

**Health and Healing, a series of articles on the Science of Health and Healing by  
Dr. Devananda Tandavan**

**Healing is an Inside Job**

The 5000-year-old Ayurvedic tradition is based on human spirituality and a life lived in wisdom. In this system, stress is placed on balanced forces of mind and body and on staying well, more than on how to recover from illness. In this series of 101 columns, Dr. Tandavan unfolds in simple and effective and totally practical ways India's Science of Life. His knowledge and experience in many dimensions will help anyone to live a healthier, happier, and holier life.

Table of Contents

1. Dis-Ease: Origin and Treatment .....	4
2. Successful Weight Loss: Part I.....	5
3. Successful Weight Loss: Part II.....	7
4. Successful Weight Loss: Part III.....	8
5. Vegetarianism: The B-12 Question .....	9
6. Cholesterol--The Villain?.....	10
7. Routine Circumcision is Unnecessary .....	11
8. True Villain--Free Radicals.....	12
9. Fat--How Much and What?.....	13
10. Milk--The Perfect Food?.....	14
12. Vegetarian Babies Are Healthy!.....	16
13. Proper Care for Your Teeth.....	17
14. Medical Options: Homeopathy.....	18
15. Some Homeopathic Alternatives.....	19
16. Biochemic Cell Salt Remedies .....	20
17. Cigarette Smoking Can Kill You .....	21
18. How Food Labels Can Deceive .....	22
20. Healing Emotions with Flowers.....	23
21. Hazards in Today's Indian Diet.....	24
22. Reducing High Blood Pressure .....	25
23. Natural Control of Hypertension .....	26
24. Breath Control to Beat Stress .....	27
25. Physical Results of Stress .....	28
26. "Energy Medicine" and Prana.....	30
27. Stop Harming Your Children!!!.....	31
28. Vegetarian Pregnancy .....	32
29. Vegetarian Baby and Child.....	33
30. Health Through Ayurveda: Part I .....	34
31. Ayurveda Part II: .....	35
32. Ayurveda Part III: .....	36
33. Ayurveda Part IV: .....	37
33. Dangers of Food Irradiation.....	38

34. Summer Ayurvedic Pitta Diet .....	39
35. Care for Yourself by Yourself .....	40
36. Don't Live with Unhappiness .....	41
37. Taking Good Care of Our Eyes .....	42
38. Adjusting to the Fall/Autumn Season .....	43
39. The Importance of Skin Care.....	44
40. Adjusting to Winter.....	45
41.Soda Pop (Colas) --Poison by the Can .....	46
42. Wrist Problems and Computers.....	47
43. Milk Doesn't Do a Body Good .....	48
44. Milk Substitutes .....	49
45. Milk Curds and Whey .....	50
46. Salt, the Hidden Killer .....	51
47. Coping with Pollution.....	52
48. Avoiding Vitamin B-12 .....	53
49. For Happy Digesting: Part I .....	54
50. For Happy Digesting: Part II .....	55
51. MSG--A Hidden Hazard .....	56
51. Scrutinizing Sugar.....	57
52. Sugar: No Good for You .....	58
53. Don't Bribe Children with Sugar .....	59
54. Dangers of Sugar Substitutes .....	60
55. The Science of Taste: Part I .....	61
56. The Science of Taste: Part II.....	62
57. The Science of Taste: Part III .....	63
58. Doctors and Abortion.....	64
59. AIDS--A Man-Made Disease?: Part I.....	65
60. AIDS--Easily Transmitted: Part II .....	66
61. AIDS--No Possible Vaccine?: Part III.....	67
62. AIDS--Awareness is Prevention: Part IV .....	68
63. AIDS--Develop Healthful Habits: Part V .....	69
64. AIDS--Avoiding Contact: Part VI .....	70
65. A Traveler's Simple First Aid Kit .....	71
66. Staying Healthy While Traveling .....	72
67. Genes--A Double-Edged Sword.....	73
68. Constipation, Source of Toxins .....	74
69. Conquering Constipation .....	76
70. It's a Girl! Thanks to Dad.....	77
71. The Nicotine Fit: Fit for No One .....	78
72. Smoking: Sources of Addiction .....	79
73. Smoking: Quit "Cold Turkey" .....	80
74. Smoking: The Fancy of the "Civil" Cigar .....	81
75. Tobacco .....	82
76. Smokeless Tobacco's Bane .....	83
77. Second-Hand Smoke: How Safe? .....	84
78. Computer Stress Syndrome: Part I.....	85
79. Computer Stress Syndrome: Part II.....	86

80. Reducing Computer Eye Strain: Part III.....	87
81. Keeping Fit at the Computer .....	88
82. The End of Computer Stress .....	89
83. A Contended Cow’s Milk: Part 1 .....	90
84. A Contended Cow’s Milk: Part 2 .....	91
85. Antibiotic Insensitivity, Part 1 .....	92
86. Antibiotic Insensitivity, Part 2 .....	93
87. Antibiotic Insensitivity, Part 3 .....	94
88. Mad Cow Disease and CJD .....	95
89. Menopause and Women: Part 1.....	96
90. Mitigating Menopause.....	97
91 Hospital Hopes And Hazards.....	98
92. Antidotes For Andropause .....	100
93. DHEA: Menace or Miracle.....	101
93. A Toxic Monster In Your Mouth.....	102
94 Coming of Age, From Lass to Lady .....	103
95. Boys Will Be Boys, But Not for Long .....	104
96. Ayurvedic Principles For Pubescence.....	105
97. Ways to Soothe That Heartburn .....	106
98. Stevia Rebaudiana: How Sweet It Is! .....	107
99. Cures For BHP, the Older Man s Curse .....	108
100. BSE: The Ruminant Empire Strikes Back .....	109
101. Better Ways to Help an Overactive Child.....	110

## 1. Dis-Ease: Origin and Treatment

This month we introduce a new column on health and medicine by Dr. Devananda Tandavan, now retired from his long medical practice in the Chicago, Illinois, area. A highly-trained physician specializing in radiation diagnosis and therapy, Dr. Tandavan is also familiar with Indian Ayurvedic, Japanese Reiki and Hahnemannian homeopathy medical systems, making him uniquely qualified to address the medical problems of modern people with the best of the new and the best of the old. Things are often not as they seem. This is especially true in the health field and in diet and nutrition. This is a new column on the healing arts and the science of good health.

We intend to explore many of these areas in order to reveal the truth as much as that is possible. Advertising in this field often borders on falsehood, and “seals of approval” may be totally without merit or meaning. The layman cannot be expected to knowledgeably wade through this jungle of misinformation and half-truths to arrive at sound judgements. Indeed, many professionals in the health-care industry do not have sufficient interest or background to give adequate advice on diet and nutrition. We hope to bring some common sense to this subject, in order that you may be able to make intelligent decisions for your health’s sake.

The etiology of dis-ease is very complex. There are illnesses that are karmic in nature, others may be due to environmental pollution, some are infectious in nature, some are due to life style and inadequate nutrition. There are a great many illnesses that are psychological in nature; that is, they are “self-inflicted” or “self-serving.” This does not necessarily imply any pathological condition of the psyche. These conditions are often produced by an ignored or frightened subconscious. In time, it is our intention to investigate and discuss each of these. We firmly believe that health of the body is a natural birthright and can be attained and maintained by most everyone, if they but follow the natural law. No one system of health care, as we know it, has all of the answers; therefore, the approach will be eclectic.

There often are viable alternatives to the conventional allopathic methods [the western “symptom-curing” system]. It is generally accepted that one’s health-care practitioner must be not only scientifically trained but also psychologically attuned to the needs of the patient. In this time, everyone dealing in health care should also be trained in diet and nutrition, which has not been the case in the past. It also behooves each of us to take personal responsibility for our own state of health. Passive submission to another’s care and direction is no longer acceptable. Any disease or illness that is “caused” by the subconscious can also be “cured” by the subconscious which “he” (or “she”) can be directed to do by an act of the will. Since we are in the body to develop our spiritual selves, a healthy and happy body is desirable. There is no need for us to punish the body or mind to expiate some “guilt.” We will learn more about the subconscious and its efforts in subsequent columns. Future columns will discuss stress and its relationship to disease, weight problems and dieting, circumcision and other common, but debatable, medical practices and approaches.

## 2. Successful Weight Loss: Part I

Obesity is the most common illness in the USA today. Obesity is defined as the disease present when the body weight is ten or more pounds over the ideal weight. If you're overweight, what will you gain by reducing your weight to the ideal level? Besides a feeling of accomplishment and a great increase in a feeling of well-being, you will reduce the strain on the heart, reduce blood pressure, help normalize the circulation of prana and improve your ability to concentrate. In order to get to and maintain our ideal weight, we must take on the responsibility for learning why we overeat. Do we actually eat too much, or do we just eat the wrong selection of food?

The truth is probably both. The best diet for man is one in which 25% or less of all caloric intake is from fats. About the same quantity of calories may be obtained from proteins, and the balance from carbohydrates. The type of protein that we eat is of vital importance. Our protein should come from grains, vegetables and milk products (such as cheese and curds). It is known that the protein from meat is digested easily, but we do not need the toxins or the vibrations from the animal source. The proteins must be balanced, which is not too difficult if we follow common sense and mix our sources. There are many excellent books on this subject. Everyone knows Diet for a Small Planet, and there are many others, still a good sourcebook on diet..

The subject of fats is a lengthy and complicated one and will be covered in detail in a future column. A generally accepted axiom is that saturated fats, especially of animal origin, are dangerous, and considered responsible for some participation in the causation or at least predisposition to certain cancers. A diet of over 20% fat is probably involved in the etiology of arteriosclerosis and a great many cancers. The carbohydrates that we eat should be complex ones that are combined with natural fiber, and should not be from refined sugars or processed grain flours. The peasant diets of India, Mexico, Italy, France, Greece and practically all countries are typically ideal and satisfactory diets for modern man. These diets usually contain very little of deep-fried foods, meats or other animal protein, and certainly very little of the highly processed sugars and other processed foods. It is axiomatic that the more processing a food goes through, the less nutritional value it has.

A simple rule of thumb is: eliminate fried foods, refined or processed milk products, white sugar and to decrease the intake of salt, which tends to retain water in the system and is often a culprit in hypertension. To take an example, you have all seen the commercial that says "Soup is good food." This is very true, providing that you make the soup yourself. Look at the labels of the commercial soups and see how much salt there is per serving. I have seen levels as high as 600-800 mgms per serving. This certainly takes it out of the realm of "good" food, especially for young, growing bodies that can easily become addicted to the taste, and for older bodies that do not need the added strain on the kidneys. Look at the labels of the hundreds of breakfast cereals on the market. You will find not only that most of them have high levels of added sugar but also high levels of salt.

These, like many pre-packaged products, are not "good" foods. You should begin a diet with a little self study, in order to understand why you eat too much, and why you eat the wrong foods. It is advisable to initially maintain a diary in which you keep track of every morsel of food that you put into your mouth. Record not only what you eat, the amount you eat and the approximate caloric value, but also your frame of mind at the time-relaxed, under stress, when lonely, anxious, afraid, etc. Determine what subconscious state existed and why the subconscious mind thought that eating would satisfy the problem.

After a week or so, you will have new insights into why you overeat. At the same time, make a determined effort to change your eating habits to include the good foods that are low in calories. Next month we go into the specifics of a proper diet, including properly determining one's "ideal" weight, dealing with the subconscious mind, exercise programs and calories.

### 3. Successful Weight Loss: Part II

Successful weight loss requires a firm commitment to continue until the desired weight is reached. Most reasons for overeating are subconscious, so we must first have a long talk with our subconscious mind. Speak to “him” as if he were a young child, command him that we will obtain our goal and that we will be better off for the new weight. We must convince him that he will not be deprived of any real needs. There may be a decrease in eating goodies, but in the long run he will be in a healthier, easier to maintain body. Frequent use of affirmations will convince the subconscious that we are serious about this new program. Several times daily we must let the subconscious know that he is loved and his wellbeing is considered.

This is the true secret to a successful weight-loss program. A neglected or alienated subconscious will exert its formidable power to sabotage every effort at weight loss. Ideal weights are given in tables calculated separately for men and women according to body type: small, medium and large. This is determined by measuring the wrist circumference at its largest point. In women, the small type measures from 5 to 5.5 inches; medium 5.5 to 6 inches and large 6 to 6.5. In men, small is 6.5 to 7 inches, medium 7 to 7.5 inches and large, 7.5 to 8 inches. Isn't it surprising that those of us that always considered our type to be large, are really medium or small? A very low percentage of obesity is due to endocrine problems. However, to be sure that there is no sluggish thyroid to interfere with a weight-loss regimen, we should determine our basal body temperature. This is easily done by taking our temperature in the morning before getting out of bed. Prepare the thermometer the night before. Keep it at the bedside. As soon as you awaken, place the thermometer in your arm pit for about ten minutes. Do this for four or five days. If the average temperature is between 97.2 and 98.2\* F., this is normal. If the average is below 97.2\*, perhaps there is a hypothyroid condition and further testing by your physician is indicated before embarking upon a weight-loss regimen. To follow our progress, we must weigh ourselves daily and chart our progress. This should be done at the same time every day with the same amount of clothing.

Because loss of weight depends on so many factors, it is not always consistent. Some days there may be more loss than others. There may be days with no loss. However, there will be a loss recognized as changes in body measurements. Therefore, we should also measure and record weekly the circumference of the neck, chest, waist, hips, thighs, calves and upper arm. If there is not a weight loss of up to three pounds per week-never allow more than this-re-examine your diet. An intake of 1,000 to 1,400 calories a day should bring consistent weight loss, for the average caloric intake needed is 1,200 to 2,000, depending on activity. While decreasing total calories, the types of food eaten should also be changed. The new diet should have no more than 20 to 25% of its calories from fats, about the same percentage of protein and the balance in complex carbohydrates. Markedly decrease the amount of alcohol. Eliminate desserts, fat cheeses, fried foods, milk (except for skim or 1% fat), sugar-laden condiments such as catsup, highly processed foods, and foods that contain large quantities of salt. The typical lacto-vegetarian diet will make this very easy. One should also have three meals daily, with snacks consisting of low-calorie foods in-between. Snacks help smooth out the blood sugar curve which might otherwise drop enough between meals to cause hunger. Start slowly, progress slowly and be successful. During this program, it is advisable to increase the amount of exercise. The best exercise is brisk walking. Daily hatha yoga asanas are also useful. The exercise helps to stimulate the internal circulation of the prana, and also will aid in burning deposited fats. It is essential to consume eight glasses of water daily to eliminate the waste products produced by the body's increased metabolism. You can consult any of the many books and lists available for detailed information on caloric and fat contents of foods, ideal weights and combining proteins for proper nutrition.

## 4. Successful Weight Loss: Part III

After a short time on a weight loss program, one may reach a plateau and seem unable to lose more weight. With decreased food intake and insufficient exercise the metabolism level may drop and be unable to burn stored fat. Dr. Martin Katahn's sensible, balanced ROTATION DIET can "fool" the subconscious or our body into maintaining a metabolism rate high enough to burn fats. Although there is little scientific evidence, in my experience the diet worked. A man starts with a 1200-calorie-a day diet for three days followed by four days of 1500 calories per day.

The next seven days allow 1800 calories each. The third week he returns to the 1200/1500 schedule. The fourth week he returns to his former "normal" diet. The entire process is repeated until the desired amount of weight is lost. For women the calorie levels are 600, 900, 1200. Obviously, calorie levels may be adjusted upward or downward according to the individual's activity and the rate of weight loss which should not exceed three pounds a week. Probably one pound a week is safer after the first three weeks. In order to help the dieter stay on the program, the author allowed snacks of "free vegetables:" asparagus, celery, chicory, Chinese cabbage, cucumber, escarole, lettuce, parsley, radish, spinach, watercress and zucchini.

These can be eaten in unlimited quantities. If these do not satisfy the need to munch, he provided for a single "safe" fruit in place of the "free" snack. Safe fruits are apple, berries, grapefruit, melon, orange, peach, pineapple or tangerine. He felt it better to stay on the regimen by adding a few extra calories than to discourage the dieter. Another way to stimulate the metabolism is to increase exercise, e.g. to walk longer and/or faster. It is advisable to exercise at least twenty minutes a day at our target level heart rate. In other words, we walk at a speed that elevates our heart rate to the desired level. This can also be attained by any aerobic activity. To determine our target level we first find our resting pulse rate when resting with no physical activity. Then determine the maximum pulse rate by subtracting the age from 227 (female) 220 (male).

The working pulse rate is then found by subtracting the resting rate from the maximum rate. Since we are probably somewhat out of shape, we will calculate a practical range of exercise pulse rate. 50% of our working rate added to our resting rate is the lower limit. 60% of our working rate added to our resting rate is the upper limit of the pulse rate. This is called the target level range: lowest 15 rate = (50% of working rate) + resting rate; upper rate = (60 % of working rate) + resting rate. As we get into better shape this range can be raised. Every adult should maintain this pulse rate for 20 minutes per day-not only those who want to lose weight, but for everyone to have the healthiest cardiovascular system. The facts of obesity, except for very, very rare cases with hormonal causes, are simple: we take in more energy (food) than the body is able to burn.

The excess unburned energy is stored as fat. When this energy imbalance is corrected by reduction of food and/or increasing exercise, there will be a loss of weight. With weight loss there will also be a loss of stored body fat. Though exercise by itself will ordinarily not reduce stored body fat, it is usually necessary to keep the metabolic rate high enough to burn the fat. Drink plenty of water to help remove the wastes from the metabolic process. Keep a balanced diet. Exercising before eating helps to control the appetite. Any aerobic exercise may be used, but walking is the least strenuous and very good. It is not really necessary to go on a special diet. Every month or so there is a new diet so obviously they generally do not work. Some of the "starvation" and "liquid food" diets are really hazardous. Choose your correct weight from the charts, make a commitment (vrata), and begin a new life of health. Our motto: use common sense, eat less fat, and walk.

## 5. Vegetarianism: The B-12 Question

A vegetarian diet is based upon the Hindu philosophy of ahimsa. It is also the best, most nutritious diet for man. Many critics say we cannot obtain all the necessary nutrients without animal products. This is not true. But two areas of a vegetarian diet do require special attention: a balanced protein intake and adequate levels of vitamin B12, and possibly also folic acid. The essential nutrient vitamin B12 is found in meat, eggs, fish and dairy products. Though also present in sea weed and plankton, recent studies show that man cannot assimilate it from these plant sources. Nutritional yeast is not a sure source of B12; unless the yeast was grown on an animal medium, there is no B12.

The amount of Vitamin B12 that is needed for proper nutrition seems to be very small. Indeed, the National Academy of Science's National Research Council in 1980 stated that only 3 micrograms per day were needed. Lacto-vegetarians need not be so vigilant, since dairy products will usually supply adequate amounts of B12. Surprisingly, vegans, those who eat only plant foods, seem to have sufficient B12. This is perhaps manufactured by bacteria in the mouth, throat and intestines. Possibly, the body adapts to a true vegan diet and learns to manufacture this essential nutrient. Also, the body readily stores B12 in large amounts so a daily supply may not be necessary.

The RDA for those under 10 years of age may not be as great as those that are older due to the large amount that is stored in the body-received from the mother during the development and nursing periods-providing that she had an adequate intake. Adults over 50 may need more B12 due to lowered hydrochloric acid production in the stomach. This acid activates the intrinsic factor secreted by the stomach which is essential for absorption of the vitamin. This factor itself may also be produced in decreased amounts as we age. Though absorbing sufficient B12 seems not to be a serious problem, there are cases of deficiency. Deficiency symptoms are related to conditions of pre-anemia and pernicious anemia, possibly accompanied by psychiatric changes. If one experiences weakness, profound lethargy, tingling, numbness in the fingers and toes, etc., consult a competent health care practitioner. Smoking, drinking coffee, regular use of alcohol, and regular use of birth control pills increase the need for greater absorption of B12.

Antibiotics and tainted food products may change the bacterial flora of the bowels, stopping B12 production. Chronic illness, viral infections and aging may also change the dietary requirements. Excess consumption of fats and proteins also tend to deplete our stores of B12. Pregnancy obviously increases the need, and possibly supplementation will be required. As long as we consume milk and other dairy products, especially yogurt and cheeses (low fat), we do not have to be too concerned. But should we become allergic to milk, a frequent malady for the older patient, or should we be on megadoses of Vitamin C, coffee, alcohol or develop an illness, then we must be conscious of the need for supplementing our diet with B12.

Oral tablets are available, but only a very small amount is absorbed. The easiest way is an injection of purified B12, though admittedly this is from an animal source. There are also available doses that are placed under the tongue or into the nose so that the absorption takes place through the mucosa directly into the blood. Clinically a B12 deficiency may be confused with a folic acid deficiency as many of the symptoms are similar; however, laboratory tests will easily make the differentiation. This is mentioned only because a folic acid deficiency may after treatment mask a true hypovitamin B12 state. Folic acid in adequate amounts is found in the leafy vegetables, especially the dark green ones, and also in wheat germ, and in dried peas and beans.

## 6. Cholesterol--The Villain?

Cholesterol is a modified fat called a sterol. It is very much like a wax, insoluble in the bloodstream and seems to be carried through the blood attached to complicated molecules called lipoproteins, "fatty proteins." The high density lipoproteins (HDL) are considered "good" and low density ones (LDL) are "bad." The blood levels of cholesterol are usually given as total cholesterol; but to have any meaning the levels should be given as HDL/LDL ratios or each separately. Cholesterol is manufactured within the body, primarily in the liver but also within every cell in the body. It is essential to the construction of the cell membrane which protects the inner portion of all cells.

It is also important in the production of the protective barrier of the skin, construction of the steroid hormones and in the production of vitamins. About 80% of the blood serum cholesterol is used in the production of bile salts, so essential to the metabolism of dietary fats. Why then is it considered a "Villain"? Cholesterol is found in the plaques of blood vessels that are narrowed (arteriosclerosis) to the extent that blood flow to the heart muscle, kidneys, brain and other vital organs and tissues is cut off causing heart attacks and other fatal conditions. Thus many consider it the causative factor. But scientific experimentation shows that cholesterol is not the cause of this condition.

High serum cholesterol may only be a symptom of an impending arteriosclerosis-one of many factors producing these plaques. It has also been shown that the dietary intake of cholesterol has little, if any, correlation with high serum levels of this nutrient. If excessive intake occurs, the body decreases production to maintain its "normal" levels. However, in the development of arteriosclerosis, a relationship has been shown repeatedly between high serum cholesterol and other factors-heredity, age, hormones, nutrition, tobacco smoking, excessive alcohol intake, obesity, debilitating diseases, hypertension and unknown contributors.

Recommended levels for normal total cholesterol are below 200 mgm/daily (National Institute of Health). If above this, it must be broken down into the HDL, LDL, VLDL and triglyceride levels to get a true evaluation. Cholesterol testing is not always reliable, so if you have an abnormal value, have a second or third test. Do not accept tests at shopping malls, health fairs, street stations, etc. Even though high serum cholesterol levels merely indicate future problems, if elevated, they should be lowered to acceptable levels.

There are many natural methods of lowering the serum levels such as: 1) use of more dietary fiber especially that found in oats, legumes, fruits, psyllium seed and guar gum, (though recognized for years, fiber was only recently discovered by the advertising media); 2) Omega-3 oil, an essential fatty acid found most abundantly in fish, but also in some plants, vegetables and nuts; especially in flax seed, spinach, mustard greens, walnuts, wheat germ oil, soybean lecithin, tofu, buttermilk and possibly some sea weeds; 3) lowering sugar intake; 4) increasing intake of Vitamin C, E, A, B15, and niacin; 5) light exercise; 6) lecithin increase in diet; 7) increased garlic and onions in the diet; 8) elimination or marked decrease in coffee intake; 9) addition of selenium, chromium, olive oil, alfalfa sprouts, avocados, and other natural substances to the diet. Through the years other products (and surely new ones in the future) have been shown to lower the cholesterol levels. Probably all that is needed to reduce serum cholesterol (and the possible increased risks for arteriosclerosis) is to partake of a natural, balanced vegetarian diet. In a lacto-vegetarian diet the only extraneous sources of cholesterol are milk products (only animal products have cholesterol), intake of which is easily controlled, although we do not believe that it is very important to keep it drastically low.

## 7. Routine Circumcision is Unnecessary

Circumcision is a surgical procedure that has become routine in the last 40-50 years in the United States. It is estimated that 60-80% of all boys born in this country have their foreskin removed. In the beginning this was strictly a religious rite of the Jews and Muslims. It became a routine surgical procedure sometime in the thirties for all males regardless of their religion. It is true that for infants it is a very simple procedure; however, if not done properly, there may be complications—even to the extent of having to remove the entire penis, though this is very rare. In the early days there were many lower urinary tract infections in infant boys.

Studies showed that there were fewer infections in the circumcised boys. Indeed it has been estimated that there are from 1-20 times fewer infections in the first year. It has also been shown that there may be 1.5-2 times fewer infections in the circumcised boys from one to fifteen years of age. Recent studies have shown, however, that when the hygiene was improved, there was very little difference in the reporting of lower tract urinary infections in infants or boys whether circumcised or not. The fear of infections, then, is not a valid reason for the surgical procedure. It is said that the circumcised male has slightly less chance to acquire sexually transmitted diseases since the foreskin is susceptible to minor abrasions during sex. It is also said that the incidence of penile cancer is less in the circumcised male. There do appear to be very few circumcised males with venereal warts. Cervical cancer in females has some relationship to these warts.

Thus, this may be one valid reason for the ritual. Some doctors say that it is a myth to claim the circumcision reduces penile sensation. This is no myth, as any man that was circumcised in adulthood will testify. There are those who even claim that the trauma of circumcision to the new born is so slight that it can be ignored. I know of no studies that will confirm this and only know of two cases in my own practise that seemed to have some symptoms traceable to this trauma. Adult circumcision is not a simple surgical procedure. It must be done under general anaesthesia, and should only be done by a very experienced urological surgeon. There is a morbidity to the procedure that usually requires at least a week off from work. If it is really indicated, it should be performed in spite of the cost and time it takes to recover.

Reasons for the surgical procedure in adults are fairly straight forward, with little controversy. The decision whether to not have the infant male circumcised should be an individual one for each child. If there is any degree of phimosis (tight foreskin), it is probably advisable. There are new techniques of anaesthesia for this procedure, so there is not reason for the child to suffer the trauma of the surgical procedure. The new-born usually heals rapidly after the procedure with few complications, if it is performed by an expert. The decision of the parents should take into consideration the child's anatomy, the home facilities for cleanliness, the projected lifestyle of the child and the advice of the pediatrician. If the decision is to have the surgery performed, be sure that it is done by an experienced person who will use anaesthesia.

The day of blind acceptance of routine circumcision should be over. In addition to Dr. Tandavan's analysis, Hinduism Today requested Reverend Swami Satchitananda to comment on circumcision. "There is no mention of circumcision in any Hindu literature, at least as far as I know. Personally, I feel circumcision is against nature. If God wanted that skin to be not there, it would have been very easy for God to not have put it there. If you believe in nature and in God, you must accept it. Otherwise God must be a fool, and we are more intelligent than God!"

## 8. True Villain--Free Radicals

The true villain in arteriosclerosis is the "Free Radical." It has been shown that these damage the vessel linings, and an attempt to repair is made by deposition of cholesterol into the damaged sites. This results in plaques that increase in size until they block circulation in the vessels. This plaque formation may also be sufficient to increase peripheral resistance of the blood pool, resulting in hypertension. A free radical is a molecule or element with an unpaired electron. Unpaired electrons are very active chemically-"roaming" freely to find another electron as nature attempts to pair all electrons. If a free radical "steals" an electron to complete its pair, another free radical is formed, often leading to a long chain reaction.

Free radicals are also often intermediate products in natural chemical reactions. However, they also produce abnormal products that the body does not know how to metabolize which are directly involved in degenerative diseases such as cancer, cardiovascular disease, arteriosclerosis and the aging process. The body does naturally contain some anti-free-radical enzymes, but not sufficient for handling excess free radicals. One of the most frequent sources of free radical chain reactions is the effect of light on the polyunsaturated fats found in vegetable oils. A single photon may set off a 30,000-event chain reaction. Even a dimly lit room will produce many such chain reactions with a result that the oil becomes rancid and many strange and unusual and hazardous products are formed.

Oxygen will also speed this process of breakdown, as anyone can attest to, when the oil is left open in warm air. The subject of dietary oils is very complicated and has been greatly ignored by food manufacturers, many dieticians and nutritionists. Some unsaturated fatty acids are essential to proper nutrition of the body. Monounsaturated fatty acid oils are far safer than highly processed polyunsaturated vegetable oils, which rapidly turn rancid under fluorescent lighting on the grocer's shelves. The food industry spent millions in developing the process of hydrogenation in order to prolong the shelf life of the vegetable oils. Hydrogen in the presence of a catalyst is bubbled through the vegetable oils. During this process, the "double bonds" of the unsaturated oils are broken and replaced with free hydrogen.

Thus unsaturated oils become saturated, and also formed at the same time are many unknown and nutritionally hazardous products. The necessary prostaglandins are not formed from these "new" products as they are from the 23 natural unsaturated fatty acid chains. The "new" molecules are also burned poorly and are an inefficient source of energy. For the sake of your health, avoid all margarines, liquid shortenings, partially hydrogenated oils and highly processed vegetable oils. Practically all commercial baked goods use these highly saturated fats. Avoid coconut, palm and palm kernel oils, especially if they have been hydrogenated. These are composed of long-chain fatty acids that are involved in the degenerative processes.

Avoid any vegetable oils in cooking, as they are very heat sensitive. Instead use small amounts of butter or extra virgin olive oil in any low temperature frying, even in woks. For salads, olive oil, sesame, avocado or walnut oils are good. To assure the adequate supply of the essential fatty acids, eat flax or pumpkin seeds, soy beans and walnuts. Since these oils are very unstable, the seeds are preferred. Deep or french frying is very hazardous to your health. In order for any vegetable oil to be nutritionally safe, it must be cold-pressed, unrefined, processed under exclusion of light and oxygen, kept in opaque containers and refrigerated after opening. It must not be subjected to high heat and should be used within two to three months after a fresh purchase.

## 9. Fat--How Much and What?

As we have suggested previously the total fat or oil consumption in our diet should consist of no more than 30% ingested calories. This is somewhat less than 3-4 teaspoons of added fat per day, as the balance is obtained from the foods we eat. Of this, no more than 50% should be saturated fats, which have been connected with the degenerative diseases. The balance should be mostly monounsaturated fats, since they are less likely to produce free radicals and are easily digested. In order to prolong the shelf life of your chosen dietary oils, it is suggested that the contents of a capsule of Vitamin E, 200 units, be placed in the oil every two weeks until it is consumed. This will tend to prevent free radical formation and delay rancidity. Also all oils should be kept within the refrigerator in a tightly closed container preferably opaque.

The highly advertised "Omega 3 marine lipids" (found in seafood) are said to help prevent heart attacks. Data for this recommendation was taken from a study among Eskimos. Their diet is high in marine lipids and the incidence of coronary disease is low; however, the stress level of their lifestyle is not similar to ours. So there is some doubt about this study's value. Safflower and sunflower seed oils are very high in polyunsaturated fats, so they are very prone to form free radicals. The shelf life may be 2-3 months, whereas extra virgin olive oil may last 9 months. There are many ways that we can lower fat consumption.

When sauteing we can use less oil (e.g. 1 tablespoon instead of 3). Instead of sauteing onions and other vegetables, we may soften them in vegetable juices or broths, or they can be browned in the oven after spraying with a small amount of oil. This is a good way to prepare low fat "french fries". Deep frying should be eliminated. Heavy cream can be replaced by yogurt and skim milk fortified with milk solids. Yogurt is also a good substitute for sour cream. Delicious popcorn can be made by air popping or in the microwave oven with no fat.

Flavors can be added that also contain little or no salt. One may ask if it is advisable to totally eliminate all fat from the diet? This is not entirely possible or desirable. Some studies have been done with tribes that use no fat in cooking. Their caloric intake due to fat was less than 2%. They seemed to be in a state of health comparable to other neighboring tribes that had much higher levels of dietary fat. The vegetables, grains, seeds and nuts we do eat contain some fat so it is almost impossible to totally eliminate it.

There is a need for even saturated fats as a source of energy as well as the building blocks for other very essential substances to assure proper function and growth of our bodies. The amount of saturated fat can be reduced below the levels of 50%. but it should never exceed this amount. All recommendations, made here, about dietary fats are true for adults and children over the age of two. Children less than two years of age need a higher fat diet to develop normally. Their diet should consist of mother's milk and additions suggested by the pediatrician.

## 10. Milk--The Perfect Food?

Cow's milk is the perfect food for the infant and young calf. But the use of cow's milk in human nutrition is not quite so perfect. There is the possibility of contaminants in the milk from the diets of the cows, such as hormones, antibiotics and pesticides. There is also the great danger of advanced microbial population since milk is a great medium for microbial growth. There also seems to be an intolerance to milk by some older children and adults. This varies considerably with the past dairy use of the population.

The intolerance is due to the decreased formation of lactase in the older population. The peak of lactase formation is between eighteen months and four years of age. Lactase is the enzyme that is necessary to break down the sugar, lactose, into two smaller sugars, galactose and glucose, which can be readily digested. Lactose that is not broken down to these two sugars cannot be digested and ends up in the colon where it produces gas and discomfort. There is available today a commercial lactase, called Lactaid or Lactrase, which can be placed into the milk before consumption or can be taken orally before or after imbibing the milk. This is a truly miraculous product for those who have lactose intolerance, for it allows them to partake of all the good foods that are made with milk. The protein from milk is a good protein and combines well with grains to enhance that source of protein. Indeed many people will alternate milk/grain combinations with grain/ legume combinations in each day's diet to improve the quality of the proteins. In order to control the microbial population within milk, the government has required that all milk be pasteurized.

This is a process where the milk is brought up to a temperature of 161 degrees F for 15 seconds. This has certainly kept a great many of the milk diseases under control. However, testing of milk has often shown that the microbial concentration has still been way over the permitted levels. The number of microbes continues to grow in the refrigerator, the average temperature of which is 40 degrees F. It is advisable to treat even pasteurized milk by bringing it to the boiling point, 212 degrees F. Since there has recently been the salmonella scandal in several large dairies, it is certainly advisable to boil the milk. It also seems that boiled milk is more easily digested than that which is only pasteurized. The boiling produces some change in the proteins so that they are more easily broken into digestible size curds. Other forms of more digestible and healthy milk are fermented products such as yogurt, "curds" and kefir.

The commercial varieties usually are very poor substitutes for those that are made at home. The bacterial strains that are so very important to maintain colonic health can be augmented by the ingestion of these fermented milk products, providing that they are natural and not just a combination of gelatin and other chemical thickeners and binders. The homemade cottage cheese, paneer (produced by adding lemon juice to milk), is very tasty and nutritious. Raw cow's milk has too much fat in it for adult consumption. The constant use of skim milk seems to have some untoward effects upon the arteries with an increase of arteriosclerosis. There is available a 1% fat milk that is much more desirable. The lactase treated milk is 1% fat. Either of these is preferable to the usual milk that is available. These should be boiled and placed into a clean container and kept in the refrigerator. There is one other quality of milk that may be a hindrance. It is said to be mucus forming. In the Ayurvedic system, milk is kaphic. This property of the milk may be important to those who suffer from asthma, allergies of the respiratory tract. But in most persons an eight-ounce-a-day portion of milk should not be too bad. Of course, drinking cold milk may in itself produce mucus or spasm of the bronchi, the same as any other cold drink.

## 11. Baldness--Treating or Coping

Baldness, alopecia, is a condition found in both men and women but is more common in men. It may be partial or complete. It may be characterized by patches of baldness, thinning of hair or total dropping of hair from all over the scalp. Although its cause is obscure, it may be from genetic factors, aging, systemic or local disease. There does not seem to be any significant racial influence. It probably is not caused by the wearing of hats or other restrictive bands on the head. Sudden loss of all the hair has occurred following severe physical or psychological trauma. No causative connection has been found with any vitamin deficiency, although some cases have been seen in total nutritional deprivation.

Male pattern baldness is a familial condition and usually begins to show in the lateral frontal area or over the entire vertex of the skull. If this begins in the teen years it is likely to become very extensive. If it occurs later in life, it usually is not so extensive. There is also a less common female pattern baldness that is less extensive and involves mostly the vertex or top of the scalp. This may cause psychological trauma to the female; however, she can handle the problem by wearing a wig. A person that has any of the symptoms of hair thinning, falling out or frequent breaking should have a complete and thorough medical examination to determine if there is any treatable systemic disease. There is a new medical treatment for male pattern baldness that is recently available. This treatment does not work in frontal baldness.

Minoxidil topical solution is applied to the area twice a day. In a double blind study of 1431 patients, there was definite evidence of growth of hair in twelve months in all but 11% of those treated. Less than 39% showed moderate or dense growth. There can be no predictions as to who will respond to the treatment. However, it does seem to show better growth in young patients, those balding for less than ten years, and if the area is less than four square inches. Once the treatment is started it must be continued for at least a year before concluding that it will not work. If there is a response, the treatment (which is not inexpensive) must be continued for the rest of one's life. There has not been sufficient time elapsed with Minoxidil treatment for complete evaluation of the side effects or any adverse effects. It has been noted that people who have cardiovascular disease may have side effects such as increased heart rate, fluid retention and possible weight gain.

Anyone anticipating this form of treatment should do so only under the supervision of a trained physician experienced in Minoxidil use. The alternatives to Minoxidil are surgical and cosmetic. Although many dermatologists had very good results with the "punch" hair transplants that were in vogue a few years ago, the results seemed to be fairly temporary. There are wig specialists that are able to make very attractive wigs. These do seem to have some problems of staying in place or falling off at an unfortunate time. Recently there has been increased advertising in the media for methods of treating baldness. Unless the treatment is supervised by a well-trained physician, it should be avoided.

It seems that there is a great deal of hoax in some of the treatments offered. At this time there is no known medicine, vitamin or food supplement that may be taken to reverse the balding process. There is an alternative that I highly recommend. After determining whether or not systemic disease is present and after a fair evaluation of the condition, accept that there really is no stigma attached to baldness except that which we place upon it. Being bald does not mean that one is less of a man, less virile or even less attractive. All it means in reality is that a portion of the scalp that once had hair no longer has hair. Otherwise, the amounts of money that can be spent on false hopes, nostrums, and other "treatments" can be very substantial.

## 12. Vegetarian Babies Are Healthy!

Dear Dr. Tandavan: I have a grandson aged eight months. He is quite healthy and whenever I start arati to Bhagwan he comes to me and loves to look at the Gods. The doctor told his mother that the baby is underweight because she is not giving him sufficient protein. The doctor advised my daughter-in-law to give eggs, chicken and beef to the child so that he retains proper weight. I am against eggs and meat, but my daughter-in-law does not believe me and says that she will give the food which the doctor has recommended. I want to know how I should impress that the child will be better if no meat is given at all? Also, are there any substitutes to give proper proteins to children of this age? It is very difficult to solve your problem because you have a non-vegetarian mother who has a non-vegetarian physician.

It is not an uncommon problem for the Indian Hindus that live here in America. It is certain that the physician does not understand the problem, and he probably does not have sufficient knowledge of vegetarianism in order to know that it is not at all necessary for anyone to eat animals. It is a known fact that our bodies cannot tell whether the protein we ingest comes from plant or animal sources, for the amino acids are identical. It is also a known fact that the animal products are highly contaminated with antibiotics, industrial chemicals and other toxins that we absorb into our bodies when meat is eaten. Although there is some contamination of fruits and vegetables, it is not nearly as much as that in meat. There have been numerous studies that show that a strictly vegetarian diet is actually healthier for infants and children.

Three studies come to mind: Herbert, J.R., "Relationship of Vegetarianism to Child Growth in South India," *American Journal of Clinical Nutrition* 42: 1246-54, 1985; Andrews, et al, "Nutritional Status of Vegetarian Children," *American Journal of Clinical Nutrition* 35: 204-16, 1982; and Sanders, "Anthropomorphic and Dietary Assessment of Nutritional Status of Vegan Preschool Children," *Human Nutrition* 35: 349-57, 1981. I am sure that your library could obtain these for you if you desire.

I would recommend the following books to your daughter-in-law to convince her of the advisability of a vegetarian diet: *Diet for a New America* by John Robbins; *Diet for a Small Planet* by F.M. Lappe; *Transition to Vegetarianism* by Dr. Ballantine, Himalayan Institute; *Vegetarian Baby* by S. Ynetma and *Vegetarian Children*, also by S.Yntema. It is no longer considered healthy to eat as much protein as most of 31 the people in the West do eat. In fact, it has been shown that the excess protein, especially taken by meat eaters, is contributing to the marked increase in osteoporosis of mature females, some evidence of a link with cancer and certainly it does overload the kidneys.

I do not believe that there is any need for "manufactured" protein supplements to be given to children. Although there are a great many such products on the market, they may be very hazardous to one's health, as many foolish dieters have found out. The healthiest protein source for the infant is mother's milk and, as the child is weaned, the protein sources should be fruit, vegetables and dairy products. Animal proteins other than dairy products are to be eliminated because of their great contamination.

You imply that you do not mind chicken; however you may not know that chicken is full of hormones greatly detrimental to health, especially in children. Even if I were not a practicing Hindu, I would not eat meat of any kind because of the bad effect that it would have on my health. It is truly unwise for the immigrant Indian Hindus living here in America to accept the worst that our culture has to offer. Even the Surgeon General of the US is telling us that we eat too much meat, fat and sugar. I certainly wish you well in your problem, and if I can be of any further assistance, please, contact the paper.

## 13. Proper Care for Your Teeth

Dental problems seem to be more common with the diet and nutritional levels of today's urban populations. These dental problems begin with plaque, a colorless (sometimes yellowish) film that covers the teeth. It comes from the interaction of saliva and food and contains many bacteria which feed upon fermenting carbohydrates. As they grow and produce waste products in the form of acids and enzymes, these products break down the proteins that cover and protect the teeth and also "eat away" the calcium of the teeth. As the tooth surfaces are destroyed, cavities are formed. Also as tartar (hardened plaque) builds up along the gum line, irritation of the gums occurs. As this continues "pockets" are formed where more exposed surfaces are damaged by the accumulation of food and plaque.

To interrupt this chain reaction that produces harm to the teeth we must: brush teeth correctly, floss frequently, eat an adequate nutritional diet and see the dentist at least every six months. It is recommended that we have two brushes (in order that they can dry adequately between use) with soft, well-rounded and polished tips. The purpose of brushing is to remove the plaque by purely mechanical means. Studies show that the optimum brushing time is five minutes. Toothpaste is not an ideal cleanser for most people. A suggested cleanser is five parts baking soda (bicarbonate of soda) and one part salt. Oil of wintergreen or peppermint, cinnamon, cayenne pepper or other kitchen flavors may be added for taste, but never sugar. Baking soda helps to keep the gums healthy and free from inflammation.

There has been a great deal of study on fluoridation, but there is still controversy about its use. Ingested fluorine does not help after the teeth have formed. Fluoride in tooth paste and topical solutions is discouraged because a child may swallow enough to approach a toxic dose. After the teeth have formed, use of fluoridated water is of doubtful value. Ideal times for brushing are immediately after meals as well as morning and night. If we are unable to brush after meals, the mouth should be rinsed thoroughly and interdental stimulators used. These are small soft wooden wedge-shaped dental pics, not the usual tooth pick. They are available at most drugstores. The important thing is to remove food particles from between the teeth and around the gum line. To properly brush the outside of the teeth we should hold the brush at a 45\* angle pointing toward the gum line. Use a gentle circular or 33 wiggle motion. Do not press too hard. Use short, angled strokes to clean the outer surfaces of the back teeth. Use short angled strokes to remove plaque from the inner surfaces of the back teeth. Then scrub the chewing surfaces of the teeth with the brush held flat.

Tilt the brush to clean the inner surface of the front teeth. Also brush the tongue. Daily flossing after brushing the teeth will help to get the residual plaque from between the teeth and under the gum line where the brush is not effective. Unwaxed floss is probably better as it absorbs fluids and small particles. Hold the floss firmly and use a sawing motion between and behind the back teeth. Scrape the sides of the teeth with an up and down motion, but be careful to not cut into the gums. This flossing may at times produce a little bleeding, which is proof that the treatment was needed. If bleeding should continue, see your dentist. Dentists today have available a plastic coating that protects the tooth enamel. These sealants are usually applied to the chewing surfaces of a child's permanent back teeth to seal off bacteria. Dr. Leonard Cohen, chairman of Univ. of Maryland Oral Health-Care Delivery says, "Sealants are for anybody who wants to try to do everything possible to prevent cavities- they're not just for children. Adolescents and adults who are cavity-prone could use sealants as added protection. Ask your dentist."

## 14. Medical Options: Homeopathy

Homeopathy is one of the numerous alternative healing systems to conventional western allopathic medicine. Many people do not know that there were once over 100 homeopathic medical schools in the USA. Homeopathy is still practiced on a very wide scale in England, Germany, France, Mexico, South America and India. There is a recent resurgence of interest with many younger physicians learning the methods and art of homeopathy. All US physicians practising this modality are graduates from regular medical schools and licensed MD's. The founder of homeopathy was Samuel Hahnemann who, in 1798, wrote about the "Law of Similars" and its application in the medical practice of the day. This was not a new law but was previously described by Hippocrates and Paracelsus of Greece and was used by many cultures including the Mayans, Chinese, American Indians and the Asian Indians.

The Law of Similars says that a drug (or other active biological substance) can be used to treat diseases that have symptoms similar to those that one has after an overdose of the same substance. Hahnemann first demonstrated this by taking small doses of Peruvian Bark, cinchona, until he began to have symptoms. These symptoms were the same as those of malaria, so cinchona became the treatment of choice in malaria. He reasoned that this herb was beneficial because in overdose it gave the same symptoms as malaria. He also found that very small doses were more helpful than large doses. Hahnemann spent the following years similarly testing many different herbs and medicinals on himself, his family and friends, a system he called "proving" of the drug.

In his experimentation he also found that if small doses of the active substance were mixed and shaken in a solution, the potency was increased, a method he called "succussion." The very small doses and the meticulous preparation hindered the acceptance of this therapy among pharmacists of that time, as it decreased their income. The "bibles" of homeopathy are the Repertory and the Materia Medica. The Repertory groups symptoms and their corresponding drugs. The Materia Medica gives detailed symptoms and effects of the drugs on various systems of the body. The crux of good treatment is the skill of the physician in taking a meticulous history from the patient. This includes psychological symptoms, diet and reports such as: "Worse in the morning;" "Only on the right side;" "Only happens between three and four in the morning;" "Cool is better" 35 and many other obscure details.

After the physician makes his diagnosis and compares his findings in the Repertory and verifies them with the Materia Medica, he usually prepares a dose of the medication. This dose normally aggravates the symptoms before healing begins to occur. The classical practitioner uses only one dose and one drug at a time. One of homeopathy's great advantages is that there are very few side effects, if care is taken in repetitizing. Many of the lower concentrations of the medications can be used by laymen, and it is especially useful in so-called emergencies. Every home would benefit by having a homeopathic first aid kit and a manual of uses.

This energy medicine is successful as it stimulates the body's natural immune system to overcome the pathological process. It is also used in chronic disease conditions and there have been many well-documented cures of acute infectious disease. Although the orthodox medical schools have not accepted homeopathy; there is a growing interest and acceptance by the scientific world. Recently there has been laboratory proof that the system does work. Recommended reading is Homeopathy, Medicine for the 21st Century by Dana Ullman (North Atlantic Books, Berkeley, California). The National Center for Homeopathy, 1500 Massachusetts Ave. NW, Washington, DC, 20005, provides free information.

## 15. Some Homeopathic Alternatives

In homeopathic medicine the underlying belief is that the symptoms that the body manifests are the body's attempt to deal with the disease process. This system teaches that the symptoms should not be suppressed as they are in regular medicine. It is not absolutely clear why homeopathy works so well in treatment of disease, but it is believed that the vibrational quality of the remedy stimulates the immune system of the body to overcome the disease process. It is also believed that treatment must consider the body, mind and spirit of the individual, unlike most allopathic treatment, which deals only with the body. In this day of increased use of antibiotics, analgesics, corticosteroids, potent cardiovascular drugs and other medications which often have serious, longlasting and really toxic side-effects, it behooves us to find an alternative that will not weaken our natural immune systems. The immune system is attacked not only by drugs we use, but by the contaminated foods we eat, the toxic wastes in our water and in our atmosphere and the stress of everyday living.

A weakened immune system leads to disease. The remedies of homeopathy tend to support and improve the immune system, allowing our bodies to heal themselves. Is homeopathy limited in any way? Yes, for it does not replace indicated surgery. It also cannot compensate for incorrect diet, nor can it eliminate the contamination from our water and atmosphere. It may not be useful in a very acute and lifethreatening infection. There are some chronic conditions that are irreversible no matter what methodology is used. Some diseases also do not respond for unknown reasons. Because homeopathic therapy is tailored to the specific person and his history, it is said that homeopathy treats people, not diseases. This is true because the apparently same disease may require different remedies in different people. A homeopathic physician may use allopathic drugs when they are indicated. Homeopathy is especially helpful in the common diseases of infancy and childhood. An excellent example is the problem of teething. Most pediatricians would prescribe pain killers or local anesthetics which may be truly dangerous to the future health of the child.

The homeopathic physician on the other hand would prescribe chamomile, calcarea phosphorica, calcarea carbonica, coffea or another indicated remedy to give prompt relief without adverse after-effects. For common colds or other viral conditions, antibiotics are totally ineffective (even though commonly prescribed). The whole treatment of viral conditions in regular medicine leads to complications that are worse than the original disease. The homeopathic practitioner can bring results without these side-effects. The regular medical treatment of allergies is by the use of symptom suppressants, desensitization and corticosteroids. The alternative treatment is a remedy that stimulates the immune system-also the goal of desensitization, but without the use of the harmful drugs. No, not every case is cured; but the allopath doesn't cure every patient either. The whole field of female diseases and disorders is very successfully treated by homeopathic methods.

Dentistry is also an open field for the use of homeopathy. It will never replace good dental care, but it is the only therapy that is available that can easily and adequately handle the great fear and trepidation that most people have when they approach the dental chair. There are remedies that are useful for dental pain before and after the drill. Some people using homeopathic remedies can approach the dentist easily and not require anaesthetic, and they also have no post-therapy pain. With the new interest in this alternative to regular medicine, the ongoing teaching by several centers in the United States and more than 100 schools in India, Mexico, Europe and England, this does seem to be the "New Medicine" for the coming century.

## 16. Biochemic Cell Salt Remedies

Dr. Schuessler of Oldenburg Germany published in 1873, "An Abridged System of Homeopathic Therapeutics," a "new system" of treating human diseases based upon the idea that cures could be obtained by using those salts that naturally occurred in the human cells and tissues. He based his system upon "the physiological fact that the structure and viability of the organs of the body are dependent upon certain necessary quantities and proper apportionment of its organic constituents." This is known as the "Biochemic" approach. According to this theory, any disturbance in the amount (usually a deficiency) or balance of these tissue salts constitutes disease. He further postulated that replacing the "deficient" cell salts would bring about the harmony among the tissues that is required for health. He determined that blood has, besides its organic elements, the inorganic salts of potash, lime, silica, iron, magnesium and sodium. Nerve cells are principally phosphate salts of magnesium, potassium, sodium and iron.

These are commonly identified by their abbreviated biochemic names as Mag. Phosph., Kali Phosph., Nat. Phosph., and Ferr. Phos., respectively. Muscle cells have the same with the addition of potassium chloride (Kali Mur.). Connective tissue cells have as the main constituent silica, and the elastic tissues have calcarea fluoride (Calc. Fluor.). In bone there is calcarea fluoride, magnesia phosphate (Mag. Phosph.) and large amounts of calcarea phosphate (Calc. Phos.). None of these tissues can be healthy unless they contain sufficient amounts of these salts in the proper states of equilibrium. By the study of disease processes and analysis of the required tissue salts, a complete alternative system was developed. The required salts were furnished in a potentized form in decimal dilutions, usually 6X, utilizing the homeopathic method of succussion (shaking) and trituration (grinding). This dilution assures that the action of the salts is on the physical level and able to replace any deficiencies. An example of the efficacy of this dosage form is that Glauber Salts (sodium sulfate) given to the patient in a concentrated form produce a rapid and complete, strong evacuation of the bowel contents.

It is, indeed, used as a cathartic. If this same salt, however, is given in minute and potentized amounts (homeopathic style), it is absorbed from the gut into the blood and distributed throughout the body to give the Biochemic effect, among other things a diuresis (increasing the flow of urine). Both acute and chronic disease conditions can be treated by tissue or cell salts. If the case is acute, a prescribed dose is dissolved in water and given to the patient in small (teaspoon) doses every hour or so until relief is seen. In the chronic cases the prescribed salt is given in the prescribed dose three to four times a day. This is continued for a month or more.

The usual precautions about food or drink one half hour before and after also apply. At times if a more profound effect on the body is desired a 3x or 4x potency may be used; however, for self care it is advisable to stay with the 6x potency. "The Twelve Tissue Remedies of Schuessler" by Boericke and Dewey is available from several publishers, in Homeopathic pharmacies and in many health food stores. It covers the theory, therapeutic application, materia medica and a complete repertory of these remedies homeopathically and biochemically considered.

There are also multiple pamphlets and handbooks. A short amount of study will allow one to use these alternative remedies for many conditions. The remedies can be inexpensively purchased from homeopathic pharmacies and many health food stores. Since these are natural constituents of the body rather than foreign drugs, there is very little possibility of harm in the use. This is another safe and effective system whereby we can partake in our own well being.

## 17 Cigarette Smoking Can Kill You

On a recent trip to Eastern Asia I was appalled at the great number of people smoking cigarettes. It seems that even though Western media and the US Surgeon General's warnings have been successful in the United States of informing the people of the great health hazard of this habit, the American tobacco industry has stepped up its marketing efforts in Europe and Asia. This is done without the educational warnings of the hazardous nature of this habit. Let no one be fooled! Tobacco smoking is directly related to human diseases such as cancer of the lung, heart disease, emphysema, bronchitis and many other diseases. There is probably no physician in the USA that is not convinced of this, and has been for many years.

The American tobacco industry has repeatedly financed research projects that seem to show an equivocal answer to their research and the direct connection of these diseases and smoking of tobacco. It has been very slow, however, to inform the public that the industry has financed these studies and that they are truly suspect in some cases. Directly inhaled smoking is called "mainstream" smoking. Inhalation of the smoke indirectly is called "sidestream" or "passive" smoking. Recent studies at the University of Utah show that women subjected to three hours a day of passive smoking were three times more likely to develop cancer of the cervix of the uterus. This was even more evident in women over 40 years of age than in those under 40.

Passive smoking has previously been related to cancer of the lung. Dr. A. Wesley Horton, researcher at Oregon Health Science University, has found a relationship between cancer of the breast and females who only "passively" smoke. He also found that countries with high rates of cancer of the lung in men also have high rates of breast cancer in non-smoking women. Countries with low rates of lung cancer in men also have low rates of breast cancer in women. It would seem that a smoker is also subject to the passive smoking hazards. Smoking is probably one of the strongest addictions known to us. It is difficult to stop the habit as there are so many aspects involved: such as, the repetitive motion of the arm and hand, the oral satisfaction, the social pause, the implied macho image (or the liberated woman image, as seen in "Virginia Slims" ads) and the insidious slow effect of the habit on the body. The patient who develops cancer of the lung from smoking dies, and this is one of the most horrible of deaths. Every smoker develops some degree of emphysema and bronchitis.

Emphysema is the result of the loss of the tissues that make up the walls of the small air sacs of the lung. Ultimately, there are only a few large sacs (not the thousands of small sacs nature provided) making it impossible to take in as much air as we need. The small tubes that connect these sacs become chronically inflamed producing the well-known "smokers cough." It is not unusual to see patients struggling for breath, even to the point of need for constant oxygen and coughing so much their voice changes. The marked decrease in absorption of prana further weakens the entire body and spirit, and may produce unknown karmas.

This is especially true for anyone on a spiritual path, as the breath and its control (pranayama) are so important in making progress on the path. Inform yourself of the real and unrelenting effects of smoking. If necessary, obtain professional help in overcoming the habit. Realize that the on-going lack of health from smoking is even worse than the possible early death. It makes no difference how long one has smoked, "quitters always win." It is well known that even if one has smoked for many years, has developed heart disease and some lung problems, he can gain dramatic benefits by quitting. If we realize the physical, social and spiritual effects of this habit, can we not give it up?

## 18 How Food Labels Can Deceive

Food labels should help the consumer make an intelligent decision about the safety of the product and its nutritional value. Unfortunately they don't always do so. Now that many countries are adopting some form of consumer labeling, we should examine the uses and abuses of food labeling. To be truly helpful the label must include: 1) serving size; 2) percentage of carbohydrates, fats, and proteins listed in an understandable reference standard; 3) percentage of the total calories per serving from each of these; 4) percentages of saturated, polyunsaturated and monounsaturated fats; 5) total amount of salt per serving; 6) amount of cholesterol, if present; 7) amount of potassium present as well as the vitamins contained; and 8) all the other contents of the product, especially such hazardous additives as nitrites, or proteins that may be allergenic to some people.

Unfortunately many labeling laws do not provide for this degree of candor. If irradiation has been used to prolong the shelf life of the product, this must be prominently displayed on the label. I advise no one to buy any irradiated food. The present labeling regulations in America allow for many deceptive practices. For example, labels that say "97% fat free" should be immediately suspected. Banners over frozen-dessert counters that state "96% fat-free" should also be suspect. This is a clever but deceitful marketing technique. It has no meaning without stating- which isn't-how the percentage was obtained. Usually this means that the substance contains 3 or 4 percent fat by weight, that is, 3 or 4 grams per 100 grams of the product.

One product that advertises "97% fat free" gives the following information on the label: serving size 1 slice, 6 servings per container, 30 calories, 1 gram fat. If we calculate the calories per one gram of fat, we see that the 9 calories from fat is 30% of the total calories. That is a 27% difference from the implied 3% fat on the label. Another example is the calculation for milk, 53% of the calories in whole milk are from fat, 2% skim milk is 38% calories from fat and the 1% milk has 18% of its calories from fat. Another marketing strategy is to label a product "Contains no cholesterol." This gives a false security, unless we further read the label to determine what kind of fats and how much the product contains. No vegetable fats contain cholesterol, however, coconut, palm, palm kernel oil as well as other highly saturated fats may be present.

All of these highly saturated fats may be cholesterol producers after they get into the body. Often a product may be labeled "lite," "light" or "diet," terms which have no legal definitions but set up ideas in the consumers mind that suggest they are better than other products. Always note well on the nutritional label the amount that is considered a serving size and servings per container. Verify that the serving size is what you will be consuming. A common practice amongst some frozen dessert products is to list the calories per ounce, implying that an ounce is what you will consume; however, you are more likely to consume eight ounces -8 times the listed calories.

My favorite popcorn lists the serving size as 1/2oz (14g); 8 servings per container, 80 calories, 2 grams protein, 6 grams carbohydrates, 5 grams fats, 150 mgm sodium, no cholesterol. What does this actually mean when we consider that a popcorn lover would probably eat the entire bag? He would have consumed 640 calories, 56.25% from fat and 1,200 mgms of salt (almost a total day's recommend intake!). In order for us to meet our goals of a proper diet (see my April, 1989, column) consisting of 10-25% of calories from fat, with a preponderance of monounsaturated fats, low in salt and high in dietary fiber, we must both read the labels and do some simple calculations.

## 20. Healing Emotions with Flowers

Disease is, in essence, the result of conflict between Soul and Mind, and will never be eradicated except by spiritual and mental effort. No effort directed to the body alone can do more than superficially repair damage, and in this there is no cure, since the cause is still operative." Is this the statement of a New Age practitioner? No, these are the words of Edward Bach, who was a highly successful bacteriologist and homeopathic physician with a lucrative practice in Harley Street, London. In 1930 he retired to devote his time to find a therapy that would reach to the true source of disease. Through a sensitive intuition and much research, Dr. Bach determined that the essence of flowers was the vibratory agent that could influence this conflict between the soul and the mind.

He was able to extract the flower essence with pure spring water and used a small amount of brandy as a preservative. He formulated remedies grouped into seven headings: For Fear, For Uncertainty, For Insufficient Interest in Present Circumstances, For Loneliness, For Those Oversensitive to Influence and Ideas, For Despondency or Despair and For Overcare for Welfare of Others. In his 1933 book, "Twelve Healers and Other Remedies" he stated, "There should be no difficulty either for oneself, or for another, to find the state or mixture of states which are present, and be able to give the required remedies to effect a cure." A practitioner in this methodology is well trained in observation and self-analysis and has gained experience understanding the various essences. The usual dosage of the selected essence is 3-4 drops in a cup of water four times a day.

The effect of the treatment does not occur rapidly. There may even be an occasional increase in symptoms in the first few days, but in three to four weeks a definite change in the emotional state is noted. These essences can not do any harm, they can not be antidoted by any substance known and they can be given along with other therapies. The usual precaution of not taking another strong energetic substance for at least one half hour before or after is usually suggested. There is a special remedy called the "Rescue Remedy," that we recommend should be in the emergency kit of all readers. It is a combination of five different remedies for Trauma and Numbness, Terror and Panic, Irritability and Tension, Fear of Losing Control, and the Tendency to Pass Out (the sensation of being 'far away' that often precedes unconsciousness). In the case of an accident or sudden illness,

Rescue Remedy not only helps the "victim" but also the witnesses by calming them and giving them confidence in a quick recovery. Four drops in a cup of water are ordinarily given to the patient in frequent sips until the condition changes. It is also available as an ointment for external application. It is said by those that are well accustomed to the use of the Bach Remedies, that they are applicable (especially the Rescue Remedy) for the conditions of animals and plants that are in the state of shock. There are also floral essences that are more attuned to the stresses and conditions of the modern urban environment. Seventy two of these have been identified.

These have been researched and prepared by the Flower Essence Society, P.O. Box 459, Nevada City, CA 95959. The Bach Remedies and books are available from Ellon Bach USA, P.O. Box 320 Woodmere, N.Y. 11598, phone 516-593-2206, and in most Health Food Stores and Homeopathic pharmacies. Recommended books are: "Heal Thyself", Dr. Edward Bach 1931; "The Twelve Healers and Other Remedies", Dr. Edward Bach 1933; "The Bach Remedies Repertory", F.J.Wheeler 1952; "The Illustrated Handbook of the Bach Flower Remedies", Phillip Chancellor 1971; "Bach Flower Therapy, Theory and Practice", M. Scheffer 1987.

## 21. Hazards in Today's Indian Diet

As I have mentioned before in these articles, the traditional South Indian vegetarian diet is an excellent balance of protein, fat and carbohydrates with no emphasis on the undesirable fats. However, the diet I encountered on my recent six-week pilgrimage was something different. What is served by the Tamil Nadu tourist facilities and many of the other restaurants throughout the south of India, as well as in many homes, is truly a sad example of a good, healthy diet. The food served to the public, and increasingly common in the homes, is slowly killing the people by creating or fostering the problems of obesity, arteriosclerosis, coronary heart disease and other degenerative diseases. This modern makeshift diet contains too much fat and far too much sugar. There are too few vegetables and what vegetables are served have been cooked to a mush of little nutritional value.

The quality of the fat used in frying and deep frying is of the worst kind-the so-called tropical fats that are highly saturated-coconut, palm and palm kernel oils. The restaurants and many private homes use and reuse these fats until they no longer remain liquid. It is common knowledge throughout the world that whenever fat is heated, the fat breaks down to harmful unknown and unnatural products. It is also common knowledge, even in India, that the use of saturated fats contributes to cardiovascular disease and other conditions. There were two newspaper articles on this subject just during my visit. In a typical restaurant meal there may be fried dosai dripping with fat, vadai and deep fried potatoes or bananas. As near as could be calculated, the amount of calories from the fat far exceeded the desirable "less than 30%."

Main meals consisted of polished rice, rasam, sambar and a small amount of salad or vegetables. The evening meal was, again, fried foods or several kinds of rice. Even in the upper class homes, I did not see a well-rounded vegetarian diet. When I asked why no one uses brown or unpolished rice for its added nutritional value, I was told, "that is feed for the animals." Perhaps that is why some of the hogs and cattle seemed healthier than the people. The desserts were almost totally sugar and eaten excessively. Children were constantly being bribed to behave with such sweets, Some children ate practically nothing but the sugary sweets and rice, and their teeth showed the disfiguring horrors of cavities and decay.

The overall body stature of children in India is less than that of comparable children fed a more appropriate vegetarian diet. Is it any wonder that many residents of India are suffering from arteriosclerosis, heart disease, obesity and malnutrition? The habits are so ingrained that it will take concentrated effort and education to correct this great source of disease. I urge our brothers and sisters not only in India, but also in Malaysia, Mauritius and Africa, or wherever the South Indian diet is the norm, to select fats that are predominantly monounsaturated-such as from olive oil, rape seed and flax oil. Do not ever reuse these fats, for even one heating will cause degeneration.

Markedly reduce the amount of fats that are used, as well as reduce the amount of fried foods and rarely use deep fried foods. If cast iron is used in the cooking, a few drops of oil spread with the fingers over the bottom of the pan is sufficient even for frying dosai. I also urge the use of raw vegetables and slightly cooked vegetables with as much variety as is possible. One should consume some dark green leafy vegetables every day. The flavor of the unpolished rice is very good and the nutritional value is much greater. There are also other grains that can be used as rice substitutes. The elders and the children will benefit greatly by the reduction of the amount of sugar and sugary products.

## 22. Reducing High Blood Pressure

High blood pressure may be the first symptom or even the cause of many severe and sometimes fatal degenerative diseases. The accepted norms for adult blood pressure are 120/80—that is, an active or systolic pressure of 120 and a resting or diastolic pressure of 80. The systolic pressure will be elevated without danger in activity and anxiety. But if the diastolic pressure is elevated more than 10 degrees, essential hypertension may exist. Our blood pressure is the result of five factors: the pumping action of the heart, the peripheral resistance to blood flow, the amount of blood within the entire vascular system, the viscosity of the blood, and the elasticity of the arterial walls.

Changes from the normal of any of these factors directly affect the pressure. The accurate evaluation of blood pressure is done with an instrument called the sphygmomanometer. Anyone can learn this procedure, and every household should have such an instrument to periodically measure the pressure of its members. There are automated machines available that simplify the process, but these must be calibrated against a mercury type at least every six months. Hypertension may result from anything that changes the resistance to blood flow such as loss of elasticity of the vessels, abnormal capillary venous junction, or increase in blood volume with its resulting distension of the vessels. This change makes the heart pump harder and possibly more frequently to maintain a nourishing blood flow.

The most common causes of hypertension are being overweight and experiencing psychological tension. Extra weight increases the total extent of the vasculature and psychological tension, as a result of the “flight or fight” mechanism, narrows the caliber of the peripheral vessels, thus increasing the resistance to flow. There are many natural ways to assure normal blood pressure. The first of these is to maintain a “normal” weight. The second is to reduce the fat in the diet to prevent arteriosclerosis with its resulting decrease in blood vessel size. Exercise is very important to maintain nutrition to the tissues. Decrease of psychological tension is essential to have a normal pressure and to reduce the strain upon the heart.

This is best done by being consciously aware of one’s level of consciousness, separating oneself from “problems,” and becoming aware of one’s breath. It has been shown that hypertension has been reduced to normal in those who meditate. Being a Hindu has many advantages in this realm. It is advisable to regulate one’s blood pressure by natural means rather than with drugs that often have harmful side effects. However, if one needs to regulate the pressure by the temporary use of drugs, by all means do so until such time as the natural ways can be utilized. It is dangerous to one’s well being to have hypertension.

The first thing in the natural control of hypertension is to be sure that one’s diet is low in fats, especially saturated fats, low in calories, predominantly from complex carbohydrates, in order to reduce weight. The diet should be adequate in fiber from cooked and raw vegetables and grains. There must also be an adequate intake of pure water—enough to assure the production of a quart of light-colored urine a day. It is desirable to reduce the intake of salt, which tends to retain fluids within the blood, thus increasing its total volume. Usually a physician will reduce the intake of salt and give a hypertensive patient a diuretic to reduce the blood volume.

There is a hazard to medical diuresis as necessary minerals are washed out of the system along with the excess water. An alternative to this is the cell salt Natrum Sulfate, 6X. This salt will act as a diuretic without washing the other minerals out of the system as its site of action is not the same. It does not paralyze the excretory function of the kidneys. To be continued.

## 23. Natural Control of Hypertension

Last month we discussed the dangers of high blood pressure for one's health, and explained how it can be reduced by natural means such as weight loss, low-fat diet and reducing the impact of salt. This month we continue with dietary advice as well as explore stress reduction. When reducing sodium in the diet, remember that Vitamin C is often given as sodium ascorbate. It is wise to take Vitamin C either as ascorbic acid or in calcium ascorbate forms. The hidden sources of sodium in the diet can seem to make salt restriction useless in the control of hypertension. Consumption of alcohol contributes to hypertension by damaging the kidneys.

No more than an ounce a day of alcohol in any form is to be permitted for one suffering hypertension. Recent studies show that this small amount of alcohol may increase the HDL levels (the "good" cholesterol) of the blood. So in select patients it may be not necessary to eliminate alcohol. Smoking must be stopped, as it produces increased peripheral resistance due to its vasoconstricting action. This can easily be demonstrated by the change in warmth of the finger tips after just one cigarette. Licorice is often found in various forms of tobacco, and it is known that it accentuates water retention (leading to weight gain) as well as the washing out of minerals when diuretics are used.

Caffeine increases the blood pressure, whether in the form of tea, coffee, chocolate or herbal teas. Caffeine can also increase blood cholesterol levels. On the other side, consumption of garlic is known also to reduce blood pressure and total cholesterol levels. To help eliminate "offensive breath" there are both odorless forms that dissolve in the intestine instead of the stomach. Stress reduction—both physical and psychological—is very important to manifest healthy blood pressures. Physical stress can often be eliminated by an ongoing program of physical exercise and relaxation. During work, for example, a period of 3-4 minutes every hour should be set aside for changing the focus of the eyes and consciously stretching the muscles, followed by a conscious relaxation of the same muscles.

It is natural for the musculature to relax after a concerted effort at stretching. This simple procedure will do wonders to increase your physical well-being. Psychological stress is often subtle but can be recognized through certain physical and behavioral changes. Frequent colds, allergies, headaches, body aches and pains or muscle cramps can be a sign. Overeating and an erratic appetite, drug or alcohol abuse, excessive smoking, boredom or "being glued to the television screen" are signs of stress. Emotional changes such as frequent crying, insomnia, inability to concentrate, memory loss, outbursts of anger, impotence, frequent accidents and others indicate stress that has not been coped with. Since stress is a normal occurrence of living in the world, we must find ways to handle it and prevent the dreaded hypertension.

Professional help may sometimes be necessary. However, as Hindus we have various techniques that will help us to adjust. Breath awareness is the most excellent technique we know, for it may be used at anytime and anyplace. When we become aware of our breath, the pressures of the stress are alleviated. In order to be aware of our breath, we need to bring our consciousness to the bridge of the nose between the two nostrils. At the same time we must feel the subtle coolness, as we inhale, and the warmth as we exhale. Keep the attention focused in the feeling of the coolness and warmth experiences for a few minutes or as long as is possible.

When the attention wanders bring it back to the sensations. A regimen of nutrition for weight control, exercise, frequent relaxation breaks, breath awareness, meditation and prayer will control the high blood pressure, which may well be the most serious health problem of this age.

## 24. Breath Control to Beat Stress

Stress is a natural and necessary consequence of living. But there is no need for us to be subject to it in abnormal amounts. Any influence that perverts or abuses the expenditure of our energy toward our desired functions is stress. When excessive, it produces undesirable reactions, both physical and mental. We have mentioned in the previous article several of the symptoms of stress. A few more are lack of appetite, boredom, twitches and tics, inability to concentrate, lack of sexual desire or pleasure, loss of appetite, persistent worry and fear, hopelessness, depression, sudden lapses of memory, disturbed sleep, sudden feelings of hyper-elation, frequent colds and illness, aches, pains and muscle cramps, and chronic fatigue.

One may have any one of these symptoms in a very subtle form and tend to pass them off as not important. Adequate stress management, or coping with stress, must start by recognizing the symptoms of underlying stress, then doing something about it. Our Hindu yoga practices alleviate stress—a fact which western medicine is just now recognizing. Yoga teaches us to relax the physical body through stretching, relaxation and control of the breath. The cultivation of diaphragmatic breathing brings to us the ability to become aware of the state of our body and mind. Practising diaphragmatic breathing in the “crocodile and dead man postures” should be part of our daily routine. In order to stimulate the diaphragm—a muscle of respiration—to become stronger we may practice “sand-bag” breathing.

A sand bag weighing from five to ten pounds is placed upon the upper abdomen to give a slight resistance to the movement of the abdomen during inhalation or contraction of the diaphragm. It is said that we are unable to feel the effects of stress if we merely bring our minds into conscious awareness in the present, for we react unfavorably to stress only when we are on “automatic,” that is, when we are reacting unconsciously. Another powerful method to bring us into conscious awareness is “Alternate Breathing.” There are many variations to this practice, but the basic technique is to place the index and middle fingers of the right hand over the space between the eyebrows. The thumb is then used to apply a slight pressure to the lobe of the right nostril, and the ring and little fingers are used to apply slight pressure to close the left nostril.

The technic is to breath in through whichever nostril is clearly open, closing that nostril with slight pressure after inhalation is complete and then breathing out through the opposite side. Without a pause the breath is then taken in through the same nostril and the exhalation is out the opposite. A round consists of inhaling through the right nostril, exhaling and immediately inhaling through the left side and exhaling through the right. The breathing is to be smooth, slow and with no pause between inhalation and exhalation. Three rounds of alternate breathing may be performed whenever one is consciously aware that he is under stress. The effect of this is to bring our awareness to our breathing, and thus withdraw it from the stressful situation.

The alternate breathing may be preceded or followed by conscious, diaphragmatic and even breathing. This is a slow and deliberate inhalation and exhalation of equal length, say a count of four in and a count of four out with no pause at the change from inhalation to exhalation or vice versa. Once the rhythm is attained, we then slowly slow down the breath until we are exhaling for twice the time that we are inhaling; using a 2:1 pattern. This tends to stimulate the parasympathetic nervous system and brings about a sense of relaxation and reduction in arousal stimulations. Meditation performed twice daily helps us to broaden our consciousness and easily to maintain the constant state of awareness that protects us from the undesirable effects of the stress of living in this technological world.

## 25. Physical Results of Stress

One of the most frequent physical manifestations of mental stress is muscle spasm, especially in localized groups of muscles such as the neck or shoulders. This is followed by secondary physical changes such as headaches, insomnia, eye strain and finally changes in personality and more serious physical disease. It is so easy during the working day to have these spasms that we tend to ignore them, which leads to the sequence of tension building until something physical or mental- snaps and we are in the state of “dis-ease.” At work, we must get up occasionally to stretch and walk around in order to relieve the muscle spasms. Frequent trips to the water cooler may be made so as not to announce to the entire office that we are treating ourselves.

Bending over to touch the toes always helps back tension, if done properly. It may even be wise at times to go to the roof, or outside while on break, to scream. This is so effective that an entire psychologic healing regimen has been formulated using screaming as its main basis. It is surprising how much tension can be relieved by a good scream or, at times, a good cry, even for men. Chronic stress with a physical and psychological component over the years will effect one’s personality and physical bearing. Deformities such as kyphosis (humping of the spine) and scoliosis (curvature of the spine) are often the eventual result of not handling the stress that produces the muscle spasm and ultimately shortens tendons and muscles.

Chronic stress produces wrinkling of the brow and a overall appearance of pain or worry. The internal organs can be affected by this chronic stress, which changes their normal function and state of health. It is fairly obvious that such stressful living is able to produce heart attacks, peptic ulcers and depressions. However, it is not as obvious that muscle and tendon shortening will not only produce visible changes in stature and physical bearing but also chronic headaches, chronic malfunction of such organs as the thyroid, kidneys, heart and lungs. Psychological changes are less often attributed to these changes in the muscles and tendons. However, these are even more common results of such chronic stress.

People so affected may not feel ill enough to see a health care practitioner, and they often miss a great opportunity to eliminate the condition. As we know, hatha yoga is an excellent way of remedial care to the body and surely is the best way to prevent such chronic changes. There are several other techniques that may often be necessary in those people that have suffered for long periods of time. “Rolfing” is one of these techniques. Dr. Ida Rolf found that by kneading and stretching tendons and muscles she was able to bring many of these people back to a healthy and happy state. “Rolfing” is a standardized technique performed by those especially trained in this method. Through a series of visits at weekly or biweekly intervals all of the different areas of the body are worked on with the hands of the practitioner.

This is a very forceful kneading and stretching of individual muscles and tendons by using the fingers, fists and even the elbows of the Rolfer. The Rolfer is well trained in determining which areas need the most manipulation; but the entire body and all of its muscles and tendons are covered in the course of the therapy. After one is Rolfed, he may return after a year for a shorter refresher session. Most Rolfers take before and after photographs of their clients. After the first session there is a photographically different appearance of the client and his stature and overall bearing. During the course of the treatments, there are often emotional breakthroughs into new understanding and awareness of one’s problems. The client begins to not only look better but he feels like a new person. There are variations of this technique called Feldenkreis Method, Alexander Method, Oriental

Massage, and others. Each technique is adapted to specific areas of interest and to the needs of the person. Their only similarity may be the production of mental effects by working with the body and its musculature. Although the therapeutic value of these techniques is tremendous, to me their greatest importance is to show us that the mind and body are a continuum and are really two sides of the same coin.

## 26. "Energy Medicine" and Prana

Modern science, including the medical profession, is finally seeing that there is a form of energy so subtle that our present instruments are unable to detect or measure it. The great rishis have always known that there is such energy and called it prana. Other disciplines call it by names such as cosmic energy, the force, odic force, ki, chi, psionic energy, orgone energy, life force and other names. All of these are the same subtle energy that, according to our Hindu tradition, flows in and through our physical bodies in channels called nadis. Our forms are built upon this vast framework of energy flowing through the nadis. This energy is within every cell of our bodies and within every portion of these cells.

In fact, it is the constant flowing of prana that gives our body its life and apparent palpable existence. There is a constant change of birth, growth and death in the cells and tissue within our bodies. At no time are you physically the same body as you were yesterday. A continuum of existence is present so that what appears to be a body, mind and soul are all parts of the same pattern of energy. As long as the energy flows uninhibited, we are healthy and human. If there is a blockage to the flow of energy or any aberration in its flow, the result is "dis-ease." There are several branches of medicine that are built upon a fundamental belief in this principle. They all belong to what we term "energy medicine" or "vibrational medicine." The basis of all treatment in these systems is to influence the flow of the pranic energy to return to normal.

The ancient rishis knew that this energy flow manifests itself in pathways in the body with periodic and patterned emergence to the skin surface. These paths are called "meridians" by the acupuncturists. The surface points are all categorized and numbered. A form of therapy has been developed wherein internal effects are produced by stimulation of the numbered meridian points. This stimulation may be by needles, vibrating needles, moxibustion (a form of heat from burning organic substances at the points) or pressure. Acupressure, Do-in, G-jo, reflexology are all variants of the same system. Therapeutic touch, Reiki, polarity therapy and many other techniques utilize the same transfer of energy by laying on of hands. Marma vidya was a healing method by applying the hands over these areas (which correspond to the acupuncture points). It is not necessary to actually come in contact with the skin surface in most of these techniques; it is often sufficient to merely hold the hands over the marma areas.

The transfer of energy may be facilitated by massage with herbalized oils. In the case of Reiki, a special initiation process is required as well as instruction in the location of the points, but no pressure or massage is used. Reiki is the only methodology that I know of that requires no knowledge of medicine, anatomy or physiology or a diagnosis in order for the method to bring health and normal flow to the inner prana.

## 27. Stop Harming Your Children!!!

Recently I received a letter from a young Hindu lady who is to be married soon. She wrote, "I am a vegetarian and my family is not. People around me and my family are saying that eating vegetarian food alone is not sufficient during pregnancy and confinement. I will have to eat meat, too. Now I am confused and worried." There is absolutely no need to supplement one's diet with animal flesh because of pregnancy, and there is absolutely no need to give meat to the weaned baby or growing child. A properly balanced vegetarian diet is ideal for the time of pregnancy and is ideal for the growing child. The well-meaning, but badly misinformed, grandparents and other family members should not be listened to in these matters. There may be many grave consequences to the fetus (and also the mother) by adding meat to the diet, especially at the sensitive time of pregnancy.

The vibrations of fear, anger and rage that the animal feels at the time of slaughter are transmitted as toxins and "bad" vibrations that may affect the sensitive psyche of the mother and fetus. There is a serious possibility of an overload on the kidneys of the mother and fetus. Scientific evidence shows a direct connection between the consumption of meat and such disease as cancer, osteoporosis and arteriosclerosis. Is there any logic to feeding a pregnant woman anything that may produce these degenerative diseases? It has been shown scientifically that we ingest too much protein- that is, more than we need to replace the proteins of our own tissues.

The excess protein after digestion tends to overload the kidneys leading to renal disease. Vast amounts of antibiotics, hormones and other toxic drugs that are given to animals are transmitted to those who eat the meat (and thus to the fetus). This leads to overtaxing the liver in its detoxification function. It may also lead to hypersensitization of the body (mother's and fetus') to the drugs bringing about allergic reactions. There is also clinical evidence that the newborn baby may have developed allergies and asthma because of this burden of drugs upon the mother and itself. It is true that the protein of meat is a complete protein. That is, it does contain all of the essential amino acids.

The vegetarian is obligated to see to it that she combines vegetables that will supply all of the essential amino acids. When this is done-and it is not difficult-there is no problem in supplying the body with all of the necessary building blocks that it needs. Even in this day of depleted food products, a vegetarian diet is by far the safer one. In spite of what the well-wishers may say, all protein is made up of combinations of amino acids, and our bodies cannot distinguish between animal or vegetable sources of these amino acids, for the resulting protein is identical chemically-except for the added toxins, chemicals and vibrations of the animal flesh. Another problem is that the fat of the meat is primarily saturated fat which can contribute to heart disease. To be continued next issue.

## 28. Vegetarian Pregnancy

There is absolutely no requirement for humans, including pregnant humans, to ingest animal foods. We get along very well-better in fact-without the added problems and stresses that occur when animal products are eaten. You may ask, "Why do so many doctors recommend meat eating?" The reason is that they have never studied nutrition either in medical school or since graduation. There is simple scientific evidence available to those who are curious enough to look for it, and some of the newer physicians are beginning to learn of these facts. But unless the expectant vegetarian mother is lucky enough to have a knowledgeable doctor, she will need to personally study and understand her own nutritional needs. It is said that the pregnant women must eat enough for two.

The truth of the matter is that the women must eat food for 1 1/4, for the fetus does not demand as many calories as a grown person. The World Health Organizations recommended daily allowance (RDA) for protein is 44 grams; the US Government's is 74 grams. The truth is somewhere between these two extremes, but the USRDA is probably safer. It is especially wise in the last trimester to maintain this higher level. With adequate calorie intake, it is very difficult NOT to receive sufficient protein, providing some slight care is used in choosing the food sources. A good balance of whole grains, legumes, nuts and seeds will assure this balanced protein diet. More variety in this regard is best for the body, as it has a greater amount of amino acids from which to choose the "building blocks" for your child.

We tend to forget that the green foods-especially dark green foods, such as broccoli, collard greens, kale, kohlrabi, spinach, beet and mustard greens, Swiss chard, etc-are all good sources of protein and also of calcium. We also know that sprouts have a greater amount of protein than the basic seed or nut; however you should not have more than about two ounces a day in sprout form as there are alkaloids in these that may adversely effect the baby or mother.

We should be careful of the amount of the fattier seeds eaten, for we still want the diet to be no more than 25-30% fat calories. Our critics will also say that it is essential to drink milk and eat a lot of milk products for calcium. The USA RDA for calcium is 200 mgms per day. A good balanced vegetarian diet with the use of the dark green leafy vegetables will probably give this, but to be sure it is advisable to supplement the diet with 5-800 mgms of calcium ascorbate (calcium plus vitamin C). This should be also associated with 200- 63 300mgms of magnesium.

This is easily obtained from any source of vitamins or food supplements. Do not take the supplements that are made from dolomite, bone meal, oyster shells or other animal sources. These may be contaminated with zinc, lead or mercury. The calcium source from milk products may also be contaminated and the amount of fat is markedly concentrated in cheese especially. (continued next issue).

## 29. Vegetarian Baby and Child

Mother's milk is the only ideal food for the new-born baby during the first year of life. It is of ideal composition and contains the necessary ingredients for the child's normal development. It also carries antibodies from the mother, giving the child immunity to many diseases. The vegetarian mother has none of the toxins and chemicals from meat in her system, so none of these are transmitted to the baby while breast feeding, as they are in the meat-eating mother. The new-born child is still developing the brain, endocrine glands and other vital tissues and is extremely sensitive to even very small amounts of these toxins and chemicals.

The mother receives benefits from breast feeding also as it stimulates hormone development, helping her uterus to return to normal. It has been shown experimentally that the emotional relationship between the mother and child is favored by the touching and caressing that occurs at the time of feeding. The dietary guidelines for pregnant women [Oct. and Nov., 1990, columns] also serve for nursing mothers. It is important to assure that there are sufficient iron and calcium-rich foods available, and the guidance of a health care practitioner may be desired. It is vital that the nursing mother consumes from 3-5 micrograms of vitamin B12 daily. It may be necessary to supplement the diet with nutritional yeast or fortified foods in order to accomplish this level.

There is absolutely no need to eat meat, fish or eggs. The nursing mother needs adequate vitamin D, 400 I.U. daily. This is easily obtained from sunshine and fortified foods, or the vitamin supplement that is usually taken during pregnancy. This should be continued throughout the nursing period. Be sure the vitamin B6 does not exceed 100 milligrams per day, or there may be suppression of lactation or nerve injury. To assure ample supply of breast milk, drink 6 to 8 eight-ounce servings of pure water, fruit or vegetable juices daily. Soft drinks (even "diet" brands), tea, coffee, herbal teas and alcoholic drinks are to be shunned. Critics often say that a standard vegetarian diet is not suitable for the infant and growing child because of the high fiber and low fat content.

This is true, but easily adjusted. Some modification is needed at least up to the age of two. The high fiber foods are replaced by the less fibrous such as tahini, hummus, nut butters and pureed beans mixed with avocado or nut butters. If excess intestinal gas is formed, the cause is probably too much ingested fiber. The amount should be reduced. As the child grows older, a more adult level of fiber may be tolerated. The fat content of the diet of the infant and child is to be higher than the adult levels. The older child, at least up to age three, should be drinking whole milk, homogenized whole milk or whole fat soy milk.

Always remember that all cow's and goat's milk must be boiled before consumption for safety and easier digestion. It has been shown statistically that children on vegetarian diets grow to full size and mentality without becoming overweight and overgrown as are most of the children in the United States.

## 30. Health Through Ayurveda: Part I

Ayurveda, the ancient Indian study of life, uses the tridosha theory to explain human makeup and behavior. It is considered by the ancient seers that man's psychological and physical makeup may be classified as belonging to a specific type of constitution called prakriti, the underlying or inherent nature of one's being. It is nature that determines how we behave, what we desire, what we enjoy, our physical constitution and how we respond to all of the stresses of living. It further determines our physical, psychological, social and religious patterns of behavior.

The prakriti is divided into three main doshas or forces that help to bind the five elemental forces into living flesh. These doshas are vata, pitta and kapha representing the philosophical elements air, fire, and water respectively. If we know our prakriti and are well versed in the foods and activities that are natural to or that aggravate the doshas, we can maintain a more peaceful and healthy body and mind. Very few of us have a pure prakriti of only one dosha, most of us have combinations. That is, we all have all three doshas within our makeup but there is usually a prominence of one or two. For perfect health the goal is to have all of the doshas balanced within our prakriti. There are seven possibilities of constitutional types: V, VP, P, PK, K, VK, VPK and balanced (equal force from each dosha).

What causes these constitutional types? They are determined at the time of conception and depend upon many factors: such as, the spiritual state of the parents at conception, the astrology of the moment, physiology, genetics, and the physical health of the parents. Once the constitutional type is set, it is maintained for the balance of one's life. It is possible by studying the various types to analyze one's own type from the similarities and dissimilarities with the characteristic patterns and varying categories. The difficulty with this is that we have a tendency to chose characteristics that seem to be "better" or of a "higher type". It is more accurate to learn one's prakriti through the Ayurvedic pulse diagnosis. Those who are trained in the method are able to determine which is the basic type and also able to determine if there are any imbalances.

It is said that the real masters of this art are able to tell you about your entire past medical history, even to the extent of what surgery has been performed, as well as your present state of balance of the doshas. In order to simplify this rather complex theory, we speak of the prakriti as a structure; the basis upon which we (in all of our facets) are structured. We also speak of each dosha as though it were a truly separate and concrete form of energy with usual effects upon our being. The extensive study of the prakriti and the doshas is only a small part of the vast field of Ayurveda. Ayurveda has studied the natural construction of man and his behavior in order to bring his very being into a closer natural harmony with nature. The very ancient science has a great deal to offer to the health of the world today. Continued next issue.

## 31. Ayurveda Part II:

Vata Dosha In order to be healthy, according to the Ayurvedic system of medicine, we must have some knowledge of the character of each dosha (as introduced last month) and how to maintain a balance between them. Balance is attained by varying the diet and activities according to the climate, time of day and the individual's nature. Vata is the dosha that is the base or driver of all motion within the body. It is the nature of the air/ether elements. It governs all biological movement such as breathing, muscular contraction, heart beats and movement of single pulses through the nerves. It determines metabolism through the motion of the cell substances and controls the thoughts by leading the mind to constant desirable objects rather than determined ones. Vata is the root cause of the sense of hearing and stimulates the body fire for appetite. It causes the elimination of urine and feces. It distributes pitta and kapha in the body.

It maintains the health and function of the body depending upon its balance. It also governs emotions such as pain, fear, nervousness, anxiety, tremors, and muscle spasms. Vata's physical properties are dry, expanding, light, cold, penetrating, subtle, rough and dispersing. Vata dominates the fall season (Nov. to Feb.) and is also most prominent at 2:00AM to 6:00AM and 2:00PM to 6:00PM. during these times, it is not wise to do or ingest anything that may bring about an imbalance of the vata force. It is this time dominance that suggests that we rise from sleep each day before sunrise. Vata is also dominant in the old age period, that is, "life over fifty". Vata's natural seat is in the colon, pelvic cavity, bones, skin, ears and thighs. Imbalance will cause an accumulation of vata in these areas with resulting diseases such as skin rashes and growths, constipation, abundant flatulence, bloating, bone and joint changes, decreasing mobility, impaired hearing, increased fear and memory loss and often confusion. In the fall we are still geared to a preponderance of pitta, so the changes in weather, although pleasant, may aggravate the vata dosha especially if we have a strong vata constitution.

In order to counteract or attempt to balance this we should always keep warm and protect ourselves from the strong winds and draft. We must avoid cold foods and drinks, supplementing our diet with warmer, heavier and moisture foods but decreasing the vata aggravating foods such as beans, raw foods such as apples and anything from the cabbage family. Decrease pungent, bitter and astringent tastes as these aggravate vata: increase the sweet, salty, and sour tastes as they tend to balance vata.

Dairy products are good to take in moderate amounts. It is advisable to follow very closely to a routine, which may be boring, for this tends to balance or ground vata. Long air travel tends to aggravate vata, and this can be remedied by keeping warm, quiet and by good deep meditation. Alcohol aggravates vata, especially in the artificial atmosphere of air travel. Sure ways to imbalance vata are to worry, eat on the run, get too little sleep, eat dry, frozen or left-over foods, keep on the move or work at night.

## 32. Ayurveda Part III:

**Pitta Dosha** We have seen last month that vata dosha has to do with energy in motion. Pitta is the force that balances the kinetic energy of vata and the potential energy of kapha. Pitta is of fire/water energy, is dominant in July to October and peaks at noon and midnight. It governs metabolism, the enzymatic and endocrine systems, and has great influence on the mental activities. Pitta dosha's function is pigmentation, digestion, heat, intelligence, sight, hunger, thirst, softness and radiance of the body, cheerfulness and courage.

The physical properties of pitta are lightly viscid, non-sticky, active, hot to touch and bitter to taste. It is a combination of elemental fire and water. The normal seat is the duodenum (first section of the small intestine), liver and spleen. It also resides in the heart, eyes and skin and accounts for the skin's radiant heat and health. Deranged or unbalanced pitta may bring about changes in sight, digestion and inflammations of the skin. There is a tendency to be overheated and very thirsty. Ulcers, colitis, migraine headaches, hepatitis, allergies and hyperthyroidism are typical pitta diseases. Pitta people are of medium build and usually thin. They may have many moles or freckles or other skin blemishes.

The skin is soft and warm; the hair is thin and silken. Normally these people have a strong digestion and huge appetites. They crave sweet, bitter, astringent tastes and cold drinks. They do not tolerate sun or heat well as their body temperature is elevated. They are intelligent and sharp and like to be leaders. They are ambitious and have emotional tendencies toward anger, hate and jealousy. In order to balance pitta, one must keep cool by avoiding heat and the warmer parts of the day as well as the warmer climates. Avoid oils, fried foods, caffeine, salt, alcohol and hot spices. Plenty of grains and moderate dairy products tend to balance as do sweet, bitter and astringent tastes. Lots of fresh air is advised. Remaining calm and serene helps the pitta person to remain balanced.

The important thing is to keep cool physically and mentally with such aids as cool, shady spots and cooling rinses after showers. Hot spices and heavy oily, fried foods aggravate pitta. Hard cheeses, sour cream, buttermilk and yogurt are to be used in very small portions, if at all. The cooling spices such as cumin, coriander, saffron, dill, mint and parsley are valuable in the pitta diet. Garlic is very aggravating to this constitution, and thus must sadly be avoided. Deranging the pitta constitution is easily accomplished-but hardly recommended-by the following: drink plenty of alcohol, eat spicy foods, especially tomatoes, chilies, raw onions and highly salted foods.

Engage in frustrating activities, use drugs, especially cocaine, speed or marijuana and wear tight, hot clothes. Avoid cool, fresh, peaceful places. Repress your feelings and eat as much red meat and salted fish as possible. These unhealthy forces are highly reactive and must be routinely excreted from the body. Vata is eliminated from the body as gas and muscular or nervous energy. Pitta is eliminated from the body through acid, bile and perspiration.

### 33. Ayurveda Part IV:

**Kapha Dosha** This is the final article on Ayurveda, the ancient Indian study of life that employs the tridosha system to understand the subtle and gross human constitution by perceiving three different forces at work—vata (air), pitta (fire) and kapha (water). The last of the tridosha forces is kapha, active during March to June and early morning and early evening. Breakfast should be eaten by pitta and vata people between 6 and 7AM. However, this is kapha time so kapha people should not eat as it would increase the kapha within the body. Kapha is not mucus but produces mucus to eliminate its forces. Kapha dosha's main function is viscosity, nourishment, binding of the joints, solidarity, fortitude, forbearance, patience and abstinence. Its physical properties are: motionless, viscid, sticky, heavy, sweet, inert, cold, soft, white and tamasic.

Kapha is a combination of the earth and water elements. The challenge of a kaphic person is to overcome inertia and the desire to have and hold on to everything, even old outgrown attitudes and reactions. The natural site of kapha dosha is above the diaphragm. Unblanched kapha produces heaviness in the body, drowsiness, numbness, feeling of old age, dyspepsia, sweet taste in the mouth, loss of memory, decrease in sensations and general debility. If the kaphas is depleted there is dryness, weakness, thirst and feeling of internal heat and emptiness.

Activities that imbalance kapha are: taking long naps after eating, eating lots of fat and oils, overeating, letting inertia take over your body and mind, not exercising, using drugs (especially sedatives and tranquilizers), never skipping desserts (especially ice cream and gooey, sticky ones), enjoying the sedentary TV life daily and interrupting viewing only by eating large meals and excessive snacking of salty and gooey foods. In order to balance the kapha dosha: exercise daily, reduce fatty foods, eliminate iced drinks and foods and excessive amounts of bread and pastries. Also, eat warm, light and dry foods and have a lot of variety in the menus with vegetables, peppers, ginger, garlic, and turmeric. Keep salt consumption low. Most seeds and all nuts should be eliminated from the diet. Popcorn with no fat or salt is excellent.

The diseases common to kaphic constitution are: coughs, excess mucus, bronchitis, rheumatic fever, aching joints, pleurisy, peri-carditis, sinusitis, nasal congestion, accentuation of greedy tendencies—holding onto things such as repressions, body wastes, lethargy and sloth. By careful attention to diet, varying it according to the season of the year and the time of the day with special reference to one's constitutional dosha, we are able to balance the doshas. The balance is the first step to a healthy and disease-free life. If there is such an upset of the doshic balance that a disease process is present, treatments using pranayama, massage, cleansing, aromatherapy, herbals, gems and other techniques are available to the Ayurvedic physician. Remember that mental balance and a balanced diet according to one's constitution are the basis of health.

### 33. Dangers of Food Irradiation

Keeping food fresh is a major problem, and the food industry is always looking for new ways to prolong the shelf life of our food supplies. In the past the industry has used various processing techniques: cooking, salting, drying, smoking, bottling, canning, freeze drying and addition of chemical preservatives. None of these methods have been 100% successful, and with each method there are variable effects upon the nutritional value of the food. The newest technique of prolonging food life is food irradiation. Irradiation uses large doses of ionizing radiation (X or Gamma Rays) to “treat” the foodstuffs. It is claimed that this process will prevent sprouting, delay ripening, kill insects and other pests in grain, fruit and spices, kill or render sterile worms that often infest meats and fish, and especially reduce the amount of salmonella, a dreadful killer bacteria, that often is present on vegetables, meats, eggs and in dairy products.

This process, it is claimed by some, does all of this with no harm to the foodstuffs or the consumers. They claim that this makes economical sense and helps us to provide food to starving nations as the life of the food is prolonged sufficiently to allow shipment. There is a growing body of opinion, however, that realizes that there has not been sufficient scientific evaluation of the true effects that irradiation has upon the food. Are there changes in the nutritional value? Are there new and strange substances created that our bodies do not know how to handle? Even though the foods may look fresh longer, do they truly have sufficient prana to make them vital? Is the “protective” bacteria population hampered so that the toxins from the “non-protective bacteria” increase in amount?

What really happens to the “life” of the foodstuffs? It is said by some that “spoiled” food can be rendered sterile and edible by irradiation, however, the World Health organization, Food and Agriculture Organization, and the International Atomic Energy Agency have explicitly stated that food should always be wholesome before irradiation and this process should not be used to make an unsuitable product saleable for human consumption. Great Britain, West Germany and some of the Scandinavian countries do not allow food irradiation. Japan does not allow the importation of any irradiated food.

Malaysia is the headquarters of the Food Irradiation Network opposed to food irradiation until all outstanding issues are fully resolved. We are opposed to the premature use of this methodology of prolonging the shelf life of food products especially for shipment to the less affluent nations under the pretense that there is no hazard to the health of the individuals consuming it. We are also opposed to the approval of irradiation without adequate scientific testing to assure us that the process is safe for the long term. Most of the tests done have only been followed for a short term of weeks or months. For more information on irradiation, contact: [www.citizen.org/CMEP/](http://www.citizen.org/CMEP/).

## 34. Summer Ayurvedic Pitta Diet

Welcome to Summer! In the northern hemisphere as the mid-June season approaches, Mother Nature moves into Her pitta dosha (fire/ water energy) cycle. This extends until mid-October in most of the temperate zones. However, just as there are individual variations as to the time of onset and exit of the seasons, there also is some overlapping of the doshic periods. We must determine the cycle by the locale where we live as it may be that we are subject to a very shortened winter or fall season. There is always some variation in the doshic cycles of the world with tremendous local variations. Seasonal pitta is first characterized by increased heat, increase in humidity, less cloudy days with brighter sunshine and some decrease in the digestive fires of our bodies.

To stay in balance with nature and to maintain our health, we must become accustomed to these seasonal variants and prepare and adapt to them. We should not make drastic changes in our routines, but we will need to make some adjustments. The springtime is a kapha/pitta season and becomes more pitta as summer approaches, so our summer routines will actually start to some extent in the late spring. Because the digestive fires are somewhat weakened in the pitta cycle, we tend to be less hungry and naturally choose lighter and cooler foods. We should attempt to avoid sour, salty and pungent foods, such as sour fruits, grapefruit, papaya, olives, radish, tomatoes, spinach, brown rice, sour cream and buttermilk. Also we should reduce spices other than coriander, cinnamon, fennel, turmeric and cut back on black pepper. In spite of the great temptation, we should not drink iced drinks, only cool drinks and less hot drinks.

We should favor the sweet, bitter, and astringent tastes, such as sweet fruits, coconut, figs, melons, asparagus, potatoes, leafy greens, celery, basmati rice, oats, sunflower seeds and ghee. These moderate changes are always to be consistent with our basic constitutional doshas. The routine of our life must be maintained or the vata may be aggravated. These temporary and minor changes are more important for the adults (16 to 50) as they are in their pitta period of life. For those over 60, vata is the predominate dosha of the life and may easily be unbalanced at this summer period. Common sense, as always, must apply here so that we do not indulge in food or activities that will aggravate our basic constitutions. In order to alleviate some of the symptom overlay, if there is any imbalance, we may utilize modalities such as massage, aromatherapy, change of exercise, herbal teas, homeopathic remedies while always maintaining a routine that will assure us of good physical and mental health.

## 35. Care for Yourself by Yourself

Self care-physical, mental and spiritual-is a concept that has come of age again in this country. No, this is not a new concept. Our forefathers followed it, as do many people in the developing nations today. It certainly has merit in the age of rising medical costs. Self care starts with diet, eating only those foods and in the amounts that will bring about good health. The science of Ayurveda has many gems to offer in this regard. Second and equally important is to see that we receive the proper amount of exercise. We must practice the asanas of hatha yoga and perform an optimum amount of aerobic exercise. Third, we must have a healthy and loving mental attitude for life and live it with that perspective. We must train ourselves in the discipline of self observation and examination. Without the powers of observation, we are likely to exaggerate our aches and pains and believe that they are truly a disease process.

To examine ourselves properly we must have at least an oral thermometer, a stethoscope, a blood pressure machine (sphygmomanometer), a dental mirror, a reflex hammer and some experience in observing normal tissues. A flash light is also useful. It is not difficult to learn the use of these instruments as well as methods such as palpation. Every female adult should learn to do a monthly breast examination on herself. Every male adult should also learn how to do a monthly manual testicular examination. Done correctly and faithfully much of the morbidity from malignancies of these organs can be avoided by the early detection of cancer and other tumors. Health agencies teach these technics. Self care may also mean self-medication in order to alleviate some minor symptoms.

This is best done with the help of Ayurveda, homeopathy, herbology, acupressure, Reiki and nutritional changes. All of these are able to be easily learned by the lay person and can be used to overcome the day-to-day aches and pains that are due to minor lapses from discretion in diet, exercise and mental health. All of these methodologies are safe for use by the educated lay person; however, there is some chance of improper observation and improper choice of remedy to relieve the pain or symptoms. There is also the possibility of an overdose, if one is of the thought that "If a little helps, a lot will be better." This is the major danger in self medication. Even such a thing as chamomile tea, usually very soothing, can be taken in such large amounts that it becomes toxic.

One patient went from doctor to doctor for two years before she was asked how many cups of chamomile tea she drank in a day. When the answer given was 45, there was no doubt that she had a toxic overdose, which was proven when she stopped drinking the tea. Let us educate ourselves in the alternative systems so that we will be able to provide self-care for ourselves and our families without a possible hazard of self-harm. Common sense should tell us when it is necessary to have professional advice outside of our regular annual physical and psychological medical check up.

## 36. Don't Live with Unhappiness

A reader recently wrote: "Is there treatment in Ayurveda for anxiety, depression and unhappiness?" The answer to this question is somewhat complex; but in general let me state that there are many things in Ayurveda as well as homeopathy that can be done to relieve these symptoms. Indeed in the Homeopathic Repertory (the reference book for the science), there are many mental and psychological symptoms mentioned with specific remedies listed. Allopathic medicine, of course, has a whole branch-psychotherapy and psychiatry to deal with these problems.

The science of the Bach Flower Remedies deals with the mental and psychological symptoms that often plague man. Dr. Bach wrote beautifully about the flower remedies and their psychological and personality characteristics. Often self diagnosis and therapeutic use of the proper flower remedy will correct the imbalance that produces the symptoms. The science of Ayurveda has a very deep understanding of mental and personality symptoms and, indeed, was the first healing discipline to consider the vast field of psychosomatic disease. Many maladies of the psyche are due to dietary imbalance with resulting aggravation of specific doshas. When the dosha is vitiated, the symptoms will disappear. Each constitutional type and variant has fairly specific mental symptoms that are recognizable.

The science clearly points out the type of exercise and yogic asanas that are best for specific constitutional types. If these are not followed, mental and personality disorders may occur that can easily be corrected by a change in diet and a change in exercise protocol. For more serious conditions, there are herbal remedies and drugs that may correct the problems. The Ayurvedic science of jyotisha (vedic astrology) can help to make a diagnosis for unhappiness and anxiety by pointing out past and current planetary influences that affect one's well being. The karmic debts and karmic sources of serious mental malfunction are also clearly seen by the experienced astrologer. In fact, this may be the only obvious explanation for some conditions.

Ayurveda teaches many other modalities that lead to relaxation and inner balance, such as physical massage, musical therapy, aromatherapy, specific marma therapy (a form of ancient acupuncture), propitiation through gem therapy and herbal therapy, ritualistic propitiation and the use of prayer and mantra. All of these-especially those associated with diet, exercise and meditation-can bring happiness into our lives. The philosophical principle of "loving what you do and doing what you love" is a very profound truth that readily leads to happiness and balanced living. For anyone who has any of these mental or personality "dis-eases" a consultation with a good physician is the first order of business. There is certainly no reason for one to lead a life of depression, anxiety and unhappiness. Life is meant to be lived joyously, and we are truly blessed to have the great science of Ayurveda.

## 37. Taking Good Care of Our Eyes

Everyone should at least once a week give the eye lashes and lids a soapy bath, especially those people prone to itching eye lids, accumulation of dried tears, inflammation of the eye lids with styes or blepharitis. Use a soft wet washcloth wrapped about the index finger. Apply “No More Tears” or baby shampoo to this cloth and use it to “scrub” directly the eye lids and lashes, approximately thirty times each side. For the other eye use a fresh spot on the cloth and fresh shampoo in order to prevent any cross contamination of dirt or bacteria. This is to be done gently and then rinsed well with copious amounts of water and/or follow with a shower.

Daily applications of heat to the eyes is also suggested. This is to be done with a hot wet washcloth held near, but not touching the eyelids. Allow the heat to rise to the eye lids. This tends to help the tear glands and ducts clear themselves of any accumulated debris. This may be followed by exercising the muscles by alternately moving the eyes from up to down, side to side and diagonally upper outer and lower inner and upper inner and lower outer directions. This may be followed by the eye rotations. These should be done about 3-5 times in each direction. To prevent eye strain when working at close range or reading and while driving, frequently change the focus of the eye by looking off to the distance and then back again to a near spot.

Never allow yourself to stare, for this not only places strain upon your delicate inner and outer ocular muscles but also may lead to a possible trance or altered state of consciousness. During the day “cupping” is also advised. This is done by rubbing the hands together until you feel the warmth, then hold the cupped hands over the eyes, not allowing them to touch the eyes. This replenishes the eyes with prana and can be done as often as one desires. Many people who work at a desk put extreme strain upon their neck muscles which is reflected in eye strain. The yogic neck asanas are suggested to go along with the changes in focus and eye muscle exercises. If one wears contact lenses, which I do not advise, he must faithfully follow the directions of his eye care specialist. Glaucoma, macular degeneration and cataracts are aging conditions that interfere with vision. Some recent studies suggest that “free radicals” may be causative of these conditions. It is suggested that certain ultraviolet rays in the light tend to produce these oxygen radicals.

This is a reason for wearing good sunglasses in bright sunlight. Betacarotene, Vitamin C and Vitamin E are antioxidants which may help prevent these aging changes. Although there is not enough clinical evidence at this time to prescribe a minimum dose, it is advisable to take 10,000 units Beta Carotene every other day, at least 100 mg. of Vitamin C and probably 100-400 units Vitamin E as supplements daily. This dosage is safe and may act as insurance against premature damage. There is no evidence that mega-doses are advisable. Indeed, there is some evidence that mega-doses of vitamins for any reason are to be discouraged.

## 38. Adjusting to the Fall/Autumn Season

The months of October, November and December constitute in the northern hemisphere the fall, autumn or early winter of the year. This is the time when there is withdrawal of water from nature, the winds increase and the temperature falls due to decrease in sunshine. There is an increase in the vata dosha at this time of year and a tendency for more vata disease to become evident, especially in those who have a vata constitution. It is a good time to review our diets and way of life and make changes according to the needs expressed by the withdrawal of heat and moisture. The pitta and the kapha types may find some relief with the dawning of this season; but they too should review and revise wherever necessary. At this time we need more moist and warm foods.

There may be an increase in the sweet, sour and salty tastes with a relative decrease in pungent, bitter and astringent. We can eat avocado, berries and figs. We may also add brown rice and other grains to give us the earth connection we need; but we will still use sparingly barley, corn and millet. Yogurt relieves excess vata as does sesame and corn oils. Shun the cruciferous vegetables (mustard greens, cabbage, cress, etc) as they increase vata as does celery and okra. Cucumber, radishes, sweet potatoes, cardamom, ginger, clove, mustard seed, salt and sesame tend to relieve vata. The seat of vata within the body is the lower pelvis.

The daily asanas should be changed to include more positions that apply pressure to the pelvic area, such as backward bends, plough, cobra, knee to chest and the head stand. All of these will aid in keeping the vata in its natural location, as will a light circular massage of the lower abdomen with castor oil. The diseases that are most common at this time of the year are dryness and cracking of the skin and angles of the mouth, aches and pains in the joints and accumulation of gas in the bowel. There may also be some minor temporary difficulty in remembering. If the vata becomes unbalanced, there may be instability and lack of tolerance. If these should pop up, dietary changes are indicated. As the seasons change, our bodies are more susceptible to colds and flu.

Thus it behooves us to be specifically cognizant of the incoming changes and make enlightened adjustments to our life style, especially diet. Our main dietary regimen would still be that of our constitutional dosha; but we would make minor adjustments such as eating more of the seasonal vegetables of our particular area. Use very sparingly vegetables that are not native to our area—especially fruits that are grown far away, picked while still green and shipped long distances. At this time of year, going from pitta season to vata, we would eat fewer cold salads, cold drinks and we would substitute room temperature red wines for the chilled white wines and avoid dry and uncooked foods and raw fruits. We may eat half our diet from our constitutional dosha list and half from the seasonal dosha list. Use more of the spices consistent with the seasonal dosha. Do not be alarmed at this time by an increase in appetite, but do not overeat.

## 39. The Importance of Skin Care

The skin is the largest organ of the body. It is at the interface of the body and the external environment and functions as a protector of the underlying tissues. It is a part of the excretory system helping to rid the body of many toxins and as such supplements the respiratory and other components of the excretory system. Our skin serves as an efficient regulator of body temperature under normal circumstances. Heat, wind and sunshine are the great enemies of the skin. They each tend to dry it out and cause it to age prematurely. As we have found that there are certain rays of the sun that may cause severe damage to the lens of the eye, we now also know that these same rays may cause severe damage to the skin, even to the extent of causing cancers.

Even though we know that the interaction of the sun's rays with certain elements of the skin produce Vitamin D, an essential vitamin, we want to protect the skin by the judicious use of sunprotective lotions when we are forced to be in the sun for prolonged periods of time. The great American pastime of "getting a dark tan" is to be discouraged for even if no cancers result, the skin is prematurely aged. It loses its elasticity and becomes dried and wrinkled. Steam baths may be very helpful in aiding the skin in its excretory function; however, unless these are followed by cool rinses, oils and massage their value is lessened. It is advised that everyone participate in a daily total body rub down and massage with sesame oil. Some people may prefer olive oil and the pitta types may find that coconut oil is more cooling.

The massage should be done gently with the flat of the hands and start at the scalp, continuing down the body to the feet. More vigorous massage of the extremities and feet is helpful. It has been found that the massage produces changes in the underlying tissues that stimulate and tone the autoimmune system. As this system functions better, we are protected from outside invaders such as bacteria and viruses. If possible, a very thin layer of the oil is left on the skin by using only warm water to wash with. If it is desirable to get rid of all the oil, a hotter bath or shower may be taken as long as it is followed by a cool rinse. Premature aging of the skin is produced by the drying effects of heat, dry winds and sunshine. Aging is also due to the dehydration of the skin.

As this proceeds, those pesky and unsightly small lines and wrinkles occur around the eyes and lips. They can be made to disappear by replacing the moisture in the skin. The daily oil bath also helps prevent lines and wrinkles. Millions of dollars are spent annually by men and women for moisturizing creams and other "miracle" substances. But petroleum jelly is the finest moisturizer that is available and it does not cost a fortune. A simple, very thin layer of petroleum jelly applied at night over the face will soon moisturize the underlying skin and make it recover its suppleness. A coating of this same jelly over the hands will protect them from harsh chemicals and toxins that may be absorbed through the skin during work.

## 40. Adjusting to Winter

Mid-January begins the transition stage in the cyclic seasonal dosha changes from vata to kapha. The period extends from February thru May. This is characterized by the elements of earth and water. Kapha is aggravated in the earlier part of this season, which merely means that we tend to hold water within our bodies. There is an increase of mucus and a tendency to develop kaphic diseases such as bronchitis, sinusitis, and congestion of the lungs. There may be an increase in possessiveness, greed and attachments to people and things. The digestive fire is weakened and poor digestion is not uncommon. During this period, we may be tempted to withdraw and become inactive, hibernate until pitta again becomes active in the later part of the season.

This is not advised. It is vital to have vata active in order to move the accumulated mucus and water out of the system. The diet should include light bitter and fresh foods and a definite decrease in the heavy, unctuous, sour and sweet foods. One should exercise rather vigorously such as jogging, aerobics and activities under the hot sun, if possible. There must be body heat in order to mobilize the accumulated fluids. One should avoid excessive sleeping. Pranayama that is rapid and aerobic to the diaphragm helps to heat the body, in order to drive out the accumulated fluids. Hot dry heat is helpful. If we are not too familiar with the properties of ginger, now is the time to experience this great herb which tends to stimulate the agni and is an excellent remedy for the kaphic diseases as colds and congestion.

Placing a small piece of fresh ginger root upon the tongue every hour or so will do wonders to get rid of the accumulated mucus and water of this season as well as mobilizing the vata. Drinking ginger tea will also be of great value, for dry ginger is really preferred for kapha. Since the season is characterized by an increase in mucus, it will be necessary to decrease the milk intake, even yogurt, especially if the constitutional body type is kapha or a combination with kapha. The intake of ghee may be moderate for it is good for all three doshas. Wheat also aggravates kapha and mucus accumulation. Goat's milk in moderation, especially with ginger, may be substituted for cow's milk.

Deep hard massage with dry heat with special reference to the reflexology or marma points for the lungs is of great benefit; but only a small amount of oil should be used. Garbanzos, kidney beans, red lentils and soy beans with pungent herbs all tend to decrease kapha. In the seasonal variation of our diets we must remember that the underlying constitutional type is to be balanced by our selection of foods as well as attempting to balance the seasonal variant, in this case kapha. We should not add foods that are going to aggravate our underlying constitutional dosha just to treat the seasonal dosha. Near the end of this period, mid-May, we can slightly decrease the foods that tend to balance kapha and begin increasing the pitta balancing elements to our diet in order to prepare for the summer.

## 41.Soda Pop (Colas) --Poison by the Can

There are amongst our adults and children four very common addictions in the world today. These are addictions to alcohol, to tobacco, to caffeine and to sugar. Perhaps one of the most insidious of these is the drinking of soft drinks by the adult and juvenile population of most countries, causing both caffeine and sugar addiction. In our large supermarkets more shelf space is consumed by the soft drinks than any other single product. The Coca-Cola drunk daily in the world would power Niagara Falls for an hour! The youth of today skips breakfast and drinks two or more cans of soda pop while on the way to school. Is it any wonder that they are hyper-active and poor students? Data from the US Government Food and Drug Administration's Consumer report of March 1984 shows that the caffeine content of soft drinks varies from 30 to 58.8 milligrams per 12 ounce serving.

A 5-ounce cup of coffee varies from 65 to 115 mgms per serving. Decaffeinated brands are much less. What are the adverse effects of this drug? Caffeine stimulates the heart muscle, it is a central nervous system stimulant (makes us nervous and jittery). The gastric acids are increased excessively (heart burn). It relaxes smooth muscle (bed wetting and incontinence). It is a diuretic (increased urination) and it increases the blood sugar levels.

Added to this is the effect of the large amount of sugar in the drinks which gives a sudden burst of energy, stimulating the pancreas to secrete insulin. The insulin then produces the typical rebound low-ebb feeling that follows. So by the time these students get into the classroom, they are no longer in control of their minds or bodies. The heart is beating too fast. They are nervous and jittery. They are wanting to go to the bathroom. They cannot concentrate, they lack energy and have a rebound dullness. Diet drinks are not better. In fact, in many ways they may be even a greater insult to our body's physiology.

The use of artificial sweeteners has also spread to breakfast cereals, candies, chewing gum and baked-goods. The following symptoms are only a few of those that have been traced to the artificial sweeteners: allergies, depressions, dizziness, fainting, headaches, itching and nodules of the skin, poor memory, mood swings, nausea, skin rashes and changes in voice due to laryngeal edema. Most of these are due to an individual sensitivity; however, in everyone that consumes artificial sweeteners there is an effect on the doshas.

The vata and pitta are decreased and the kapha dosha is increased by the sweet taste alone. This in itself may produce insomnia, heaviness, lethargy, loss of appetite, cough and congestion. There is also the stimulating/depressant effect of caffeine to deal with. The effect on the teeth of these concentrated sweet drinks is another factor. Mixing these drinks with alcohol multiplies the harm to the body. Weaning oneself from these addictions is difficult but essential for health.

## 42. Wrist Problems and Computers

There are two main hazards to the physical well-being of computer operators and typists. The first is electrical/magnetic effects, which we will discuss at a later time. The second is the constant repetition of motion of the fingers upon the keyboard which, if the wrist is not held at a neutral angle, will lead to a potentially disabling disorder called the carpal tunnel syndrome (CTS). The carpal tunnel is the small encircled space at the wrist through which all of the tendons and ligaments to the fingers pass. The tunnel is encircled by the carpal bones and a strong ligament on the ventral side of the wrist. If there is an angle of almost any small degree- at the wrist, the underlying tissues are placed under a strain and become swollen.

The tissue spaces may be filled with fluid, also compromising the easy movement of the tendons. This may also happen with those who use a "mouse" in their computer work, as long as the mouse is of such size and position as to cause an angle at the wrist. The very first symptoms of this condition may be awakening with a tingling in the hands and fingers or a numbness of parts of the hand or fingers. There may also be an associated weakness of the grip of the hand or fingers, a difficulty in turning pages or picking up small objects, or turning doorknobs. There may also be a pain in the palm of the hand and progressive severity of pain in the wrist and in the joints of the fingers. There may even be, in advance cases, pains in the forearm with marked limitation of motion. In the advanced cases surgical intervention may be required to give relief, although this is not always totally curative.

This malady can be prevented by properly fitted chairs and keyboard heights and always seeing to it that there is no angle at the wrist. If a ruler were laid on the top of the forearm and wrist it would make contact at the forearm, the wrist, and the back of the hand. Pianists very rarely get this syndrome as part of their technical training is the proper position of the wrist at all times. There is a therapeutic prosthesis available to help maintain this position. It is an orthopedic splint specifically made for wearing during work to prevent any slumping of the wrist. For those who use a mouse, it is wise to have a small platform to hold the forearm and hand in neutral angle while the mouse is operated by the hand in true alignment.

There is also a platform about three inches high that is placed at the bottom of the keyboard. The wrists rest on this and the keyboard is not elevated on its back legs. At the first symptoms of CTS, one should apply the splint and take vitamin B6 supplementation of about 50-100mgms per day up to a level of 200mgms per day. This should be maintained for at least three months. It is also advisable to reduce one's salt intake to help reduce the tissue swelling. Homeopathic Natrum Sulfate 6x may also be indicated. Early and aggressive therapy can reverse this condition so that surgery will not be necessary. Prevention by proper ergonomically designed furniture and maintaining a neutral angle at the wrist will prevent its occurrence.

## 43. Milk Doesn't Do a Body Good

If we were to listen to the government and many dieticians, we would believe that commercial, pasteurized, homogenized cow's milk is an essential component of a good diet. The truth of the matter is that this kind of cow's milk that we are involved with may be the cause of various chronic and troublesome symptoms such as: abdominal pain, acne, indigestion, asthma, bronchitis, flatulence, colitis, heartburn, cough, constipation, cramps, flatus, irritability, canker sores, depression, diarrhea, nausea, stomach ulcers, postnasal drip, recurrent strep throat, sinusitis, excess phlegm, dandruff and many, many others.

The benefits of Ayurvedically prepared raw milk from properly treated cows will be discussed in a subsequent column. In order to determine whether your symptoms are related to the ingestion of cow's milk, do this: scrupulously eliminate all cow's milk and dairy products from your diet for a period of fourteen days. If at the end of that time your symptoms have disappeared or lessened appreciably you will know that you are a victim of cow's milk intolerance. On the fifteenth day, add a lot of milk and dairy products to your diet for that day, and the symptoms will return at once.

This is incontrovertible proof that you must alter your diet to eliminate milk and dairy products. People who are lactose intolerant can use lactase along with the dairy products to eliminate the symptoms. Milk is labeled to make us believe that its fat content is not excessive; for instance, eight ounces of 2% milk contains 145 calories. In this there are five grams of fat, responsible for 45 of the calories. Therefore we see that 31% of the calories come from fat—well above the recommended fat level of a healthy diet. The fat is also homogenized, which means that it is mechanically broken up into smaller particles and equally distributed throughout the milk. Unknown changes in the molecular structures may occur in this process.

Cow's milk is the leading cause of allergies. It contains about sixty different proteins, at least thirty one of which are known to produce allergic reactions. It is known that cerebral allergy is very often due to dairy products; producing such symptoms as bed wetting, irritability, depressions, fatigue, restlessness, muscle and joint aches and pains. Skin problems and respiratory problems are also very often traced to sensitivity to milk and dairy products; even cardiovascular problems have been implicated with dairy products in the diet. Often these allergies may be due to the presence of antibiotics, high concentrations of environmental toxins and other contaminants.

There may also be increased levels of progesterone in the milk, that when ingested and digested may produce such symptoms as acne. Cow's milk is touted as a great source of calcium for good healthy bones. It is known that the calcium in milk is less readily absorbed than that from the green leafy vegetables, possibly because it is accompanied by a very high amount of protein. It is known that a diet high in meat and dairy products is more likely to produce osteoporosis (soft bones) than a more balanced diet. Milk has a high phosphorus to calcium ratio which may prevent good calcium utilization. So we see that milk is not the great food that it is advertised to be.

## 44. Milk Substitutes

If we determine that milk is a hazard to our health by the evaluations mentioned in our last column, what do we drink instead? The most obvious answer is water. If this were the only liquid that we drank, all of us would be in much better health. This could be supplemented by fruit juices also. If we decide we need a white substance on our cereal in the morning, we could add soy milk to our diet. It is more expensive and tastes somewhat different, but diluted with an equal amount of water it is tolerable. Many people may also be allergic to soy. Fruit juices also make a wonderful topping for cereal. If it is determined that the nursing infant has symptoms due to the mother's ingestion of cow's milk, the mother should eliminate all dairy products in her own diet. If the infant is on a cow's milk formula, there are other formulas available using goat milk (less allergenic), soy milk and one using selected amino acids. All of these are obtainable from a good pharmacy.

Probably the healthiest dairy product for us is no-fat yogurt, which is a milk product that is made from skim milk or low fat milk inoculated by a bacteria, *acidophilus bulgarica*, that tends to alter the proteins and sugar. The frozen yogurt products, however, usually have too much sugar added, as do the flavored varieties. The ancient societies always knew the value of "curds" in the daily diet. If one is still allergic to this product, certain nut milks can be made with Rejvelac, a fermented grain soaked in water. A very tasty milk substitute can be made with rice or oats by cooking it in water and then liquifying it in a blender or food processor. Whey milk may also be a viable alternative to cow's milk. In order to be on a milk and dairy product free diet, one must become an avid label reader, for milk (or milk products) is often a hidden ingredient in canned and processed foods. Water, fruit juices, pureed fruits and vegetables may all be very good substitutes for cow's milk.

If you have no problems with drinking milk and have no allergies to it after running the elimination test, continue to use milk and dairy products. However, use only skim or 1% milk that has been boiled; pasteurization does not always kill all of the bacteria. It is probably wise as one grows older to drink the Lactase treated milk product and use it in making yogurt and ice cream at home. Cheese can also be made from the 1% milk. Other cheeses can be used in moderation, because of their very high fat content, although it is not recommended to indulge in them too frequently.

They are likely to produce symptoms when the plain milk does not. Remember that the greatest benefit that we derive from consuming milk and dairy products, especially butter and ghee, is that it is our main source of Vitamin B-12, an essential vitamin. We will discuss the benefits of Ayurvedically prepared raw milk from healthy, properly treated cows in our next column.

## 45. Milk Curds and Whey

The person who is able to purchase certified whole milk or has his own contented cows is indeed fortunate. There is a vast difference between raw milk and the processed variety from the dairies. All milk is to be boiled, and raw milk is no exception. The boiling not only kills all bacteria but it denatures the proteins so that they are more digestible. Raw milk still has too much fat for ordinary consumption, but this is easily drained off as it appears in layers. Ayurvedically, milk is considered as a food, nutrient, tonic and appetizer, as well as a remedy for many ailments and symptoms. Cow milk is light, astringent, cold, sweet and forms stools. It tends to balance vata and pitta but may aggravate kapha, especially in the form of curds. There still may be intolerance to the lactose.

A natural souring of the milk produces a very healthy, partially digested product called yogurt. Its taste will depend upon the bacteria added to promote the souring process. The lactose is partially digested so intolerance to this is much less. Remaining pathogenic bacteria are killed as well. This soured milk, if hung in a cheese cloth overnight so that the whey can be drained off, becomes a very delicious cottage cheese or paneer. There is practically no resemblance of this natural yogurt to the commercially available substitute. For kaphic types the mucus-producing qualities can be alleviated by warming the water diluted milk and adding ginger, pepper or other pungent spices. This is especially wonderful for one who needs help in getting to sleep.

The whey that is drained off when making paneer is not only very nutritious, but is a carrier of some vitamins and minerals that do not stay with the curd. This should not only be drunk but also added to cooking foods to enhance flavor and nutrition. The royal product of milk is butter and its companion buttermilk. We must always remember that we want the fat content of our diet to be less than 30% calories. Buttermilk is best for vata types and tends to tone the intestines to promote proper elimination. Pitta types best take it as a sweet lassi, and kaphic types usually are advised to drink salt lassi. Butter is to be used wisely and in small amounts. It is used to prepare ghee, the essence of Ayurvedic magic. Ghee, in combination with food, aids in the absorption of the vital elements of the food and tends to help lubricate the gastrointestinal tract to aid digestion.

It is so highly thought of by Ayurvedic physicians that an entire group of medicines called “ghritas” have been created. Butter and ghee tend to balance all of the doshas when used in moderation, but if used in excess may add to indigestion. The use of so called “vegetable ghee” is to be discouraged because of its harmful effects on proper nutrition. If one has access to raw whole milk, it can help in the growth and nutrition of the body. If access is to only the commercial milk, it is probably wise to use it cautiously and sparingly.

## 46. Salt, the Hidden Killer

One of the most overused of hidden nutrients in processed foods is salt, the common name of sodium chloride. If you have any of these symptoms, you may be ingesting too much salt: hypertension, bloating, excessive thirst, constipation, breast tenderness, headaches, puffy feet and ankles, dizziness, premenstrual syndrome, fatigue, edema of dependent parts, ringing in the ears, or weakness. All may be due to too much salt. The minimum daily requirements vary from 1000 to 3000 mg. It is easy to obtain this amount in a standard diet without adding salt at the time of cooking. One should read the labels of prepared foods, for often a whole day's supply may be had in one product. The junk foods, of course, have the highest amount.

Often, we ingest 20-40 times the salt that is necessary! The action of salt is to trap and retain water in the cells and in the circulating blood. As the blood volume increases, the blood pressure is elevated with all of its hazards. Excessive sodium upsets the potassium and chloride which may affect the kidneys adversely. As the water is withdrawn from the bowel into the blood stream, constipation and hemorrhoids may develop. Salt was used in ancient times as a food preservative, and to some extent is still used as such today by the food processing industry. Look at what salt does to salt-preserved food and realize that it could very possibly be doing the same thing to your tissues.

Check the tomato juice that you drink before breakfast, and you will see that it may contain up to 900 mg of sodium which is increased when we add flavorings such as Worcestershire Sauce. The cereal may have as much as 250 mg, the margarine on your muffin 90 mg and the muffin itself may have up to 450 mg. This is already in the range of your total daily requirement. There are many hidden sources of sodium in prepared foods, for example, sodium bicarbonate leavening agent in breads, sodium citrate to control the acidity, sodium benzoate, a preservative along with sodium nitrate, as well as sodium propionate and many other additives that increase your intake of sodium to the danger levels.

Another caution is not to use the salt substitutes in place of salt if they contain potassium chloride, for its safety is debatable. This substitute tends to disrupt the potassium balance within the body which can be very hazardous. If we are to maintain our intake of sodium to about 200-300 mg daily, which is ideal, it means that we must read the labels for excessive amounts, never use salt at the table nor during the cooking process, and use herbs and spices instead. Since a taste for salt is an acquired taste, we must train ourselves to learn to like foods without salt.

This can be done gradually by becoming very conscious of the amount of salt in various foods and how much we use in cooking and at the table, then consciously reducing the amount used. The natural flavors of our food without added salt are really very good, but if we've become accustomed to the flavor of salted food, then it will take time to re-acquire a taste for food's natural flavor.

## 47. Coping with Pollution

Our health is only as good as the food, water and air that we take in. Over the years of misuse of the soil it has been depleted of many of its essential minerals. Oh, yes, the farmer has fertilized the soil but this is only replacing the minimum nutrients that are necessary for plant growth-not all of the trace minerals that we need. These elements have been totally depleted from the soil and have been washed into the ocean. We would be wise to eat food that has been grown in organic conditions without the addition of poisonous insecticides or unnatural fertilizers. The food that we buy in the large markets is not fresh.

After picking, the vitality of fruits and vegetables declines rapidly with exposure to air. The proposed irradiation treatment of food to prolong shelf life merely makes them look better but they still are not fresh and may also contain other induced free radicals. Our water supplies for irrigation and consumption are polluted with industrial wastes, chemicals, bacteria and stagnation. We must have our water tested and ask consultants how best to purify it, especially to rid it of the chlorine and fluorine which interferes with our calcium metabolism and bone growth and repair.

Consultants may also suggest that we filter the air that we breathe in order to eliminate the toxic industrial emissions and raised levels of carbon monoxide and ozone. Because of these toxic pollutants and the increased occurrence of free radicals in our food, water and air, there is a great need to supplement our food and drink with anti-oxidant materials that will eliminate the free radicals and the host of diseases that they produce.

We must take a multiple vitamin as well as a multi mineral supplement. As we have previously discussed, Vitamins A, E, C, co-enzyme Q-10, B complex, betacarotene and selenium are the most potent anti-oxidants. Some of the trace minerals also serve this function. The so-called minimum daily requirements set by the US government are usually not adequate for those of us who live in urban surroundings. Our needs are very much individual and depend upon where and how we live. Our needs will depend upon how depleted the soil is and how polluted the water and air are. There are many sources of multi-vitamin and mineral supplements.

Some are of very doubtful origin. It behooves us to study the labels well to find out what actually is contained. We do not need "mega-doses" ordinarily, but we do need at least the minimum daily requirement with an emphasis on greater amounts of A, C, E, beta carotene and the bioflavonoids. One of the substances that supplies very good quantities of these anti-oxidants is the Ayurvedic chywan prash. There are several varieties made by different manufacturers and they are all about the same. I can recommend the new Dabur brand. These usually can be found in the Indian grocery stores or bazaars. As we think about our own needs for health, we must not forget the health needs of the planet.

## 48. Avoiding Vitamin B-12

**Deficiency** We have already discussed vitamin B12 and seen that it is essential to our life and well-being. Yet we require it in such small quantities and our body stores it so well that vegetarians probably have little need to be concerned about developing a deficiency, if they eat butter or milk products. But when we ingest certain things, our ability to absorb B12 and our stores of it tend to decrease markedly. Birth control pills, denatured alcoholic beverages and tobacco decrease the stored supply.

Wine and beers made with yeast probably cause a deficiency only when used to great excess. The older person's stomach produces the "intrinsic factor" in reduced quantities-this is a substance quite necessary to the vitamin's absorption from the stomach and small intestine. The symptoms of B12 deficiency develop insidiously, but if they are recognized early, they are easily reversible-with replacement therapy. If they are not detected and treated early, the changes may become irreversible. Many people in India show the late neurological changes due to this deficiency.

The actions of B12 and folic acid are complex. Indeed, anemia due to B12 deficiency may even be countered with the use of folic acids. Folic acid is common in vegetables such as asparagus, kale, beets, greens, spinach, turnips and wheat bran. Thus a deficiency of folic acid in adults is less likely to occur than a B12 deficiency. But it may be common in children and young adults since they often avoid these foods. Folic acid can be lost with exposure to heat, air or light. Also, because it is water soluble, it may be lost to the liquids in which the greens are cooked. Therefore, it is wise to either drink the "pot liquor" or use it in soups and sauces. Up to 94% of pregnant women show some deficiency of folic acid, and it can quickly develop after trauma, burns or surgery.

The deficiency may worsen if vitamins C or B12 are also deficient. Now, our intestine can manufacture folic acid, but for that, paraminobenzoic acid needs to be present. This acid is often added to food supplements for this reason. Vitamin B12 can be absorbed from certain cereals, for example, when they have been treated by the addition of this acid. Vitamin B12 supplements can be taken by injections, about once a month, in pill form, which can be absorbed from the intestine if the "intrinsic factor" is present, or in liquid form that can be placed under the tongue for rapid absorption. B12 is often added as a supplement to breakfast cereals and other foods.

Eating greens raw is a good way to assure adequate absorption. If you cannot obtain these foods fresh, then frozen greens are acceptable, as are canned greens, though they have lost most of their potency. Would I supplement my diet with these low nutritional substances? Yes, as an older vegetarian, I do. And I highly recommend it for all vegetarians, especially children, women and older people who may live in metropolitan areas. Supplementation is absolutely necessary for those vegetarians who do not use dairy products.

## 49. For Happy Digesting: Part I

Indigestion, or abdominal distress after eating, is usually due to eating too much food and/or eating it too fast or at the wrong time of the day. There may also be other causes such as food allergy, food incompatibility, a disturbing environment or improper food combinations. If one doesn't eat in harmony with his doshic needs, according to Ayurveda, the dosha will become unbalanced, with distress and possibly disease following. Eating too fast often causes air swallowing which adds to the distension of the stomach. Eating must produce a satisfied body and tranquil mind. Anything that disturbs one's tranquility should be eliminated prior to eating.

Each morsel of food should be thoroughly chewed (32 times according to the Vedas) and taken as prasadam. Seven factors are to be considered when one thinks of eating, namely: the place and time of day, how much time has expired since the last meal, the kinds of food to be eaten, the order in which the food is to be consumed, the state of mind one is presently in, and the amount and variety of food that are to be taken. As to the amount of food to be ingested, Vedic knowledge teaches that one may fill the stomach two-thirds full for the large meal of the day, which should be at noon, the height of cyclic pitta. Another way of putting this is to eat as much as can be held in two hands cupped, and possibly a third handful if not satiated. The morning and evening meals should fill the stomach only about one-third full. Following this procedure allows the stomach to adequately mix the foods with the gastric secretions. Also, it does not exert excessive gas pressures.

Water should be sipped throughout the meal to aid in digestion. It must not be cold, for this will put out the agni which is the fire that is necessary for digestion. The mind should be focused on the eating and the needs of the body and spirit. One is not to discuss business, problems of the day, gossip or disturbing news events while eating. The mind is also focused upon the foods as a gift from God in order to keep the body healthy to help us in performing our dharma. The place we select for eating should be conducive to this idea. We should be seated in an agreeable place to have this communion with God. Eating is a form of meditation, and its place and time should be selected as carefully as for meditation.

The morning meal is taken after one has performed his morning ablutions and worship. The largest meal of the day is during the pitta cycle, from 10AM to 2PM when the fire element is operating sufficiently to aid in complete and proper digestion. The late meal should be in ample time so that digestion will be complete before sleep, in order that no ama (toxic residue) will be formed. The Vedic rule is that there should be approximately six hours between meals, from 6AM til noon, for example. If one is on a special light diet, he may allow only 3.5 hours between meals. Fruits should not be eaten with a heavy meal. They should be taken with milk or nuts as a separate light meal. (To be continued.)

## 50. For Happy Digesting: Part II

The proper sequence for taking food, according to Ayurveda, is as follows: 1st) sweet reaction foods; 2nd) sour and salty foods; 3rd) rice. Bitter, hot and astringent can be taken either as an appetizer or in the middle of the meal. Desserts and sweets should actually be taken during the first part of the meal while there is adequate acid in the gastric secretions. If desserts are taken at the end of the meal, they should be very light. Large amounts of fruit are not advised after a meal. The sweet-reacting foods are grains, most legumes and most sweets. These are the body building foods and are usually kaphic. The second group consumed-sour and salty foods-are usually liquids consisting of vegetables, some dahls and yogurt. These increase pitta and the digestive fire.

The bitter, hot and astringent foods are best taken with other foods to stimulate the appetite and the digestibility of the meal. Rice is added to the meal to give a sense of completion and satisfaction. Buttermilk (4 ounces) is a special food for the completion of a meal. This should be homemade and fresh, for the storebought variety is too sour and often is stale. Good buttermilk helps to prevent gas, complete digestion in an orderly manner and adds acidopholous bacteria to the colon. (Do not use homogenized milk to prepare it.) The cooking should always be of fresh foods. Any that have been cooked more than six hours before eating become hard to digest.

The habit of cooking vegetables for a week at a time is discouraged for it makes all of the food hard to digest and more gas-producing. Only fresh-picked fruits and vegetables should be consumed as stale food has a loss of prana and also becomes hard to digest. Fruits should be taken separately from other foods as in a light supper or for breakfast. The more systematic we are in choosing the same time each day for our meals, the better the digestion. If one must eat at erratic hours, he must plan the diet very well and may have to reset his agni clock. Snacking between meals also leads to poor digestion, especially snacking at night and while watching nerve-racking movies.

After a satisfying meal it is wise to lie on one's left side for 5-10 minutes to allow better mixture of the gastric contents. It is best to delay marked exercise for an hour after eating. Also the drinking of large quantities of water should be postponed after the meal for a period of one hour. Then drink a small amount (unchilled) each hour until the next meal or bedtime. Some food combinations that are not conducive to good digestion are: eating sweet foods and juices with starchy, salty, or protein meals; combining dairy food with sour fruit or with bread,[or meat or fish, for non-vegetarians]; eating large, heavy and sweet desserts after meals.

These all lead to excess gas formation. Too much spicy, sour, greasy food along with alcoholic products causes very uncomfortable burning of the stomach, eructations and a sour taste in the mouth. This can be also caused by excessive intake of sweets. Strong denatured alcoholic drinks tend to make all food indigestible, whereas good wine aids in the digestion.

## 51. MSG--A Hidden Hazard

There is an invisible substance that is contained in almost all prepared, canned, frozen, enhanced or packaged food. It is monosodium glutamate-MSG-which may produce many physical symptoms, such as headaches, joint pains, abdominal cramps, incontinence, diarrhea, blurred vision and even psychologic symptoms of depressions and neurosis. About 20-30% of all people are sensitive to the drug effects of this substance. We know this to be a true “drug effect” for it is a dose-related reaction. Less than two-percent of the population has a true allergic response. MSG often triggers asthmatic responses of lifethreatening proportions. It is common as a cause of sweating, flushing of the face, rapid heart beat, thirst, tingling around the mouth or throat and arthritic aches and pains. No body part or system is free from its effect.

Not infrequently a chronic debilitating undiagnosed disease may clear totally when MSG is removed from the diet. Incontinence in children should make parents investigate junk and snack foods consumed. In the USA, whenever MSG is added to a food product, its presence must be mentioned on the label. However, since glutamate is an amino acid and this salt does appear naturally, its presence can be hidden by calling it “natural flavors,” “hydrolyzed vegetable protein” or “protein hydroxylates.” These contain up to 20% MSG, so are to be shunned. It is the glutamate that is rapidly absorbed. At high levels within the blood, it produces these symptoms, proportional to the dose and the individual’s sensitivity.

Every person may have different symptoms of MSG reaction, and the threshold of reaction will be different also. But the unifying fact is that as soon as the ingestion of MSG is stopped, the symptoms will begin to abate. Infants and small children are very sensitive to even small doses of the drug so that the food industry has been kind enough to eliminate it from all infant foods. However, infants will often ingest it when adult food is introduced to them at the table. In order to eliminate this hidden drug from your diet, the first rule is to eat as much fresh and unprocessed food as you can obtain. Secondly, one must become an avid reader of labels and recognize that MSG, natural flavors, hydrolyzed vegetable protein (HVP), and even hydrolyzed plant protein may be listed and that each contains MSG.

If the label says “all natural,” read further to determine whether there is MSG present as one of these. Suspect all flavoring salts and products such as ketchup, worcestershire and other sauces. Why is MSG used so commonly? It is a flavor enhancer. It tends to sensitize the taste buds of the tongue. It helps the flavors to spread over the mouth, and it may be used to mask unpleasant flavors, cover up spoilage and staleness. There are some chefs who claim that they are not able to cook without this flavor enhancer, although there are ready substitutes for it such as herbs, spices and lemon and other fruit and vegetable juices. There are millions of people who are reacting to this substance unknowingly and are completely unaware of the reasons for their increasing depressions and dis-ease.

## 51. Scrutinizing Sugar

Recently, the question was asked: “Is sugar good or bad for us?” As usual, the answer is not all that simple. Usually, by sugar we mean the highly purified, concentrated, white product of sugar beets or sugar cane. Also there are other sugars such as: raw sugar, brown sugar, fruit sugar, milk sugar, honey, sucanat, maple, jaggery, etc. Of these, white sugar is the most processed and contains a singular structure of sucrose. Pure white sugar has zero nutritional value and is only a source of pure energy.

The other sugars mentioned contain some contaminants or other plant products that give them some, but minimal, nutritional value. If you think of an internal combustion engine running on pure unadulterated gasoline, you will realize that the motor runs erratically and with a loud knocking which can only be quieted by the addition of adulterants such as ethyl, a lead substance to make it run more smoothly. So too, when our bodies use pure sugar, they do not “run” quietly or efficiently. Vitamins, minerals, enzymes and more complex molecules are needed to give us a nutritionally active fuel. Raw sugar and brown sugars have some residual plant stuff on the purified sugar granules which makes them slightly more nutritious. We have previously discussed the difficulty adults have in digesting lactose, milk sugar. However, these minor additives do not protect the teeth from the harm produced by the carteric process in the mouth. It has been documented that purified sugar, even brown variety, is the most common cause of dental caries.

The other great hazard to our health produced by these simple sugars is their rapid absorption into the blood stream, thus elevating the blood sugar. The body reacts to this higher level by producing insulin, which is needed by the body in order for the blood sugars to enter into the cells and to reduce the plasma blood sugar level. This usually throws the blood sugar to the lower levels that cause weakness, fainting, lethargy and nervousness. This starts a period of see-saw-like blood sugar levels that make us ill. This is the great hazard of habitually consuming in the morning sweet drinks and sweet rolls, etc. The pancreatic cells that produce the insulin are needlessly overworked and metabolic disorders such as hypoglycemia and even possibly diabetes may result.

So we can easily see that it is better to obtain our fuel from the more complex carbohydrates (long chains of sugars) or starches that take a longer time to digest and slowly enter the blood stream as they combine with other desirable nutrients. The best carbohydrates for us are obtained from the whole grains, vegetables, legumes and fruit which have valuable vitamins, minerals, proteins, enzymes and fibers.

## 52. Sugar: No Good for You

Sugar's effect on our well being is a very controversial subject. Any of the following symptoms may be related to a high simple sugar intake: anxiety, bedwetting, tooth decay, depression, diabetes, poor immune response, perspiration, fainting, fatigue, heart disease, hypoglycemia, insomnia, memory loss, obesity, osteoporosis, seizures, skin rashes, itching, rapid heart beat, hoarseness, vaginal itching, weakness, marked irritability and many others. The causal relationship of these symptoms is rather complex. For instance, a high intake of sugars will produce an elevation of insulin secretion. If the sugar is not all utilized, the insulin will help convert some of the sugar to fats which then are deposited in the arteries, especially the small arteries of the heart.

Those people who eat a lot of sweet foods tend to overeat, as the sugars do not satisfy the appetite as well as the more complex carbohydrates. That is, they do not fill us. Since it takes the B vitamins to help metabolize the sugars, these are taken from the stored quantities, which can easily be depleted. Both of these then tend to produce not just obesity but hypertension and heart problems. It has been shown that excess dietary sugar will deplete the stores of copper in the body. There is also a disruption of the calcium/phosphorous ratio resulting in some degree of bone absorption.

Reactive hypoglycemia, the result of sudden increase in blood sugar levels, will manifest as the many psychological types of symptoms mentioned above. This is the most easily treated conditions-one merely needs to lower the intake of sugars and increase the intake of complex carbohydrates accompanied by high fiber and low protein foods. The biggest hazard to our dietary efficiency is processed foods, for it is very easy to obtain sugars in these without its presence being obvious. Who would think that tomato catsup is high in sugar? Sugar and salt are both the unsuspected offenders in most processed foods. It is absolutely essential, for health's sake, to become a label reader. Of course, it is not only the hidden sweets that are empty calories.

The blood sugar may rise higher and more rapidly with a large serving of processed potatoes (starch is a form of sugar) than ice cream. Need I remind you that the worst offender in ice cream is the butter fat and the dairy origin of the fat? It is possible that over 75% of all sugar intake is hidden in the processed foods that are advertised so highly in the media. This is the first thing one should eliminate in reducing dietary sugar. If we could eliminate all hidden sources, we could then control our intake and keep it within the reasonable limit of less than 10% of all ingested calories. We have said that the ideal energy source in our diet is the complex carbohydrates from whole grains, fruits and vegetables.

The complex molecules made up of long chains of sucrose molecules, and accompanied by other nutrients, are digested more slowly so that the sudden rise in blood sugar level does not occur. They are often accompanied by fiber which tends-by its bulk alone-to fill us to a satisfactory level, without the see-saw effect of the blood sugar level.

## 53. Don't Bribe Children with Sugar

While on the subject of refined sugar [see parts one and two in January and February, 1992] we must also note that excessive sugar in the diet is addictive, making us slaves to a habit which may be equally as strong as drug or alcohol addiction. There may be also a subtle relationship here. There is a tendency for high sugar intake to “deaden” the sensitivity of the taste buds for sweet. The result of this is the inability to savor the subtle tastes of our food, and the foods become tamasic. When excess sugar is ingested there is a decrease in vata and pitta accompanied by an increase in kapha, according to the Ayurvedic system. Perhaps the greatest danger in excessive sugar intake is its effect on the mind and our behavior. Since there is almost a universal liking of the sweet taste, it has become by many parents the source of a “bribing type of behavior.”

Many parents hold the sweets, especially chocolate, as a bribe for getting the children to “eat their vegetables” or perform other activities or disciplinary actions. I have seen at breakfast children being given chocolate candy to start the meal; then, of course, if they eat other food at all, they eat too much, because sweets do not satisfy our appetites. However, the usual reaction is that the children will not want to eat anything else for they know that if they act up, they will get more sweets. We can continue to eat sweets until we are “sick” of them, and even then some desire may remain. Sweets should never be used to enforce an action or discipline, for it only makes the parent lose control over themselves as well as their child.

The child very quickly learns that a temper tantrum will bring about the bribe of candy or other sweets to stop screaming or crying. Thus the child manipulates the parent into action that may be very harmful for the child. This bribing will tend to change the mental development of the child, and it will last into adulthood, thus perpetuating the failure to communicate and discipline the child as mother tends to mother as she was mothered. Using this method of child control is not an act of love but is evidence of a lack of maternal maturity and ability to truly communicate with the child. A smile and well-timed hug will transmit love to the child much more than a bribe of a sweet. I am not suggesting that sweets be totally eliminated as a dietary basic, but excessive sweets become rewards and bribes much too easily.

The child, as well as the adult, must bring to eating the knowledge that it is a necessity in order to keep the body functioning and healthy. In itself, a well balanced diet will bring to us happiness and appreciation of the great gifts of God. We should consider the time of eating, which should be on a regular schedule, to be a holy time and a time for happy familial communication and sharing. The television should not be on, current events or governmental problems should not be discussed. There should be serenity and prayers before eating, during the meal and after the meal. I have previously mentioned that a period of 10-15 minutes after meals should be spent in meditation.

## 54. Dangers of Sugar Substitutes

The food industry has been conscious of the consumer's desire to reduce the consumption of sugar without giving up the sweet taste. The industry for a long time supplied saccharin which had no nutritional value but did have a very sweet taste. It could not be used in cooking for it tended to turn bitter. Saccharin was subsequently withdrawn from the market because of a possible link to the causation of bladder tumors in mice. It is still available in some places. Cyclamates were a fad for many years until they were banned for having carcinogenic properties.

The FDA later reversed its position on the carcinogenic properties, but the use of cyclamates has never returned to any significant degree even though it was very inexpensive to produce. The current substitute in vogue is aspartame (sold as Equal or Nutrasweet), a protein substance made up of two amino acids, aspartic acid and phenylalanine. The substance is much sweeter than even sugar. One-tenth calorie of aspartame has the sweetening power of one teaspoon of sugar, which has 16 calories. The industry was not too happy with its introduction as it was almost as expensive as the sugar. Certain people must not use this in any form.

Those who suffer from a metabolic disorder called phenoketonuria (PKU) lack an enzyme that is necessary for the metabolism of phenylalanine. If these people have a build up in their blood of phenylalanine there is damage to the brain leading to mental retardation. The number of people who react in this manner is not known at this time. There are also people (non-PKU) that react with dizziness, depression, headaches and possible seizures. This does not speak for the future generations' well being since it is almost impossible to find food products that do not contain this sugar substitute. As long as people do not curb their addiction to the sweet taste, they are doing their bodies an injustice.

One should use fruit drinks diluted with nonsweetened water rather than the popular "diet" drinks. The sugar in fruit is primarily fructose which is less likely to start the up and down problems of glucose in the blood, as fructose does not need insulin for its conversion. For the future generations' decreased desire for sweets, mothers should discontinue the use of the pacifier filled with sweetened water, the so-called "sugar teat." The use of this assures that the child will have a strong desire for sweets as he grows. Sweetened breakfast cereals should not be fed to anyone. We should all make a firm effort to reduce our taste for sugar sweetness.

Many foods have a naturally sweet taste, such as rice, that is acceptable. In fact we should increase the amount of complex carbohydrates as we decrease the sugar to regain a healthy balance in the body. Honey is sweet and is only slightly less nutritionally empty than plain white sugar. Honey when cooked becomes indigestible, according to Ayurveda. Honey may also be the cause of many allergic reactions due to its source being the pollen of flowers. The chemicals on the plants may also come through the honey with all of its toxins.

## 55. The Science of Taste: Part I

The rishis have categorized the food we eat into six different tastes: sweet, salty, sour, pungent, bitter and astringent. These tastes become “tastes” only after they contact the tongue. Their qualities may change according to which phase of digestion they are in; for example, on the tongue the effect is called rasa, as the food enters the stomach we call it the virya or energy, and the postdigestive effect is the vipaka. Usually the rasa and vipaka are the same, with different energies shown by the different tastes. We can easily understand these differences if we become aware of the philosophical elements: sour is a combination of earth and fire; sweet is earth and water; salty is water and fire; pungent is fire and air; bitter is composed of air and ether and astringent is primarily air and earth. So we can see that the energy of sweet is cold.

Sour, salty and pungent are hot. Bitter and astringent are both cold. Since the nature of vata is air; pitta fire; and kapha water, we can readily see that the interaction of the food and doshas will give certain responses. For example, sweet -earth and water-will decrease vata (air) and pitta (fire) but increase kapha (water). Sweet is nourishing and tends to increase all tissues and cells; it also will eliminate thirst and hunger. However if taken in excess, kapha is aggravated and may become excessive, leading to disease. If too little sweet is taken, pitta and vata will be increased with resulting symptoms. There are very few foods that have only a single taste, so the effects on the doshas will be variable according to the combination of tastes. Sweet taste is most agreeable to the body and helps it to grow and stay healthy. It satiates the mind as well as the physical senses.

A good nutrient, it is valuable for the body's growth. If it is used to excess the body becomes obese, lazy, heavy, lethargic, cold and has a tendency to catch colds with coughing, also urinary problems may occur, possible tumors and circulatory disorders. If balance is not attained, the symptoms will progress to the vata and pitta disorders. Examples of foods that have sweet taste are milk, butter, ghee, rice, honey, wheat, candy, sugar, licorice root, peppermint, most lentils, bananas, saffron, corn, millet, oats and other grains and fruits that combine more than one taste. Sour taste is earth and fire and is hot, heavy and unctuous.

Sour increases kapha and pitta and decreases vata. It stimulates the appetite and aids the digestion. It may excite the mind. It is a carminative and tends to nourish the heart. It will stimulate the flow of saliva which aids in propelling food along the digestive system. If sour is used too much or alone, it stimulates thirst, increases pitta, inflammations and burning sensations in the throat and chest. Anemia and weak eyesight, giddiness and fevers may result. Itching skin also occurs. Sour taste is found in the following foods: yogurt, cheeses, green grapes, lemons, tamarind, vinegar, sourdough (also sweet) and combined with sweet in other fruits. Because of the heating properties sour may aggravate trauma, contagious bites, burns, fractures, bruises and crushing injuries.

## 56. The Science of Taste: Part II

From our discussion of sweet and sour last month, we see how these tastes affect the doshas differently, developing symptoms if taken in abundance or excess. By the addition/substitution of basic tastes and the creative use of condiments, tasteful and healthy meals may be prepared. Since all in a family will not have the same prakriti, many dishes can be made to satisfy all by the use of the condiments and basic elemental properties of the food, being always mindful not to use any one taste to an excess. Now we continue with salt and pungent. The saline taste alleviates vata. It nullifies the effect of all other tastes; causes salivation; liquifies kapha; melds and accentuates other tastes, increasing the appetite.

When used in proper amounts, salt may bring out the flavor of foods, aiding a little in digestion. It retains body fluids. It is a mild antispasmodic and cathartic. Salt is the combination of water and fire, and as such increases pitta and kapha. If used in excess, it contributes to hypertension, increase of thirst, fainting, sloughing of areas that have a chronic skin disease. It may loosen the teeth, leading to gum problems. It is also involved in premature wrinkling of the skin, graying and baldness. It may also be responsible for increase in craving for physical sensory pleasures. Salt taste is found in table salt (sodium chloride), black salt (sea salt), kelp, other sea vegetables, and in combination with sour in pickles and other such condiments. It is also frequently found in metallic medicinals and other drugs. The salty taste is the most hidden of all in processed foods.

This source often gives us far more than what is good for our bodies. Modern day nutritionists say that a balanced vegetarian diet needs no additional salt for the minimal daily requirement. The pungent taste is a combination of fire and air elements. The primary action is to decrease kapha and increase vata and pitta. This taste helps to keep the mouth clean and does promote digestion because of its fire nature. It also helps in the absorption of foods, increases secretion in the nose and eyes thus aiding in their proper function. It helps in the elimination of sticky waste products through its action on kapha. It acts as a blood purifier.

It helps to eliminate blood clots and to cure many skin diseases. Many drug actions are partially due to the physical action of this taste. If the pungent taste is used excessively, it can destroy manhood, produce unconsciousness, weariness, asthma, fainting, emaciation, giddiness, burning sensation in the throat and stomach, production of too much heat and excessive thirst. Leg pains, pains in the back and hands possibly associated with tremors may result from over indulgence. The pungent taste is found in onions, garlic, radishes, ginger, chilies, hing (asafoetida), cayenne pepper, peppermint, cinnamon, sage, parsley, basil and thyme. Pitta types should use these sparingly.

Other types should also use this taste sparingly in the summer months. Many herbs used in healing have this taste. It is wise to take this rasa with ghee to prevent any irritation to the stomach and intestinal linings and also to prevent killing the friendly bacteria.

## 57. The Science of Taste: Part III

Over the last two months we have discussed the sweet, sour, salty and pungent tastes and their effects upon the doshas, according to Ayurveda. The next taste is the bitter taste, which by itself is not very “tasty,” but when added to other tastes brings out the deliciousness of the food. This taste is mostly air and ether. Bitter increases vata and decreases pitta and kapha. Bitter is anti-toxic and germicidal. It is often used as an appetizer. It tends to purify and dries secretions. Bitter promotes firmness of the skin and muscles. It causes drying and helps in the depletion of moisture, lymph, pus, sweat, urine and the stool. Bitter provides an excellent balance for a salty or sour food.

It is especially useful in correcting any imbalance in pitta. The effect upon the consciousness is to help us to see more clearly the reality of a situation. If bitter is used excessively, it tends to deplete plasma, blood, bone marrow and semen. It has an adverse effect upon the circulatory vessels, and may cause emaciation, unconsciousness, dryness of the mouth and other vata type diseases. Too much bitter may also cause vomiting. The bitter taste is found in the dark green, leafy vegetables (these are also a great source of iron and calcium), alfalfa, aloe vera, chicory, chaparral, licorice root, red clover, yarrow, dandelion root, rhubarb, turmeric and fenugreek.

These substances are used primarily to help balance the effect of the other tastes on the doshas. The dark leafy greens may be eaten 4-5 times a week, except for spinach, swiss chard and beet greens. Because of the high oxalic acid content of these, we are unable to absorb the calcium that is present in the plant. Astringent tends to eliminate kapha swelling and is a good liver tonic. It is able to kill parasites and worms and to counter the effect of poisons. It may also control nausea and vomiting. It is useful in increasing vata. It is mainly composed of air and earth. It reduces secretions and is a sedative. It is constipating and causes scar tissue, also dryness of joints and stiffness of joints.

When taken in excess, astringent taste may be the cause of cardiac problems, abdominal distention, dryness of the mouth with difficulty in swallowing and talking. Abuse of this taste is often the cause of many vata diseases. The astringent taste is found, usually in combination with other tastes, in unripe bananas, pomegranates, myrrh, turmeric and alum. It is further found in butter, old honey and in pearls and coral which are often used in Ayurvedic medicines. The astringent taste purifies the blood and helps to control pitta and kapha doshas. For good nutrition it is advisable to have a balance of the six tastes at least at the large noon meal with foods representing each taste.

For the rest of the day, the tastes of food can be used to help balance the doshas, never allowing any taste to be predominant or an imbalance to occur. The spices and condiments may be combined into churnas that give specific taste effects on the doshas. These are used at the table to adapt a food to the specific dosha needs of each individual since all do not have the same prakriti.

## 58. Doctors and Abortion

My over forty years of medical practice has been a great joy. All of these years were in affiliation with a Roman Catholic hospital. The last issue of the Hinduism Today on abortion brings to mind several events in my professional life that may be helpful to the Hindu physician in his review of his own religious and philosophical ideas concerning the ethics of abortion. Abortions are not performed in Catholic hospitals, because the act is considered a sin against God. It is always wrong to take another's life at any stage of development.

This is unequivocal and not open to any interpretation or discussion. Each member of the medical staff agrees to abide by these rules. The vast majority of the doctors believed wholeheartedly in these rules. However, that is not to say that some doctors did not take their patients to non-Catholic hospitals to have abortions. One colleague, when quizzed about his taking his abortion patients to another hospital, said that he must give his patients what they wanted otherwise they would leave him for another practitioner. His morality was affected by his financial well being.

This is the exception rather than the rule. A physician, of course, cannot force his moral code upon his patients, although he may give strong advice to accept his. He must also make it clear to the patient what his ethical position truly is. Before abortions became legal only very rarely were hysterectomies performed on gravid (pregnant) patients. This would prompt a very quick review by the medical staff committee on standards and was often responsible for the physician's prompt dismissal from the staff or loss of surgical privileges. Another incident of a married doctor's girl friend becoming pregnant with his child comes to mind. She was sent by him to another institution for an abortion performed by another physician (it was truly her choice to abort).

He personally would not perform an abortion but when pushed to the wall he agreed to one. Another female physician went elsewhere for an abortion because the child was unexpected, she no longer loved the father, and it would "be very awkward to have another child at this time." The examples that come to mind are all evidence of selfishness and self indulgence as the reason for abortion. In more recent years the most numerous requests for abortions are by unmarried teenagers. Many of these are being performed by charity clinics without parental approval. Those that are pro choice suggest that the fetus is not truly alive until a certain time late in the period of development; and that the business of destroying life is overrated. It is true that the fetus cannot independently sustain life outside of the womb until later in its development; but this does not mean that life does not exist.

The sperm is a living "half" cell; the egg is a living "half" cell and as they combine they produce a living whole cell that is able to develop and grow into a human being from the joining of the two cells. This fetus is then able to accept a human soul in order that its dharma can be completed. Life exists at all times, and it seems to me that we must conclude that abortion is destroying life at whatever stage it is performed. cut out: Rarely therapeutic abortions were performed at another institution after a verifying consultation and review by a medical staff committee. If it was essential for the mother's well being, an abortion may very rarely be permitted.

The usual line of thinking on this subject was that the baby's life is to be saved at all costs, even if the mother's is sacrificed. This, however, was never official policy of the Church but was understood by many people to be the official statement of canon law. It is essential to do all that is possible to save the life of both the mother and the child.

## 59. AIDS--A Man-Made Disease?: Part I

AIDS, Acquired Immune Deficiency Syndrome, is the most controversial disease known today. There are many misconceptions about this disease, some deliberately circulated by the government agencies, some by political groups and some by the misinformed medical groups. The current (more or less) accepted belief is that the disease we call AIDS is due to HIV, human immunodeficiency virus. This is at least true by definition of the CDC, Center for Disease Control. The CDC has changed the definition over the years when their current definition did not cover the facts or symptoms. Many scientists tried to implicate the African green monkey as the harbinger of a mutated natural virus that suddenly became pathogenic to man and that this was transmitted by the monkey's biting a man.

It is statistically impossible for the number of cases of AIDS found in Africa today to have come from a single source such as this. The statistics prove that there was a widespread infection at the beginning of the pandemic. It has also been noted that it is genetically impossible to transfer the HIV virus from monkey to man by natural means. The simultaneous appearance of the disease in the United States, Haiti, Brazil and Central Africa was no accident. There is monumental evidence available that the spreading of HIV was through contaminated vaccines that were used in these countries. There is no resemblance between HIV and monkey viruses; however, there is marked similarity between HIV and naturally occurring viruses in cattle, sheep and goats. None of these that are naturally found in the animals are pathogenic to man.

There is irrefutable evidence that HIV is a manufactured virus, man made to be used in experiments sanctioned by the World Health Organization, National Cancer Institute and other organizations. This man-made virus in some manner contaminated the growth media that was used for producing the smallpox and hepatitis virus from which vaccines were to be made. Infected smallpox vaccine was used to vaccinate thousands of African people and an infected hepatitis vaccine was used to infect young gay men in California, most of whom volunteered for the research project for the control of hepatitis. This is the only reason that so many gay people were infected. AIDS has been a heterosexual disease from its insidious beginning.

The gay lifestyle was ideal for the rapid spread of the fatal disease. No, the involved agencies have not admitted to their part in the pandemic, but the evidence is there and has been suppressed by all of the media except the London Times which published the smallpox/AIDS connection on May 11, 1987. If we believe the CDC's definition and the known doubling time of the disease (the time it takes for the number of people with the disease to double) of approximately one year, within twenty years the vast majority of the people in the world will be HIV infected. Unless a cure or treatment is found very soon, this HIV may well be the cause for humanity to be eradicated. Continued next month.

## 60. AIDS--Easily Transmitted: Part II

The evidence presented in part one of this series points to the disturbing conclusion that the HIV virus probably was man-made and transmitted to people through contaminated vaccines for small pox and hepatitis under the auspices of national and international health organization projects, leading to the present AIDS epidemic. A virus is a clump of genetic material (exactly the same as our normal genetic material) that must be incorporated into a human body cell before it can grow and replicate. It stimulates an immune response from our immune system, thus allowing us to use an immune testing protocol for determining its presence within the body. We were led to believe that the AIDS virus is very fragile and cannot live outside of the body for any length of time.

This is not true. According to S. L. Loskoski's report given at the Third International Conference on AIDS in Washington D.C. 1987 (NO. MP 229), "Researchers from the Centers for Disease Control in their own analysis of the viability of HIV outside the body verified that it is a tough virus which survives for several days after being dried out and placed on stainless steel strips in a desiccator jar at room temperature." We were told that it does not live within the body for any length of time before it manifests as the dreaded disease. This is not true. The virus can lie dormant within the body's sympathetic system and nodes for as long as ten to twelve years without demonstrating any symptoms. We were told that the virus is fragile and can be easily destroyed. This is not true. It is very hardy and difficult to destroy both in and out of the body. 70% alcohol, usually a good disinfectant, is not practically effective.

High temperature, autoclaving and gas sterilization are effective for surgical instruments, but not readily available in all places. The spermicidal Nonoxynol 9, said to kill the virus, is actually so irritating to the membranes that it makes transmission easier for the virus. Furthermore, the virus entwines its genetic material around that of the human body cell. Being identical in make up, how does one separate the virus from the desirable genetic material? The virus is primarily blood borne, and thus any exchange of blood will infect the receiver. However, the virus is also found in all of the body fluids. It is in higher concentration in the saliva than in semen.

The virus is able to penetrate intact mucosal tissues through the dendritic cells. It can be transmitted through kissing, sexual contact, by contaminated blood on needles or by transfusion of contaminated blood, possibly through exchange of tears, possibly airborne by transmission through droplets of sputum and lung secretions. No studies have been done yet to determine whether or not transmission by mosquitoes or other insect bites is possible, but there is no scientific reason why this would not be a pathway. It is also possible for transmission to occur through infected food handlers. HIV and AIDS are not just sexually transmitted diseases. In fact, we do not really know how some people were infected.

## 61. AIDS--No Possible Vaccine?: Part III

In our first two articles on AIDS, we discussed the various ways that HIV may be transmitted and presented evidence suggesting the HIV virus was man-made and transmitted to people through contaminated vaccines. Indeed there are over 7,000-10,000 cases of full blown AIDS that have none of the usual risk factors for the disease. In other words, the way these people contacted the disease is totally unknown. Thus we can see that we do not know enough about its transmission. There are some unusual things about HIV; for instance, there are 9000 to the fourth power (9000 X 9000 X 9000 X 9000) possible Aids viruses.

The virus also has the ability to adapt and mutate whenever it enters a different host, whenever it is attacked by a different medication or to any change in its environment. Furthermore, it usually resides within the body's cells so is fairly well protected from direct onslaught. Since it also is entwined with the host cells genetic material, it is further protected from outside destruction. It seems to be stimulated to more rapid growth as a reaction to the normal immune response of the body; thus a vaccine may cause it to replicate faster.

As soon as AZT, a drug that inhibits HIV growth, is given to the patient the virus slowly becomes immune to its action. A three drug technique has been attempted in order to try to fool the virus into not becoming adapted to drug response. This has not shown the results to be as great as expected. Many virologists believe that a vaccine is impossible to prepare because of the number of variants and also due to the possibility that the virus would stimulate not only replication but also mutation. We have also been told that AIDS does not kill, that the patients die from acquired infections. Just what does the virus attack within our bodies?

First: it attacks the T cells of the blood, these are the first line of defense for our immune system. These cells are attacked and eliminated. Yes, this does make one prone to opportunistic infections that are fatal. Secondly, the virus can produce brain rot and nerve damage. It can also produce leukemia-like conditions. These patients are very prone to tuberculosis (TB) which accounts for the rapid rise in this disease that was almost extinct in the USA. The virus is highly resistant to our present TB drugs. We have been told that the disease cannot be transmitted by food. Recent studies show that this is not true.

The dendritic cells in the mouth and intestine can easily absorb the virus that may contaminate food. This contamination is possible by the food workers as well as the health field workers and rodents and other animals. The wastes of our pets may also transmit the virus. Although the pet is unable to contract the disease, it may transmit the virus. I believe that mandatory testing for HIV carriers is necessary so that we can have some intelligent way to combat this plague. This should be amongst the food workers, health field workers, patients, teachers and anyone else that could readily transmit the virus.

## 62. AIDS--Awareness is Prevention: Part IV

Our previous three articles on AIDS focused on the nature of HIV and its transmission. We now continue by explaining some basic ways to prevent contracting AIDS and the urgent need to increase awareness of this deadly dilemma. It seems there is little that we can do to conquer the "plague of the century" but we must try. Our first line of defense is to be AWARE. We must arm ourselves with as much knowledge as we can. We can not blindly accept what the health and government agencies of any nation say about it, for they have a political and monetary interest which makes them prone to be less than truthful. We must realize that the blood supplies may all be contaminated in spite of testing programs-often short cuts are taken.

So if one needs elective surgery, he should furnish HIS own blood for use during or after the surgery. Become politically active to assure that meaningful laws are passed to save the uninfected. The fear of losing one's job if found HIV + should be eliminated, an alternative is needed. We must know that our dentists use heat sterilization of his well cleaned instruments. He, as well as the patient, should be protected by glasses or other shields. WE must know that the endoscopes (instrument used to look within the body cavities) are gas sterilized. At home, the usual home disinfectants are to be used judiciously. Although chlorine does kill HIV, one must be assured that proper procedures are taken in the care of swimming pools, for indeed these are reservoirs of human secretions. There is no such thing as SAFE sex, except NO sex.

Those who propose that the use of a condom makes sex safe are doing a very great disservice to our youth. HIV can be transmitted by kissing, possibly even by holding hands and other body contacts so even light petting is forbidden with you do not absolutely know is free of the HIV. We should consider that anyone who is promiscuous is probably HIV+ and therefore a health hazard. Consider that all prostitutes are HIV+.

The ancient Hindu practice of brahmachariya, chastity, must be brought back as the rule again. I also believe that mandatory blood testing before marriage is essential. The great fallacy of our youth is, "That cannot happen to me!" The truth is that it can happen to you-and to you and to you and to you. And it may well happen unless we are aware every moment of the day and night of the potential threat. Condoms have 15-25% failure rate even as a preventative of pregnancy. Studies have shown that the HIV came through 33% of the condoms tested. The virus is much smaller than the natural holes in the latex condom.

This was an experiment without any motion or pressure on the condom, which I conclude is spurious-the failure rate is probably nearer 75%. Because of the political nature of AIDS, the money made by the researchers and pharmaceutical houses and the great sums that the insurance companies lose, all humanitarian aspects of the disease are forgotten. Government and news agencies fear creating panic. Yet the possibility of killing the vast majority of people and the reduction of their finances to the poverty level is REAL. The subject of AIDS is 99% political, 1% medical and 100% fatal. BE AWARE, and protect yourself.

## 63. AIDS--Develop Healthful Habits: Part V

In this fifth column on AIDS, we continue with ways to protect ourselves from this deadly disease. In order to have an healthy immune system, one that may ward off contaminants and maintain a perpetual balance of the doshas, especially at the change of seasons, we adopt the Ayurvedic Vegetarian diet. Fresh vegetables in variety will help to make the system healthy, especially when the science of taste is also used to keep the doshas balanced.. Since there is ample proof that for most of us the produce is not really fresh, we must take supplements. Especially the antioxidants and members of the B complex of vitamins which stimulate the immune system.

We recommend Vitamin A (as beta carotene); Vitamin C fortified with citrus bioflavonoids; Vitamin E (d Alpha tocopheryl acid succinate) and Selineum (selinomethionine and seleniumselenate). Other nutrients can be taken upon the advice of your health practitioner. There are also many herbs that stimulate the immune system; the advice of an experienced herbalist is suggested. Excessive use of alcohol and any use of drugs is to be discouraged. There are many scientists who believe that drug addiction, whether it be medical, recreational or so-called "nutritional" tends to weaken the immune system. The fact that most drugs are toxic at some level adds credence to this theory.

Try to get all of your nutrition from natural foods and natural sources of vitamins and minerals. For example; Chywan Prash is a good source of Vitamin C. Learn to understand your doshic needs and how to satisfy them with food manipulation and the creative use of spices and condiments. It has been shown repeatedly that exercise (a brisk walk of 1/2-hour duration) helps to maintain a strong immune system and a feeling of well being. Swimming is an excellent form of exercise, but we need to exercise caution about swimming in public pools-they must be adequately disinfected. To assure a healthy immune system we must get adequate sleep that is restful and invigorating. Since we know that stress tends to lower the efficiency of the immune system, it is wise to keep the stress level low. T

his may be done through meditation and a life-style that brings God and the gods into your life. Science has shown that meditation can lower blood pressure, stimulate the immune system and give a sense of well being. Living a life of joy and optimism makes both body and mind healthier. Feelings of hatred and revenge adversely affect the immune system. Although we may be tempted to fall into periods of despair, disgust and hopelessness, if we remain joyful, peaceful and loving, our health (and immune system) are at their optimum. If we are exposed, we may become infected. The strong desire to have sex must be controlled. It would help stem the pandemic if people would return to the consideration of sex as the holy and sacred rite that it is.

This past week reports were made that the hopedfor AIDS vaccines all failed their final tests-none worked. It was also reported that some of the major medical centers are now admitting that the use of dietary supplements (such as we have just mentioned) do help keep the immune system healthy. If we protect ourselves from contact with the virus and maintain a healthy immune system, we may survive this pandemic.

## 64. AIDS--Avoiding Contact: Part VI

This is the last of a six-part series in which we have been discussing the most commonly held ideas about AIDS and its professed cause, HIV. We must point out that there is a small number of scientists that do not believe that there is a causative relationship between HIV and AIDS. Although they make many good arguments, the majority opinion is that HIV is the virus that causes AIDS. The definition of AIDS has changed many times and now represents a composite of diseases that are due to immune deficiency. HIV is, supposedly, one of the deadliest causes of immune deficiency. Illegal drugs, other toxic drugs and addictions and stressful situations also contribute to immune deficiency.

Infection with this virus may occur in anyone, no matter what their color, creed, political affiliation, sexual preference or place of habitation. Then what can we do to save ourselves from this dreaded disease? The answer comes in the following categories: behavior, diet and nutrition, scrupulous rules of hygiene, exercise, transmission by blood and its products and stress reduction. Since we know that the virus is able to live on exposed surfaces both wet and dry for hours or days, it behooves us to keep our environment as clean as possible.

Frequent washing of flat surfaces with household bleach (1/200 strength) is advisable. Scrupulous washing of the hands before cooking and eating is essential. The lips must not be touched by the unwashed hands. Hand washing, preferably with sudsy detergents that do not tend to cling to the skin, should include rinsing with copious amounts of running water. Cooking utensils should also be so cleansed and air dried. Since the body fluids also carry the virus, we should frown upon and eliminate such social habits as spitting on the streets and sidewalks and urinating or defecating in public places where one may accidentally come into contact with the body wastes. Western-style toilets should only be flushed with the lid down to prevent possible airborne dissemination of contaminated water.

Drinking and eating utensils should not be shared with others. The feet should be washed thoroughly before coming into the home. Avoid touching them with the hands. If one finds it necessary to administer to or nurse a patient with AIDS, he must use double latex gloves and a surgical mask. There should be caution and adherence to the rules of surgical practice, yet with no trace of fear in one's mind. Special caution should be followed when dealing with any of the patient's body fluids and daily sterilization of the utensils and surroundings are mandatory.

If you need elective surgery, make arrangements to deposit your own blood with the hospital for use in case you need a transfusion. I also recommend that you arrange with a friend or relative whom you know to be HIV negative (by testing) to be on call in case you need emergency blood. Of course, compatibility must also be tested. Wear an ID-band with this information on it or place the information with your other ID papers in your wallet. The risk is small, but why suffer if a small preparation will save you?

## 65. A Traveler's Simple First Aid Kit

It is wise for all travelers to carry a first aid kit for possible injuries or mishaps while away. The easiest first aid kit to carry is a homeopathic one. These are readily available in homeopathic pharmacies, many health food stores and from homeopathic manufacturers. They usually consist of six to eight remedies and an accompanying booklet explaining the use of the remedies. The idea of taking homeopathic remedies is foreign to many people, and they approach it with some degree of fear and disbelief. I can assure you that these remedies are wonderful when the proper one is used. I would recommend the following remedies for a small but powerful kit. All of the remedies are prepared homeopathically and many potencies are available.

The rule of thumb in this discipline is that the more acute the trauma or disease the higher the potency needed. The beauty of these remedies is that if you have not chosen the correct one, no harm is done and another can be tried. The remedies usually come in the form of a pill, which is not swallowed but allowed to dissolve under or on the tongue. Aenica-6x and/or 200c or any potency available-is the first remedy of choice in injuries, especially when some shock is attached and there is painful swelling of the soft tissues. In severe cases the remedy may be used every 15 minutes until there is some relief. The symptoms are that the patient feels very sore and achy. There may be bleeding. He feels better lying down with the head lower.

He usually feels better when warm; however, cold on contact may give some relief to the aching of the injured spot. He also wants to be left alone. A combination remedy called traumeel can be tried if arnica does not give relief within an hour or two. It is a combination of several other remedies that are used in injuries with slightly different symptom complexes. Bryonia is used when the injury develops slowly with swelling and pain. If there is no desire to move or be touched because of exacerbation of the pain and if the area is red and hot, bryonia should be used. Hypericum is used when nerves are injured or areas are crushed where many nerves exist. It is most often used in finger and toe injuries or for the sharp nerve type pain that follows falling on the tail bone.

Ledum is the remedy of preference where the area is black and blue, e.g., a black eye, or for a bruise discoloration that does not tend to go away. Ledum is also used in insect bites. Apis is the remedy of choice for bee stings and other insect bites. The symptoms are a red hot feeling and swelling around the bite. It feels better when a cold compress is applied but is aggravated by heat. If the skin feels cold around the bite, then ledum is used. Arsenicum alba is preferred for diarrhea and symptoms related to food poisoning or over indulgence. There is always a feeling of hopelessness about these patients, and they desire warm drinks. If necessary, the diarrhea can be controlled by the allopathic drug Immodium. However, if there is blood in the stool, see a physician at once. Next month we will consider a few other simple travel needs.

## 66. Staying Healthy While Traveling

Continuing last month's column on the homeopathic first-aid kit for travelers, this month we include some remedies from Ayurveda and some valuable travel tips. Travelers often lose their footing and fall, scraping their knees or elbows. If the skin is broken or there is scraping of the skin, lacerations, abrasions, nicks or ulceration, calendula acts as a remarkable healing agent, especially if the associated pain is greater than one would expect. It rapidly promotes healing without scarring. It comes in ointment, liquid and gel forms and is spectacular as an after shave lotion. Mag. Phos.-a cell salt of magnesia phosphorica-is the great reliever of spasm, especially if there is cramping of muscles with radiating pain.

Neuralgia pains that are relieved by warmth will respond to this cell salt. It is the remedy of choice when sleep eludes one because of being tired, exhausted from activity (especially mental), covering too many time zones in travel and the frequent hassles at airports. The 6x potency will do wonders. A few pills allowed to dissolve on the tongue at hourly intervals will bring sleep to the weary. The typical "morning after" is greatly relieved by nux vomica. The cause is food and drink overindulgence. The first symptoms are that heavy feeling of discomfort in the abdomen, maybe accompanied by nausea and sour taste (especially in males).

The life-style of modern man leads to such symptoms, which are aggravated by travel. Nux works best when taken in the evening. The bowels are often disturbed by travel because of lack of exercise, sitting for long periods of time, mental tension, often extreme changes in diet and a tendency to not drink sufficient fluids. When there is constipation, an eastern herbal mix called triphala will give a very gentle stimulus to the bowel to move. It has a tendency to make the stool more fluid so it can be passed easily. It can be taken in tablet or in the form of tea. Psyllium seed husks, being a hydrophilic, may also be used to stimulate the bowel to move by forming a firm but soft stool. This can also be used in some diarrheas to help absorb the water in the bowel and to prevent the too frequent movements. When traveling it is very important to drink plenty of pure water.

If there is any doubt of its purity, purchase bottled water or well capped effervescent type soft drinks. Do not allow them to be uncapped except in your presence and be sure the top is dry before opening. Never drink iced beverages, for the ice is usually made from tap water and is thus suspect. In the back country and most third world countries it may be necessary to treat the water to assure purity. A 2% tincture of iodine made with ethyl alcohol will make almost any water safe to drink. Eight drops per gallon and a waiting time of ten minutes may be required. There are other preparations for this purpose too, visit your large sporting goods store and/or your pharmacist. Sun screen protection is vital in tropical countries and mosquito repellents are a must wherever malaria may be endemic. Call the Board of Health or State Department to locate these areas. Remember that if you have prescription drugs (and glasses), be sure that they are labeled and have a duplicate available.

## 67. Genes--A Double-Edged Sword

It is said that the human body contains one hundred trillion cells. All of them, except mature red blood cells, have nuclei. The nucleus is the central, more-or-less encapsulated portion of the cell that contains the life controlling activity. Each nucleus contains 23 paired chromosomes. One chromosome of each pair is from each parent. Usually we speak of 22 pairs plus the X and Y chromosomes, for these are the ones that determine the sex of the offspring. A female has two X chromosomes—one from the mother and one from the father. A male has one X (from the mother) and one Y (from the father). So we see that the father is the one that determines the sex of any child. If the Y chromosome has a gene for hemophilia, it is easy to see that all the males in the family will have this disease.

None of the females will have the disease, because there is no Y chromosome to carry the disease-causing gene. Maleness and male characteristics, as well as some other diseases, are carried by the Y chromosome and are manifested only in the males of the family. Femaleness and female characteristics are carried by the X chromosome from the mother. The X chromosome from the father is required to manifest the baby as a female. Within each chromosome is the tightly folded DNA (deoxyribonucleic acid), which is the double-helix arrangement of molecules that divide symmetrically in order to reproduce the host cell exactly.

DNA was discovered in 1952, and since 1953 its chemical structure has been mapped. Each individual determining factor of DNA is called a “gene,” and there are billions of them. It is being learned that the genes determine, individually or in groups, all of the physical characteristics of a person as well as the body’s ability to allow certain diseases or gross malformations. Certain genes may also be the direct cause of diseases. This leads the scientist and the philosopher to visualize a time when we know enough about the billions of genes to predict the characteristics and health of the person. Research is coming up with identifications of up to 300 genes per day, and new disease sites at about one a day. There is continuing research on the various methods through which genes can be either repaired if damaged, replaced if defective or removed if mutated.

There has also been some success in causing “whole” genes to enter the cells of a sick person to overcome the disease. Even at present a genetic profile can determine whether the embryo, in utero, carries the identification markers for certain diseases. In utero genetic screening may also determine if the fetus has a serious inherited disease or the pattern to develop the disease later in life. In some cases it is possible to change this genetic pattern and prevent the disease from developing. This, however, is rare. Thus we see developing a double-edged sword with our increasing knowledge. Politically, it is possible that genetic screening could be used to attempt to control the type of children produced. Insurance companies may be able to accept or reject clients according to their propensity for long and healthy life. Many horrible plots can be imagined. However, by voluntary effort and continued research, a healthy and happier future is possible.

## 68. Constipation, Source of Toxins

Chronic constipation is not an infrequent complaint. It is a very trying and tension-producing symptom-complex. On one hand, the person knows that regular evacuations are necessary to keep the digestive system functioning satisfactorily. On the other hand, the system seems to shut down. Then, attempts at evacuation can be painful, difficult, and frustrating-resulting in secondary bloating, abdominal pain, feelings of drowsiness, foul flatus and other symptoms that do not seem to be directly related. This is in most cases due to unbalanced or disturbed vata dosha. It occurs most frequently in older persons (vata phase of life) who do not exercise very often and have changed their dietary habits. So, in order to treat this problem, often a complete change in lifestyle is necessary, including diet, exercise and how we think about the problem.

First, a vata pacifying diet must be followed. In this diet there should be ample quantity of warm and unctuous drink and food-such as yellow mung beans in liquid preparations along with vegetables that are well cooked and juicy or soupy. The tastes are sweet, sour and salty. Whole rice, wheat, and small amounts of oats are permitted. Avoid green leafy vegetables, colored pumpkin and squash, peas, potato, sprouts, radish, broccoli, cauliflower, cabbage and celery. Permitted are tender young eggplant (peeled), zucchini, cucumber, asparagus, tomato (skinned), carrots and spinach. Dairy products should be low in fat. Buttermilk and lassi are fine.

Very small amounts of ghee are allowed. Any of the oils are permitted, except coconut. They should be used very sparingly. All nuts and seeds are allowed in very small quantities. Honey should be avoided. Condiments are to be used in small amounts, preferring ginger, cumin, fenugreek, mustard seeds, black pepper, cardamom, anise, fennel and cloves. Salty lemon juice and tamarind are especially good to pacify the unbalanced vata. Fruits should be limited to ripe fruits in season, avoiding the pungent, bitter, and astringent tastes. The secret to this diet is to eat sparingly, but be satisfied, and to enjoy eating the combinations and flavors that you appreciate. A most important aspect in treating this problem is to also consume at least 10 eight-ounce glasses of liquid daily. For normal action to occur we need to have a good digestive fire, ample fluid and considerable roughage to permit the stool its normal consistency.

The fluid intake is crucial and so is the muscular tone of the digestive tract and abdominal wall. This means that there must be some form of exercise that will aid this muscular tone. The best exercise is walking associated with yoga asanas that twist and compress the abdominal organs. Regular meals and activity is one of the keys to treating this condition. The mental attitude is also helpful in correcting the vata imbalance. Visualization is a great help in keeping the movements regular. By regular we mean setting times to wake up, get out of bed, exercise, eat, work, meditate, socialize, relax, etc.-and then follow that schedule meticulously. At first the body will want to rebel, but just stick to the schedule. Continued next month.

Chronic Constipation We continue with our discussion of constipation. While some may feel this is a problem for the elderly and unfortunate few, the truth is that it may affect everyone at some level. Since it is essential to eat regularly to supply energy to live, we must also eliminate regularly to prevent accumulation of toxins. As soon as this cycle is disturbed, even slightly, the mind and body both may suffer. In the beginning of the treatment it may be necessary to lubricate the lower bowel so that the hard stool can be moved out. This is accomplished by instilling about four ounces of olive oil or flax oil into the rectum. At the same time the same amount of the oil is taken orally. When the urge comes, sit and concentrate even visualize that the movement will be successful. Do not strain but keep the mind

upon the duty at hand. It may sometimes be necessary to use the aid of an enema. In this case instill 1-2 quarts of hot water into the bowel while lying on the left side.

Slowly turn to the back and then to the right side as the water progresses along the bowel. Hold the water for awhile before eliminating it. If this does not clean all of the feces out, repeat it. Do not add soapsuds to the water, as this retards the movement and irritates the mucosa of the gut. Use this technique usually for about three days while instituting the diet and exercise changes. Overcoming the lethargy of the body may take a considerable time depending upon how soon the doshas balance. Do not give up. Remember, maintain a persistent routine. Begin each day with a "tune up."

Drink a cup of hot water into which has been squeezed the juice of one half a lemon, sweetened with about a teaspoon of honey, and also add a pinch of salt. Do this faithfully, every day, even for the rest of your life. This is to be had at least one half hour before any food is taken. Break the fast with a vata-pacifying fruit juice followed by grains and appropriate spices. The yoga postures may be done before breakfast and the walking after breakfast. At the first urge to move the bowels, sit and concentrate on the process.

As soon as we put food into the stomach and digestion starts, there is a natural reflex called the gastrocolic reflex which starts the normal peristalsis of the colon to increase. This is the time to sit and concentrate, breathing deeply and regularly, upon the process of moving the food throughout the cycle. For the first few days it is also advisable to ingest a teaspoon of castor oil in the afternoon. Do this for three days. At the same time one can carry a slice of ginger root in the mouth or chew on whole lemon peel. To get the agni really burning and pushing the air forward it may also be helpful to massage the lower abdomen externally with castor oil in a clockwise circular motion for about five minutes a day or until a warmth is felt in the area.

If further help is needed internally, the use of triphala is suggested. This may be taken in the form of pills (Ayush Herbs). The dose is 1-3 pills daily in order to further liquefy and propel the stool. If necessary, this can be repeated weekly for a month. As the body begins to understand that you are really serious about having a regular and complete bowel movement, it will respond to the loving care and treatment. The body responds by feeling more alive and radiant, and because of the increased exercise and better digestion you will be moving the prana better and better.

## 69. Conquering Constipation

We conclude our three-part series on constipation with more information on how to conquer this serious and troublesome condition. In order to supply more bulk to the bowel contents, psyllium seed husks can be used daily. Flax seed husks may also be used and are preferred by some. A daily dose of one or two teaspoons is mixed with a full glass of water and consumed. It is important to follow this with another full glass of water. If sufficient water is not drunk, the gelatinous mass produced may cause a lower bowel obstruction. This mass gives something for the bowel to contract against and assures movement of the stool forward. After a few weeks of this therapy, the amount should be decreased and eventually discontinued-even this product may become habit forming. Of course, all drugs should be stopped as soon as possible to allow the bowel to recover. In some stubborn cases, a castor oil pack may be advisable.

A wool flannel cloth is saturated with a good quality castor oil and placed upon the lower abdomen at bed-time, and a hot water bottle is applied. Never use an electric pad for the heat as the oil may soak into the pad and cause a fire. In constipation due to vata disturbance it is essential to institute a routine of behavior and meals, with set times for eating and also set times for evacuating. Great amounts of water are needed to keep the stool soft so that some remaining nutrients can be absorbed in the lower bowel. Feces is not all waste products. There are some nutrients and chemicals that must be reabsorbed for physical health. Pitta constipation is sometimes seen after a long febrile illness. It is characterized by heat and the tongue being red with a yellow coating. There is perspiration with an offensive odor.

This may also be associated with some degree of liver dysfunction. Treatment emphasizes cutting back on oils and sweets in the diet. A bitter laxative usually stimulates the bowel to act. Aloe vera gel is helpful and can be taken daily until balance is returned. Strong evacuants are usually not needed. Purgation using 1-3 tablespoons of castor oil taken at night in warm milk and a little ginger will move the pitta from the small bowel and help to eliminate the heat and toxins. Kapha constipation gives a characteristic bloating and heavy feeling with mucus often seen on the stool. The tongue may be coated white or with mucus. There is lethargy and sluggishness. The treatment is an anti-kaphic diet-eliminating heavy unctuous foods, wheat and rice, all dairy products and sweet, sour and salty tastes. The kaphic fruits-banana, avocado, pineapple, orange, melons and coconut-are to be eliminated. Fasting is helpful in this condition.

However, a fast should last no more than three or four days. The bitter herb laxatives such as rhubarb and senna are useful and the hot spices like ginger, cayenne and black pepper are needed. An enema with ginger in the water may also be helpful. Preventing constipation is easy by regulating the diet and taking into account the natural prakriti. This keeps the three doshas in balance. Plenty of exercise and drinking adequate water are necessary. It is far easier to prevent than to treat, especially the vata type. A meditative lifestyle with love and concern for the body will assure a healthy, happy life.

## 70. It's a Girl! Thanks to Dad

Large numbers of women in India suffer cruel indignation (at best) and physical and emotional abuse and even murder (at worst) for bearing a female child. These atrocities are perpetrated by men (and women) who believe that it is the woman who somehow determines the gender of the child. This gross misconception has also contributed to polygamy and its subsequent abominations. If one wife could not bear a son, the thinking goes, maybe another wife could. Perhaps we can help alleviate some of this inhumanity with the hard scientific fact: the baby's gender is entirely determined by the man. In the human cells there are 23 pairs of chromosomes, with one pair expressly called "sex chromosomes."

The sex chromosomes are made up of X and Y chromosomes. If an embryo has two X (XX) chromosomes, its sex is female. If the chromosomes are an X and Y (XY), then the baby is a male. Since the female always delivers an X chromosome to the fertilizing egg and the male delivers either an X or Y chromosome to the sperm/egg combination, we see that the only thing that determines male sexuality is the Y chromosome received from the father. If the father gives an X chromosome to the combination, the offspring will be female. So the natural law is that the father is the sole determiner of the sex of the offspring.

The mother has no part in this determination. The Y chromosome carries primarily genetic material that produces the maleness and masculine secondary characteristics. There are some diseases that are carried on the Y chromosome that will manifest only in males. And there are some sex-linked diseases that are also carried on the X chromosome, carried by the mother, but they do not manifest in the daughters for the Y chromosome is usually also required to be present to have the disease manifest. In each ejaculation there are 200-400 million sperm cells with a random distribution of X and Y chromosomes. The psychoelectromagnetic forces that bring a particular sperm and egg together are only vaguely understood. There is, however, a theory that allows the conscious determination of gender.

Ancient yoga texts like the Tirumantiram, by Rishi Tirumular, say it is possible to influence the gender of the child at the time of conception. This theory is based on understanding birth as the process of bringing a soul into the physical plane from the subtle plane. It is also based on the knowledge that both men and women have a masculine nadi (current), called pingala, and a feminine nadi, called ida. It is a subtle and sensitive process. There must be consideration given to the precise time of conception, precoital diet of both parents, postcoital diet of the mother, expanded consciousness and awareness of both parents and many other factors for the determination to be successful. This process must be under the guidance of a very advanced Vedic yoga scholar. It is a complicated partnership effort that is often denied by the Western scientists.

The knowledge of this fact places a new responsibility upon the father and brings him into a closer partnership with the mother in the creation of the offspring. He should be in an excellent state of health, be aware of his part in the great miracle, and especially more aware of his duty to mother and the offspring-male or female.

## 71. The Nicotine Fit: Fit for No One

It is the middle of the night. He wakes up coughing and gasping for air. There is a thick, tenacious mucous covering the inner walls of his breathing tubes. His foul breath is stale and offends even himself. He must sit up and use all of the accessory chest muscles to try to loosen the obstruction to his breathing tubes. He feels his eyes bulging from the pressure of the cough. There is no relief. He thinks he is going to suffocate. With increasing weakness, he reaches for his inhaler, the magic substance that will open his bronchi. Finally, after another prolonged coughing spell, he feels a small amount of air enter the deeper portions of his lungs. He now tries the second inhaler, containing a corticosteroid, and takes four intermittent whiffs. Slowly the swelling of the inner mucosa recedes a slight bit, and more air enters the deeper lungs. He tries to get out of bed to expectorate and to take his regular medicine; but he is lightheaded and short of breath and falls back upon the elevated pillow asking, "Why me?" Sleep is gone for the rest of the night.

This story is all too common and happens in more or less degree to everyone who smokes cigarettes. It is a natural and unavoidable reaction to the irritation that the tobacco smoke makes on the linings of the lungs and bronchi. After years of irritation and damage, scar tissue sets in which narrows the caliber of the air tubules. With coughing, the delicate membranes that separate the air sacs, alveoli, break down, forming larger sacs that will transmit less life-giving oxygen—a condition called emphysema. The constant irritation of these membranes produces a chronic bronchitis that adds to the breathing problems by forming copious amounts of thick, tenacious, yellowish, smelly mucus that tends to fill the smaller bronchi. Is there no hope for this man that has succumbed to the temptations of tobacco? If he stopped soon enough, before much damage had occurred, there could be some repair and little morbidity.

However, if one waits too long, and it is a matter that varies with each individual, the changes are irreversible and medications can do very little to help. An adequate antioxidant diet and a change in climate may be helpful to a minor degree. The condition may become cancerous. In spite of what the tobacco industry says, smoking tobacco does have a causative effect with cancer of the lung as well as emphysema, bronchitis, asthma and susceptibility to pneumonia. The industry says there is no proof of this, but they are merely protecting their income. There is, and has been for many decades, a known causative relationship between smoking and these dreadful diseases.

Death because of cancer of the lung is one of the most prolonged, painful and difficult ways of dying that we see clinically. Each of us who has smoked has always felt, "It cannot happen to me. I will quit before it gets me." That kind of thinking is delusional. It does happen to everyone eventually. The nicotine, and probably other factors as well, in tobacco is addictive. Accept no information to the contrary. It is very difficult to stop this dirty habit because of its addictive nature. Smoking is a no-win situation, especially for the young. Also, we now know that second-hand smoke is almost as dangerous as the primary, especially to infants and children. The easiest way to quite smoking is to never try it nor start! The only smart smoker is the non-smoker.

## 72. Smoking: Sources of Addiction

In the November, 1994 column we briefly discussed the scourge of the smoking habit and graphically illustrated the devastating effects it has on the body. We noted that it is very difficult to stop this baneful habit because of its addictive nature. This month we continue by exploring the sources of addiction. Smoking is addictive primarily because of chemical dependency due to the nicotine content of the tobacco. Indeed, the industry has recently been accused of manipulating this content in order to make a particular brand even more addictive and thus increase sales. Another area that causes dependency is the oral satisfaction gained from the habit of smoking.

This throwback to a primitive oral need is a very strong and fairly well hidden satisfaction that adds to the addiction. There are many substances added to the tobacco to make it more palatable and to exaggerate this basic oral pleasure. The subconscious layer of mind enjoys and gets security from ritual. Smoking satisfies this need easily with the ritual attached to reaching for the cigarette, tapping it to pack the tobacco, reaching for the matches or lighter, and finally lighting the tip of the cigarette so that it bursts into a smoldering flame that transforms the noxious weed into smoke. The smoker watches the smoke curl upward and is able to fantasize unknown dreams. He may even form smoke-rings and watch them fade into the now.

After a very short time the muscles get used to this ritual and the lower consciousness is pleased with its fantasy, which may be romantic and adventurous. At least it satisfies a certain mechanical need. It seems that the subconscious mind rapidly turns this habit into a reward situation, whenever there is a feeling of anxiety, uneasiness or unsettled behavior, the play-out of this ritual gives a reward to the lower consciousness, that is, keeps it busy so that it can forget the disrupting influences. We can better understand how this works if we consider that the subconscious is the animal-like part of ourselves that behaves as if it had a mental age of three to four years. It wants what it wants, when it wants it, and it will act up unless desires are satisfied now.

Consider a three-year-old child and his behavior and liken your own lower-self to this. The lower-self can make no judgments. It acts only as programmed even though it does have the ability to make monumental changes in the physical and psychic forms of our being. It will always do the bidding of our middle-self (conscious self) if it knows what that is. In other words, it will act according to the program we give it, providing that it is clear what that program actually is. Anything unclear about the program will probably be ignored and result in no action and a reversion to previously set patterns.

These are some of the facts that make giving up the habit of smoking so very difficult. So we see that the first thing we need in order to give up this disgusting and life-threatening habit is to firmly make a middle-self resolution and conclusion to give up the habit. We must consciously make the logical decision to change our behavior. This must be an unequivocal decision. Then begins the second procedure to transform this desired change to the lower consciousness in order to reprogram him/her. This we will explore next month.

## 73. Smoking: Quit “Cold Turkey”

Last month we assessed the affliction of addiction. We saw that the first thing one needs in order to quit smoking is a firm resolve. We'll now look at how to stick to your decision to quit and make it work. We know that if we can reprogram the subconscious it will be able to bring about the change in habits that we desire as well as to avoid the physical and psychic changes known as “withdrawal symptoms.” We must convince our lower self that this is what we really want. There must be no hesitation, confusion, obliquity or equivocation in the transmission of the act of will. If there is, the subconscious will sense this and act only according to previous patterns, or the old program of satisfaction through smoking.

The use of the Nicotine Patch is not advised, as this an equivocation. There is no need for physical withdrawal symptoms as long as the subconscious knows exactly what the middle (conscious) self desires. A firm act of the will is the most decisive and effective tool. A technique of “shouting it out” may help to convince the lower self that a change is really wanted. This technique means that whenever you are alone (even driving in the car) you may shout, “I have stopped smoking” so loudly that the subconscious cannot help but hear and be convinced. If this is done several times a day, the message gets through to the lower mind and one notices an ease developing in overcoming the habitual behavior.

This technique also works to overcome other unwanted habits. Thus I advocate one to stop supplying the subconscious with the pleasure of the ritual, oral satisfaction and chemical dependency all at once- “cold turkey.” Daily chanting of the new mantram “I have stopped smoking” several times a day, especially when shouted, helps accomplish the goal. Have frequent discussions with your subconscious, as in prayer, giving it moral support, praise and pleasure and always reassuring it that “This is what I want. It will be good for the body and our whole being.” It may help to set a goal in time so that after the change has been successfully accomplished the lower self will be rewarded by some special activity that it enjoys, perhaps a special trip or food. Make the time interval sufficiently long that the behavior will not revert to the previous habit. This will vary with your own experiences. Frequent prayers to Lord Ganesha imploring His help is also advised. Live as if the goal of stopping this ugly habit has already been accomplished in its fullness.

The message to the subconscious must always be “I have stopped smoking,” not “I am in the process of giving it up,” or “I will give it up.” A new habit ritual may be formulated to replace the old one, such as daily exercise, a meditation ritual, reading or whatever will satisfy the insatiable “3-year-old” subconscious. This assures continued success. In my own case, I had stopped the habit for three years and was again hooked because someone handed me a lit cigarette while my mind was occupied with a floor show. Unconsciously, I took a drag, was hooked again and had to repeat the entire process. Of course, it did not take long the second time to overcome the habit. So we must always be aware of what we are thinking and doing in order to do that which is healthful and happiness producing.

## 74. Smoking: The Fancy of the “Civil” Cigar

In the last article we described the process of convincing the subconscious mind that we really are stopping the smoking habit. We expressed our conviction that using replacement therapy merely prolongs the physical addiction and adds to the pains of quitting. But cigarettes are just one corner of the tobacco trend. This month we debunk cigars. When we think of a man smoking a cigar, what images pop into our mind? Cigar smokers are usually affluent men of influence and power, and the lower self hangs on to this image as a desirable end.

The genteel man retiring to the drawing room after dinner for a brandy and cigar seems to be an image that the subconscious can identify with as an attractive goal and makes it feel as though he/she has attained an enviable social spot. The reality is, however, that the cigar smoker is also an addict. Even though he may not inhale the smoke, the nicotine is absorbed from the oral mucosa. There may be slightly less irritation and trauma to the lungs than in cigarette smoking, yet cancer of the lung is still common in these people. There is the added irritation and trauma to the mouth and lips that tends to cause malignant changes of the labial and oral mucosa. Since many people also chew on their cigars, resulting in some swallowing of the noxious tobacco, carcinoma of the esophagus is quite common. So the reality is that the coveted image of the cultured gentlemen is not valid. The result is an uncomely, disease producing addiction.

The irritation of the oral and labial mucosa can cause “white spots” (Leukoplakia, which is precancerous) and “red spots” that are true cancers. Cancerous lesions of the lip are not uncommon amongst the cigar smoker. A constant “upset stomach” is also often the result of swallowing the “juice” from the chewed end of the cigar. There is a new trend in the young “in” society-clubs of today to switch to cigars from cigarettes, thinking that it is less hazardous. There are many smoking clubs, often called “The Georges Sand Society,” forming in the larger cities to memorialize the women who smoked cigars. Georges Sand was not only the lover of Frederick Chopin, she was also one of the few women in history that was addicted to cigar smoking.

The fact that many women have taken to cigars also is not only alarming but suggests that there will be more cancer amongst these women in the future. This includes breast cancer, for there is some evidence that smoking tobacco increases the incidence of breast cancer. There is also evidence that irritation of the urinary bladder from the absorbed toxins is connected to cancer of the bladder. Many restaurants are now catering to the cigar smoker by offering separate rooms for the smoking of the cigar, thereby carrying on the great myth of affluence and being cosmopolitan. We must eliminate these false images from the minds of our young adults and instill in them a reality of the dangers of smoking so that they may make an informed decision to give up this dangerous and expensive habit. The smoke from cigars is not only a very carcinogenic substance, it is also offensive to almost everyone. I see no glamour associated with cigar smoking, nor does it indicate affluence, intelligence or power. Stamp out its use.

## 75. Tobacco

We have been discussing the various modalities of the use of tobacco in our present day situation. We now take up an ancient method that was used by the American Indians as a bonding, declaration of truth, binding agreement of peace amongst the elders of the community. The image that fascinates our subconscious is of the elder, the scholar, the wise man, the secluded one, the contemplative, the thinker. All images that are desirable and very powerful. This use of tobacco is in the smoking of a pipe. The pipe smoker is probably involved in more ritual than any of the other methods of smoking, which is very satisfying to the subconscious.

This is manifest by the ritual of choosing one or more fragrant blends of tobacco, the ritual of packing the tobacco into the pipe, indeed, the ritual also of emptying the pipe of the used tobacco, also the complicated ritual of cleaning the pipe making it ready for another ritualistic ceremony of mixing the blends, packing the bowl of the pipe, and lighting the tobacco, getting it to burn at a desirable rate. All of this adds to the power of the addiction to the tobacco. His smoke is the least offense of all the others as it is mixed with various delightful and satisfying fragrances. Who does not remember passing a pipe smoker and having the fragrance of his particular tobacco remain for a considerable time after him? This is another aspect of the addictive nature of the pipe smoker.

Could such a delightful memory be caused by a killer? Yes, indeed it is! For pipe smoking has all of the health hazards of any other type of tobacco. It also has its own particular health hazards exclusive to the pipe smoker. First, it is often the cause of pain in the jaw due to asymmetric pressure from clinching the pipe stem between the teeth. This sends tension and pressure to one temporomandibular joint more than the other. Nature responds to this unnatural tension by producing pain and swelling in the temporomandibular joints. Many people go through years of unnecessary pain not knowing the reason for it. The stem of the pipe is usually elevated in temperature due to its proximity to the flame.

This hot pipe stem is constantly irritating, mechanical and elevated temperature combined, the mucocutaneous junction of the lip which often ends up in a cancer of the lip. The constant irritation of the oral mucosa produces changes either precancerous or cancerous in the mouth. Slugs of tobacco juice may come through the pipe which produces irritation to the esophagus and stomach which may lead to cancers in these areas, at the least inflammation and/or indigestion. Usually pipe tobacco smoke is not inhaled into the lungs so there may be less likelihood for lung cancer; but the nicotine is absorbed by the mucosa of the mouth and pharynx. Because of this there is the attendant chemical changes that are produced by all tobacco use.

Through a rather complicated chemical reaction there is a tendency to lower the bodies stores of Vitamin B12; Vitamin C; and other chemical changes that are detrimental to one's health. The physical changes that occur with these deficiencies are very serious. An old teacher of mine told me that if one smokes he should supplement his diet with vitamins, "C for tobacco and B for Booze." Perhaps the advice should have been, "Just say, No, to the killer." Tobacco in any form is truly a killer and also produces great morbidity to those who use it. The next article will discuss smokeless tobacco and its particular hazards.

## 76. Smokeless Tobacco's Bane

We have been discussing the serious and sometimes death-dealing effects of smoking tobacco in its various forms. Each modality has its own peculiar health hazard as well as the general ones that come from nicotine addiction and tobacco use. This is true of the smokeless use of this noxious plant. In the West there has been an alarming increase in the use of snuff and chewing tobacco over the past two decades, especially among teenagers and young adult males. The most popular form of this use is moist snuff. Snuff is a very fine pulverized tobacco leaf that is inserted into the nostrils and sniffed into the upper nasal and air passages.

Moist snuff may be sniffed or chewed. It is proven that cancers of the nasal linings and upper airways are very common in snuff sniffers, and it is difficult even to ponder the pain and trauma associated with this disease and its treatment. Snuffing also causes chronic sinusitis, tracheitis, laryngitis, and often erosion of the septum of the nose. Snuff still is causative in cardiovascular disease and may even cause stress and possible anomalies in unborn children of pregnant female users. Frequent users of smokeless tobacco, especially chewing tobacco, are subject to gingival recession and gingival infection. Often the teeth fall out of the jaw with no unusual trauma.

Leukoplakia and oral cancers are also common, as are cancers in the upper gastrointestinal tract. Because of the loosening of the teeth, it is often impossible for these people to get a nutritionally adequate diet, thus adding to their susceptibility to malignancy and other diseases. The immediate result of chewing tobacco and/or snuff is increased salivation and the necessity to spit out this mouth load of saliva. This adds another hazard, the sociological one, as the obnoxious spittle may transmit many disease carrying germs outside the body and thus spread infections that are common to these users. The chewing of tobacco is common in the East and especially in India. Many times chewers will add betel quid to a mouthful of tobacco. It has already been shown that the use of the betel nut (Areca) is carcinogenic. It seems to be causative in the high incidence of cancer of the upper digestive tract, especially among men in India who mix tobacco and betel.

The unsightly spitting of red-tinged saliva is all too often seen in India, especially in and around her temples. It is esthetically disgusting to see the oduvars, religious musicians, singing praises to the Deity while interrupting each verse with a spit and a cough. In the West, head and neck squamous cell (tobacco related) cancers are 2-4% of the total cancer burden. In India this figure becomes 40% of total cancers, bringing a great health burden upon the nation. Most of the head and neck cancers we see are preventable by consuming a diet high in vegetables and fruits and eliminating smoking, chewing and snuffing of tobacco. Since habits are difficult to break, public health officials are, through education and the enlistment of dental personnel, trying to prevent people from starting. Before leaving the subject of tobacco and its hazards we must also note that secondhand smoke, air that is polluted with the smoke of tobacco, is also carcinogenic and may also cause all of the diseases we've discussed. This is especially true for children who must constantly breathe the polluted air, as in the home environment.

## 77. Second-Hand Smoke: How Safe?

Last month we stated that passive smoking, also called “second-hand smoking,” poses serious health risks. We will now look at how smoking not only hurts the smoker but those around him or her as well. It may not suffice to simply quit smoking, we should also try our best to avoid smoke-filled environments. Passive smoking is the inhalation of the side stream of smoke emitted from tobacco between puffs on the cigarette, and/or inhalation of the exhaled smoke from the smoker. This smoke presents a special problem. It contains more particles of smaller size than the directly inhaled smoke and is often deposited deeper within the tissue of the lung.

The pathological changes depend upon the total amount of smoke particles inhaled and the duration and frequency of exposure. We do not need to be in near proximity to a smoker to be assaulted by this poison. Smoke particles are carried great distances by diffusion, convection, and other modalities. The public relations aspect of the separate “smoking dining areas” in our finer restaurants really is not much safer than the adjacent “Smokers” section, for the air is mixed by central air circulation, often without being filtered. This is also true in air travel. If you watch the wafts of smoke rise and disperse in front of you while you are in or next to the smoking section, it doesn’t take much imagination to determine where the smoke will end up. Although the separate sections are an improvement, we should not rely on a possibly inadequate air filter to be the final act of safety.

Unfortunately, there is no “threshold” toxin level that is considered safe. What is clear is that prolonged contact, primary and secondary, determines toxicity. It is thought that there are about 53,000 annual deaths in the US caused by passive smoking, 37,000 of these come from combined cardiovascular disease. Spousal smoking accounts for much cardiovascular disease and pulmonary changes, as well as increased mammary carcinoma. Is it any wonder that our youth are developing pulmonary weakness and disease? There is a two-fold attack that secondary smoke has upon the tissues of the nonsmokers’ body.

All the usual carcinogens, fiber and other chemicals have their direct toll on the physiology of the cells, much like they do in the primary smoker. But there is the added effect of the carbon monoxide diminishing the oxygen-carrying capacity of the blood. With reduced oxygen in the blood, there is an obvious decrease in the viability of the cells of the heart and respiratory organs. This low-level deprivation of the brain oxygen levels leads to subtle but permanent brain and vascular changes. In women, these subtle changes are more profound if she is also on the “pill.” The tender tissues of infants and children are the most susceptible to second-hand smoke. Being exposed many hours a day, they develop many pulmonary conditions such as allergies, asthma, chronic bronchitis and cardiovascular problems. Later in life, many develop cancers. Studies have repeatedly shown that children of smokers do not develop physically or mentally to their full potential. Yet, in spite of the scientific proof, people do not want to believe this is true. So it seems logical that a smoke-free school, workplace and home would take this public health burden off of us and give us all a chance to lead healthier lives.

## 78. Computer Stress Syndrome: Part I

The computer is perhaps one of the greatest communicative tools available to us in this century. However, it does produce physical stress to its users. The strain experienced is in direct ratio to the amount of time that one uses the computer and also to other factors that we will discuss-such as the placement of the computer, the lighting of the room in which the computer is used, one's posture, while using the computer, visual factors including glare, inherent eyestrain, whether or not glasses are used and reflective glare. There are many other factors related to work habits that may lead to the computer stress syndrome. The symptoms of this malady are headaches, eyeaches, burning of the eyes, excessive tearing and blinking, stiff neck, aching of the neck and back, tingling of the hands and fingers as well as feet. Sever migraine-type headaches are fairly common.

Loss of appetite, indigestion, changes in mood and many other complaints can be traced to the above symptoms. There may be limitations as to what one can do about the placement of the computer, depending on the room it is in, however, the following are some guidelines to use in choosing a work place for computer use. The computer should never face a wall or window, nor should a window be to the side of the operator because of the strain to the eyes. The computer is ideally placed in front of a doorway so that the operator may look through the door and into the corridor or next room. The operator should be able to see an area of the room around the monitor screen so that he will have a fixation to reality and his location.

One should not be within 4-5 feet of the back or sides of another computer as the emissions from these surfaces (of the monitor and computer itself) may be hazardous. If the computer is backed up to a wall or in a corner, the emissions may be reflected back upon the operator. If a window is present, ideally, shades should be installed so that the volume of light can be reduced and the glare on the screen eliminated. The monitor should be at eye level or slightly below it. It should not be in such a position that the eyes must look up to see it, for this may induce an altered state of awareness. If one wears bi- or tri-focals, the monitor must be in such a place that the head does not need to be elevated in order to use the near vision.

If not, there is bound to be strain on the neck as well as the eyes. Also, there should be no source of light within the field of view of the operator while looking at the screen. This produces a tremendous strain on the eyes. The lighting of the room is very important. There must be no glare upon the screen of the monitor. Preferably, lighting should be indirect-that is, bounced back from the ceiling. If fluorescent lights are used, there ought to be an "eggcrate" diffusion screen in front of them and preferably the florescent tubes should be of the full spectrum or "VitaLight" type. The room must have a reduced level of light but not darkened, for that would again strain the eyes when looking at the monitor. Sometimes a tilt-type mounting for the monitor may be helpful in reducing glare on the screen. These guidelines will help you to position the computer within the room and also help achieve proper lighting. Part II will explain the proper posture to keep while working and its importance.

## 79. Computer Stress Syndrome: Part II

Last month we considered some of the factors that produce Computer Stress Syndrome and what we can do to eliminate them. Now we will discuss one of the most important causative aspects of this syndrome-posture. The most critical factor is the relationship of the head and spine. For healthy and comfortable prolonged work, the head must be in a straight line directly over the pelvis. The lumbar curve can be maintained by using an adjustable chair or a wedged cushion to sit upon. Keep the feet flat on the floor or on a foot rest. They should not be crossed, as this interferes with the circulation. We must not allow ourselves to slump. To help the circulation in the lower extremity, frequent wiggling of the toes is suggested.

The arms hang freely from the shoulders, which are always relaxed, and the forearms are at a 90-95 degree angle to the arms. The wrists are to be at the level of the elbows or slightly below, preferably resting upon an elevated bar so that the fingers may freely move above the keyboard. Adjust the angle of the keyboard as necessary to maintain the proper alignment with the fingers. Thus we see that the level of the keyboard is very important to maintaining good posture. The fingers should be at, or slightly below the level of the wrist, never higher than the wrists. If they are higher, the carpal tunnel syndrome may develop.

This is a very painful disease syndrome that we have previously discussed. Printed copy that one is working from should be at eye level and well lit, but the light must not reflect upon the screen. If the copy is positioned alongside the keyboard, then it should be frequently changed from left to right side in order to maintain the balance of posture. It is advisable while working to change one's line of vision periodically by turning the head to the right and left to view other parts of the room. At the same time one may shrug or rotate the shoulders to release built up tension. Also, twisting and bending at the waist gives the body a chance to relax further and improves circulation. Frequent changes of the line of vision from near and far are advised. If there is tingling in the hands and wrists, this may mean the wrists are lower than the hands or that there is spasm and increasing tension in the neck from mal-alignment. This can easily be corrected by doing the cervical spine hatha yoga asanas and/or a full body stretch. Also, frequent flicking of the hands and wrists as though one is trying to flip water off them will return the circulation to normal.

One of the most helpful procedures to maintaining correct posture during long working periods is conscious deep and rhythmic breathing, with the spine straight and the back supported by the chair or the use of the wedged cushion. Frequent blinking of the eyes is also helpful as one tends to stare and not blink, which may lead to an altered state of consciousness. Consciously blink your eyes easily but completely every 3-5 seconds. It is advisable to have a special "computer glasses" prescription-even if one does not ordinarily wear glasses. Consultation with a behavioral optometrist or ophthalmologist is wise for the eyes. The ideal working distance from the monitor is 24 to 28 inches, so glasses focused at this distance are helpful. They may be bi- or tri-focals if needed. Tinted lenses will help cut down on detrimental and distracting glare. Part III next month.

## 80. Reducing Computer Eye Strain: Part III

We have been discussing some of the many factors that lead to Computer Stress Syndrome. We'll focus now on protecting our eyes. Try as we like, there may be situations where the location of the monitor and the lighting of the room are not ideal or may even be deleterious. Since glare on the monitor causes serious stress to the eyes, we will do everything that we can to reduce the light on the screen from nearby windows, overhead fluorescent lights and simple improper placement of the monitor. While the wearing of a simple billed cap often helps against the overhead lighting problem, there are two devices that may help us in eliminating the glare.

The first is an antiglare visor that adheres to the top and two sides of the monitor. It is a piece of fiberboard that is lined with an antiglare surface and is cut in such a way that when it is placed upon the monitor, the monitor is well shielded from extraneous light and glare. These are inexpensive and available from most computer suppliers. The use of this visor will improve the definition of the image as well as increase the contrast so that one will see a sharper image easier and without strain. The other device is a filter that fits in front of the monitor window. There are several kinds of these filters and not all filter the same ranges of energy.

There are those that will filter brilliance, color, glare, ionization and radiation. Some only do part of these. The use of this kind of filter will also increase the quality of the image tremendously. The greatest benefit, however, is to decrease the irradiation from the screen, which we usually depend upon distance to protect us from. The emanations of extremely low frequency (ELF) and very low frequency (VLF) rays are present in every video (TV) tube or monitor. Very few monitors come with a built in filter to lower the dosage from these rays. The ELF and VLF rays are similar to those that are emitted from electric shavers, electric blankets, heating pads, hair dryers, toasters, and other common objects that are around the home.

Some studies have shown that women who work before VDT's (visual data terminals or monitors) from 8-10 hours per day for extended intervals tend to have irregular menstrual periods and that pregnant women may miscarry or their offspring may develop birth defects. There are also some studies that suggest that those who work long hours before these terminals are more likely to develop cataracts. This evidence seemed to be sufficient for Sweden to set up rather strict emission standards for their manufacturers. Other countries have less strict standards, or none at all. I must say that there is no definitive study that actually proves a causal relationship between ELF and VLF emanations and any problems suffered by humans. Since we cannot say unequivocally that these rays, like radio and television waves, are harmless, it behooves us to take all of the precautions that are available.

That is, we should use the best filters that we can find at all times, stay at least three feet from the back or sides of a monitor, sit at least an arm's length from the screen of the monitor, and turn off the monitor when it is not in use. Even with a screen saver working, the monitor still emanates these ELF and VLF radiations. Continued with part IV next month.

## 81. Keeping Fit at the Computer

We have been talking about the various stressful conditions caused by working for long hours at a computer. We have briefly talked about some remedies for this stress. Now I would like to mention a few exercises that can be performed while at the keyboard without taking significant time away from work. There will be great rewards, even if one does these just a few times a day. For the eyes, we have already stressed the frequent change in focus from near to far. One may blink the eyes rapidly for 10 times and then relax the lids. This will help to lubricate the eyes and eliminate the tendency to stare. The blinking may alternate with frequent squeezing of the eyelids very tightly as one breathes deeply and slowly from the diaphragm. This is followed by a sudden release and opening of the eyelids as wide as possible, again holding this position through a couple deep breaths.

This will tend to overcome the fatigue of the extraocular muscles. The changing of eye positions from vertical to horizontal, then from left to right, doing this slowly but going to the extreme position in each direction, is to be followed by a rolling of the eyes slowly in all the directions, first clockwise then counter clockwise. The neck should receive our attention next by also flexing and extending it and rotating in both directions as well as bending the head down to the shoulder on each side. Do not bring the shoulder up to the ear, but bring the ear down to the shoulder without twisting. These slow movements are then followed by a slow and relaxed rolling of the head in each of the directions, first to the right then to the left. Each movement is done slowly with concentration on the breath, which is also slow and deep.

This will relieve a lot of the spasm and tightness in the neck and prevent headaches. Now bring the awareness to the shoulders. Shrug them up as high as possible and down again, then rotate them forward and backward as far as possible. These movements are slow and determined and coordinated with the breath. They may be repeated several times. Follow this with a shaking of the arms and hands as though you are trying to flick water off the hands and fingers. Slow rotation of the wrists in both directions is followed by spreading the fingers as far apart as possible with tension so that the wide opened hand tends to vibrate. This is followed by strong closure of the fist. Again rotate the shoulders and shake the arms and hands. Repeat at least twice.

The spinal twist can also be done while seated before the keyboard. Sitting straight and on a deep inspiration, exhale slowly and turn the body at the waist to the left so that the right hand reaches behind you and grabs onto the chair to put more strength into the twist. While in the extreme position take a deep breath and send a message of relaxation to the muscles of the back. Repeat this in reverse. At least two or three repetitions at a time are suggested. While away from the computer, you might want to stand with both feet together and rise up on the tips of the toes, then back on the soles of the feet and then up on the heels. This will help to relieve tension in the extremities if it develops.

## 82. The End of Computer Stress

We complete our series on maintaining health at the computer with additional simple exercises which can be done while seated, or standing. Let us not forget the feet. While seated, simply wiggle the toes, flexing them strongly with a rapid release of tension. Repeating this several times will increase circulation. One can also rotate the ankles and flex and extend the feet at the ankles to assure proper circulation in the entire foot. Once or twice during the day it may be helpful to contract the calf muscles and again release them to a relaxed and restful position. Here is an excellent back asana that must be done standing up (when you make a trip to the drinking fountain or wash room, for instance). Stand erect, with the feet together.

Raise the arms straight above the head, stretching up as high as possible with the arms alongside the ears. Then, while exhaling slowly, bend over in a forward manner so that the arms stay by the ears. Get to a position with the hands near or touching the floor. When your torso is inverted, relax into the posture and take several deep breaths, letting the inverted body relax completely. Relaxing into the posture is the key. Follow this by bending the knees slightly and taking a deep breath. On the exhalation, start coming back up to a standing position. Visualize one vertebrae after another returning to its former position. Only move upward on the exhalation of a deep breath. One may breathe normally upon returning to the upright position.

The arms are to hang totally relaxed, as is the head, until the spine is again erect and the arms are returned to the side and the entire body is relaxed upon the spine. To finish off the spinal massage, again raise the arms, the hands clasped, and bend to the left and to the right. Do this slowly and with deliberation on the exhalation of the breath. This forms a curved position, similar to a set of parentheses, first the ) and then the (. This, too, can be repeated several times. One who works before the monitor screen for long periods may consider the following nutritional supports: Bilberry, an herb that is excellent for visual acuity;

Vitamin A in the form of beta carotene, which helps in producing the necessary chemicals for vision; Vitamin C; l-glutathione; zinc and selenium. These antioxidants are excellent for the eyes. These and other preparations are available in most health food stores especially made for supplementing the nutrition of the eyes. The use of these supplements will often prevent cataracts and other eye conditions. The frequent practice of "palming" will also soothe the eyes. This is a simple procedure wherein the palms of the hands are rubbed together rapidly until a warmth is felt. Then the palms are placed over the eyes lightly for a few moments.

Place no pressure upon the eyes. Also, placing a cool cloth over the eyes, or pads soaked in Witchhazel, can be very soothing to tired eyes. If one performs these simple exercises and follows the few rules given in the last column and also considers the additional nutritional support, computer stress syndrome will become rare and easily handled. Headaches and eye strain may soon become symptoms of the past.

## 83. A Contended Cow's Milk: Part 1

Some time in the past we discussed the reasons for not drinking or consuming cow's milk from commercial dairies. Any health-conscious person will shun all processed dairy products. This, however, is not true for milk from contented unmedicated cows. There are those who call this milk a perfect food, being second only to mother's milk (which is the most complete and perfect source of nourishment for infants, especially in the first year of life). Whole cow's milk is a complete food, not just a beverage. It is becoming increasingly possible in the USA to obtain pure raw whole milk from certain dairies that advertise organic milk, which assures us that it is unmedicated. We must all make an effort to obtain such raw milk.

The laws in the US require that all milk be pasteurized, but this does not detract from its health giving properties, even though the pasteurization process is incomplete. If whole raw milk is not available, try to obtain non-homogenized milk without any other adulterations or processing. All raw whole milk, even pasteurized milk, should be boiled before consumption. This not only kills any bacteria that may be present, but it also assures that the curds are broken down to make them more easily digestible. Since whole milk is very high in fat content, it is best for adults not to drink it too often. (Remember to hold the total calories from fat in the diet to less than 25% of the total calorie count.)

This milk is good for adults to consume occasionally. If taken at night after it is warmed and flavored with a small amount of ginger root, it is very nourishing to the body and also calms the mind, leading to a good night's sleep. It is always best to take milk warmed slightly, except for the strong pitta types who are able to take it cooled. Never drink milk cold. Cow's milk is light, astringent, sweet and cold. It is a tonic for all. It tends to calm all the doshas. It is able to detoxify the body and is well known for reducing the "heat" of peppers, onions, garlic and other strong spices. It is said that milk from the morning milking tends to produce sleepiness and lethargy and is Kaphic in nature due to the fact that the animal has had no exercise; but that from the evening milking tends to appease kapha and vata and is especially good for the pitta types.

On the other hand, goat's milk is best in the morning and appeases vata and pitta doshas. Cow milk's high fat content makes it a great source of butter and subsequently its essence, ghee. Ghee is used in medicine because of its action of emulsifying and augmenting the properties of herbs and spices. Often ghee is used to aid in the digestion of a multitude of foods. It, along with warm milk, may act as a purgative especially for the pitta types. Butter itself is cold, astringent, unctuous, increases appetite and gastric fire. Ghee from cow's milk is sweet and tonic. It calms or removes aggravation of all three doshas and is good for the eyes and memory. Ghee also contains Vitamin B12 and other nutrients that we need. Ghee is commonly used in cooking and is often added to food for its appeasing effect on the doshas, especially its ability to remove excess kapha.

## 84. A Contended Cow's Milk: Part 2

Having discussed the benefits of drinking only fresh whole milk last month, we now focus on other milk products. Butter and ghee, with their many great health properties, lend themselves to a variety of Ayurvedic treatments. One such special therapy is known as oleation, unction or fat cures. This is the administering of fat into the body for periods of time to purify and relieve vata and pitta without aggravating kapha. If vata and pitta are aggravated, the unction is taken during autumn months, and at night. However, if kapha is aggravated, it is best taken during the day in the summer months. A typical treatment is to add two to four tablespoons of ghee to warm, sweetened milk. Drink this before going to bed. If digestion is weak, add a little ginger and/or black pepper to the milk. It is said that the use of old ghee in this therapy is good for insanity.

Butter and ghee have a high content of cholesterol, but that does not seem to hamper one's health in a vegetarian diet, which in itself is low in cholesterol. Butyric acid, a fatty acid present in butter and ghee, is very beneficial for antiviral activity and controlling free radicals and cancer-cell reproduction. An age-old habit in India is for people to take a spoonful of ghee the first thing every morning to bring about alertness, mental acuity and slowing of the aging process. Buttermilk, the by-product of the extraction of butter from curds, is variable in nourishment, according to how much butter fat is removed. Buttermilk should be consumed fresh, as it gets sour when it ages.

The vata person may drink this straight. Pitta and kapha persons should dilute it with water, though the latter might substitute buttermilk made from goat's milk. Buttermilk acts as a tonic; it pacifies the doshas and aids in digestion if taken after a meal. Vata people fair best with sour products to which a little salt has been added. The pitta person adds sugar or honey, and kapha types add ginger, black pepper or black chilies. Commercial buttermilk is too sour for consumption and should be avoided. Curd or yogurt is a fermented milk product that is high in the lactobacillus group of microorganisms. It is highly recommended for lactose-intolerant people, as the lactose is reduced in the fermentation process.

The bacterial flora of the gut is improved by the presence of the active bacteria of this product. It is also a very good source of Vitamin B12, an essential ingredient to the diet. Curd is unctuous, sour, sweet, astringent, heavy and hot. It alleviates vata, aggravates pitta and increases kapha. It is suggested that curd not be taken along with dinner or at bedtime. But taking small amounts after the meal helps in digestion. Commercial yogurt varieties are to be shunned at all costs. Only homemade and fresh yogurt is healthy. Yogurt is incompatible with milk, sour fruits and melons. Kapha persons should use yogurt very sparingly, because it creates mucus. For them it should be treated it with spices as mentioned and always diluted.

Commercial cheese made from cow's milk should also be shunned, except for the freshly made paneer, which is a good way to introduce the magical qualities of good milk to the diet. Children may have a glass of milk per day, adults may get their milk through the consumption of ghee, buttermilk and curds. Milk should be considered as a whole food not a beverage.

## 85. Antibiotic Insensitivity, Part 1

Antibiotics are chemical substances that are produced by certain microorganisms and have the capability to inhibit the growth of or destroy bacteria or other microbes. Penicillin and tetracycline are two common antibiotics. You can usually find some type of common antibiotic in the medicine box in any home. Antibiotics have been life saving against serious microbial infections of the body. However, antibiotics are easily misused. For instance, they are often wrongly taken in cases of colds and influenza. But antibiotics have no effect on these ailments, as these are due to viruses rather than microbes, and antibiotics have no effect on viruses.

Often patients will begin to feel better after being on an antibiotic medication for a couple of days and therefore stop taking the drug. Such brief treatment actually desensitizes the microbe to the drug, making the microbe more resistant to it in future use. This insensitivity may even be transmitted to other microbes. Antibiotics must be taken throughout the prescribed time so that the germ is truly incapacitated and doesn't survive as a weakened microbe. Desensitization may also occur if the initial dosage is not sufficient to incapacitate the bacteria. It takes several days for specific identification and sensitivity tests to be completed.

The practitioner must often prescribe an antibiotic before he knows exactly which bacterium is involved and which drug it is sensitive to. He must rely upon clinical signs and experience to initiate treatment. There are times when the "wrong" drug is started, which also tends to lead to possible desensitization of the microbe. It has taken about thirty years for certain classes of enterococci to become insensitive to a widely used drug, vancomycin. This is especially serious because there is at this time no satisfactory substitute for the drug. Some strains of tuberculosis and other serious diseases are totally resistant to all presently known antibiotics. The future is not as gloomy as it may seem, though, for there are alternatives to antibiotics that often work as well or even better. The Ayurvedic approach is such that the body is kept in balance and the immune system at peak efficiency so that infections and various inflammations seldom manifest. If there is a lapse in balance, then rebalance and specific herbal treatments may be necessary to bring the body back to health. This is a preferred, wise and age-old system of health.

Outside of the US, it is often easier to find competent vaidyas, traditional Ayurvedic doctors. Vaidyas may occasionally use antibiotics if the condition warrants, but usually prescribe herbal concoctions that will accomplish the same effect. Another approach is homeopathy. This great medical science is often overlooked and snubbed, but it is an excellent, valid method of keeping the body healthy. Its greatest strength is that it will not harm the body during the healing process, as allopathic drugs may. By artful interviews and physical examination, the practitioner is able to assess the entire clinical picture, including possible psychological influences, and thereby select a remedy that will eliminate the unwholesome condition.

Chinese medicine offers yet another alternative, aided by the use of acupuncture to help to stabilize and balance the flow of the Chi in the channels throughout the body. We will further discuss some of the methods of these alternative systems in the next issue.

## 86. Antibiotic Insensitivity, Part 2

Our previous article [February] discussed medical science's concern over the developing resistance of bacteria to known antibacterial drugs. This month we apprise you of some natural antibiotics and antioxidants. Some diseases such as tuberculosis and certain types of "hospital acquired" infections are totally resistant to known drugs. It has also been shown that bacteria are able to transmit their resistance to other not-yet-affected bacteria. The pharmaceutical industry has been somewhat slow in recognizing the development of this "universal" resistance to known antibiotics, so there is likely to be a hiatus before they are able to develop new drugs. Until we have the new materials with which to fight microbial infections, it behooves us to do everything possible to maintain our immune systems at their peak. This can first be accomplished by keeping the doshas balanced.

The diet is to be whatever your constitution requires to keep it in balance. Adequate exercise, including aerobics, is also required. Nutritional supplementation with vitamins, minerals and antioxidants will help to keep the immune system functioning at its peak. Keep in mind that it is the immune system that conquers the invading bacteria, with or without the help of antibiotics or other natural substances. If one is on any antibiotic, or antibiotic tea, it is absolutely essential to take supplemental vitamins and minerals as well as yogurt or acidophilus milk in order to maintain the normal flora of the intestinal tract. The normal flora of the bowel keeps us in a state of health by synthesizing vitamins and enzymes. Ingested antibiotics kill these friendly bacteria. In order to help the immune system stay active and balanced there is a class of substances called Proanthocyanidins (Pycnogenol) which are bioflavonoids found in certain fir tree barks and in grape seed extracts. These are superior antioxidants and also have some anti-inflammatory properties.

They are synergistic with vitamins C and E. Their major influence is to improve capillary circulation so that cell health is enhanced and maintained. They are able to pass the blood-brain barrier to protect the brain cells. Though not antibiotics, their antioxidant abilities help support the immune system against invaders. The product from grape seed extracts are more economical and ecologically preferred. Using pycnogenols as a daily food supplement is highly advised for everyone. One of the most powerful naturally occurring antibiotics is garlic. For centuries, garlic overcame bacterial infections. Its potency has proven greater than some of the better known antibiotics, especially in respiratory diseases.

Garlic contains allicin, a natural antibiotic. It is also antiseptic, antifungal and anticlotting. It is commonly used to expel worms from the intestinal tract. It is an excellent source of potassium and phosphorus, vitamins B and C, and also calcium and some proteins. Its abundant supply of selenium, a potent antioxidant, may be useful in ailments of the heart and eye. Garlic juice has been invaluable in the treatment of childhood ear infections without the hazards of habitual chemical antibiotic use. Garlic may be used raw, cooked or in capsular form as long as the content of allicin is guaranteed.

## 87. Antibiotic Insensitivity, Part 3

In the previous article(April 96) we discussed that the food garlic also has antibiotic and antioxidative properties. This month we will reveal some more traditionally used antibiotics. Probably the most powerful herbal antibiotic/antiviral is Echinacea purpurea, the purple cornflower. This is a native American discovery as the native Indiana used it for all sorts of human ailments. Over the past forty years studies of the effects of E.purpurea, E.augustifolia and E.pallida have shown definite effects against infections by bacteria and viruses. This is accomplished by a stimulation of the immune system so that the body mobilizes the many blood elements that attack and eliminate the effects of the invading elements. There is even evidence that it is beneficial in various arthritic conditions with no side effects as are seen with the drug treatments.

Recent studies are also showing that it may have a place in the treatment of cancer. A combination of echinacea, goldenseal and garlic is an excellent remedy for the treatment of colds and influenza. This combination is readily available over the counter and has been used for many years in Europe. It is supplied as encapsulated powders and extracts (which may have an alcohol base) and should be used at the first symptoms of a disease process and maintained for a few days after the condition subsides. No other drugs or pain relievers will be needed. Another old and unique healing agent is silver. No known bacteria, virus or fungus can remain active in the presence of metallic silver.

It was used universally as an antibiotic until the 1940's when its use was replaced by the newly discovered penicillin. It has never been shown that a disease causing organism can develop a resistance or immunity to this metal. Colloidal silver; that is, very small particles of the silver metal that have an electrical charge are suspended in a solution with no added substances or preservatives is the medium which delivers the silver particles to the body. Because of this electrical charge the silver remains in suspension . It is also instrumental in the detoxifying as well as killing the offending organisms. True colloidal silver is nontoxic and has no apparent side effects.

The ideal product is one that contains no more than 3 to5 parts per million and should be 99.99999% pure silver. no binding agents or stabilizers are to be used, and, indeed, are not necessary if it is a quality colloid, in a range of 0.005-0015 microns in diameter. There is a danger if the colloid is not a true colloid or contains binders and such: that is, there may be an accumulation of the silver particles within the tissue leading to a condition called argyrosis, giving an intractable bluish tint to the white skinned individuals. This was a rather common complication in the 1930- 40s because the particles were not true colloids.

If it is taken orally, as is the usual method, there is the killing off of the friendly bacteria of the gut, the same as antibiotics, and these must be replaced through supplementation of the diet with vitamins and minerals as well as yogurt or acidophilus milk. Ayurveda, traditional chinese medicine, herbology, and other traditions of health care have available many herbs and plants that are native to their cultures that will replace (without drug side effects) today's antibiotics as they become ineffective. Each tradition has methods to assure that the immune system is in excellent condition so that health can be maintained. Alternative medicine is the medicine of the future.

## 88. Mad Cow Disease and CJD

Creutzfeldt-Jacob disease (CJD) is a debilitating and fatal disease that occurs in humans throughout the world. It is characterized by progressive dementia and chronic seizures of muscles, ultimately leading to death. It most often occurs in people at age 50 or 60. The pathology is sponge-like changes in the brain. It has been transmitted from human to human inadvertently during organ transplant and other surgical procedures. It has also been seen in people that were given human growth hormones as children. It is definitely infectious, although there is also a familial aspect. It is not caused by bacteria, viruses, mold or any other of the usual pathogenic materials. It is now known to be transmitted by a "prion" which is a section of protein devoid of any genetic material. It is able to replicate by using its host's DNA or RNA.

An animal form of the disease, known as scrapie, has been around for many hundreds of years, especially in sheep and goats. It has been known to be transmitted to the shepherds and goat herders, but the method of transmission is obscure. The most alarming form of the disease at present is "mad cow disease" (BSE) which is found mostly in Great Britain, although a few rare cases have been seen in the US. It is characterized by leg weakness and obvious abnormal mental behavior in infected animals. Herds that graze in the same fields show transmission from animal to animal; and those herds that eat the same food also see lateral transmission.

This suggests that it may be transmitted by air, such as the prion being attached to dust or dust mites in the fields. In 1988 the use of sheep brains and other byproducts of butchered sheep in cattle feed in the USA was made illegal. There have been cases of CJD in England all out of proportion to that seen throughout the world. It is especially found in the farmers and cattlemen that have infected breeds. Recently, a form of the disease has been found in a teenage girl (commonly only found in humans of age 50 or over). She was very fond of hamburgers, and her doctor blames them for the disease. Since the prions that are the infectious agent are in the diseased animals blood, they are also obviously in the muscle tissues and can be transmitted to humans who eat this contaminated meat. It is also felt that the prions attach themselves to the leukocytes (white blood cells) that appear in the milk.

Thus it is possible to also transmit this disease by drinking the milk of infected animals. Yet, many involved agencies say that there is no actual proof of the transmission of the disease from animal to humans. They have said that the "contaminated" feed was not proven to transmit the disease, despite a decrease in the incidence of the disease amongst the animals since the changes in the feed were made. It is said that the incubation period may take many years, especially in humans. The truth is that there is no warning of the disease in animals or humans. It is not diagnosed until the irreversible symptoms of brain damage appear.

At the present time there is no cure for the disease. There is good research being done with many suggestions of ways to combat the disease. These approaches prevent replication of the prion after it has already produced symptoms in the brain. The lesson to be learned is that herbivorous animals should not be fed animal parts; and the human does not need to eat other animals either. Even UK milk and milk products, such as cheese, should be avoided.

## 89. Menopause and Women: Part 1

During the years between age 40 and 50, many changes occur in our bodies and minds as the bodily doshic cycle turns into the vata period. This cyclic vata phase brings on a change in our life and its purpose. In women it is the beginning of the end of the childbearing period and cessation of the menstrual periods. This is called menopause. There is a gradual withdrawal of energy from the function of the ovaries so that they no longer produce the ovum and slowly decrease the formation of the hormones that prepare the uterus to receive the egg (ovum) for fertilization and its further development into a fetus.

This is a natural condition and is not to be considered a disease. However, it is accompanied by some physical symptoms that vary greatly according to the physical condition of the women. There are also mental and psychological changes that are a result of the menopause. It is now time for the woman to have more concern about herself and her spiritual center than before. She is free from the biological necessity of producing children and the constant concern for their welfare. She now has more time to think of herself and her husband and their well being, physically and spiritually. The most common symptom of this period of life is the experiencing of “hot flashes,” the sudden spontaneous surging of heat throughout the body, with the skin flushing and often sweating. The liberated woman has called these episodes “power surges.”

It is a time-limited experience but may be shocking and troublesome when it does occur. Women who practice hatha yoga postures as a routine seldom, if ever, have these vasomotor experiences. A good hatha yoga routine emphasizing the inverted and forward bending postures can assure great relief from these episodes. Sometimes women will ask for doses of estrogen, usually given as a synthetic drug, to get them through this phase. This is not recommended because these drugs cause the body to not recover naturally from the “hot flashes” and these episodes will continue as long as the drugs are taken. The taking of these drugs has been connected to increased risk of breast cancer as well as uterine cancer and other adverse effects.

Dietary changes to a grain-based diet and giving special attention to foods rich in calcium, vitamin E, and elimination of smoking, drinking coffee, hot spices and alcohol are indicated, as these aggravate the pitta dosha which controls the heat production within the body. The diet should be a vata pacifying diet. Herbs such as valerian and passion flower are calming. There are homeopathic remedies compounded for helping one overcome these symptoms. They are highly recommended and are readily available in health food stores and homeopathic pharmacies.

To aid in the mood swings, meditation and yoga postures are suggested. The postures that work on the adrenals and kidneys such as the twisting postures will help these organs to furnish the hormones that are no longer being produced by the ovaries. A good diet, adequate aerobic exercise, hatha yoga, meditation and even dietary supplements will make the menopause a favorable experience as far as the short-term effects are concerned. There are long-term symptoms also associated with the menopause, such as thinning and dryness of the vaginal mucosa, muscle loss, water retention, osteoporosis and cardiovascular diseases.

## 90. Mitigating Menopause

A Vegetarian diet, proper supplements and appropriate exercise can ease the transition. One of the most alarming consequences of menopause is the loss of calcium from the bones, leading to weakening of the skeleton and possibly an increase in fractures. The solution to this is a correct meat-free diet high in calcium and other nutrients, at least beginning in one's mid-thirties, for this is when the problem of osteoporosis really begins, accelerated by the lack of estrogen at menopause. A high-protein diet is acidic, causing calcium to be leached from the bones.

A high-fat diet decreases absorption of calcium from ingested food. Smoking, alcohol, colas containing phosphates, and chronic stress all add to this condition. Low magnesium levels due to too much refined grain (flours) and lack of green, leafy vegetables contribute to calcium deficiency. Thus we see that a well-balanced diet high in calcium-rich foods such as kale, chard, turnip greens, Chinese cabbage and other green, leafy vegetables is desirable. The average woman needs adequate magnesium and exposure to sunshine to help metabolize at least 1,500 mg. of calcium daily. This may require some supplementation to the diet, especially if dairy products are not consumed. Exercise is absolutely essential to maintain bone strength. Weight-bearing forms of exercise, such as dancing, walking, golf, swimming, cycling and Tai Chi are not too strenuous and will help to maintain strength and decrease chronic tension.

The possible cardiovascular complications during menopause can be kept at a minimum by following an ayurvedic diet that balances the doshas. Unsettling emotional swings will be lessened by an exercise program of hatha yoga and aerobics and helped a great deal by the stress reduction of regular meditation. One of the common effects of the decrease in production of estrogen during the period called menopause is the thinning of the mucosa of the female organs and a decrease in mucus and other secretions, leading to dryness. This causes discomfort and susceptibility to frequent infections. The use of synthetic hormones is not suggested for treatment of this condition. Symptoms can be alleviated by a diet high in vitamin E, grains, nuts and cold-pressed oils from fruit and nuts. Plenty of liquids and fluid foods, such as melons, greens and other moist vegetables, are recommended. The organs can be lubricated with cocoa butter, vegetable and fruit oils such as sesame, coconut, almond and cold-pressed castor oil.

In spite of this dryness there can be bloating from water retention as well as tenderness of the tissues and even emotional depression. The necessary diuresis can be assured by the use of the homeopathic cell salt Natrum Sulphurica taken in four to eight daily doses. Frequent sips of warm water throughout the day and teas made of green tea, corn silk or dandelion greens may also naturally stimulate the diuresis so that harsh and mineraldepleting drugs will not be necessary. Cranberry and watermelon juices are also very good and have a tendency to decrease possible urinary tract infections. Menopause is a normal, natural event in life. It is not a disease and should not be treated as a disease with harmful hormone-replacement treatments which use strong, synthetic and dangerous drugs.

## 91 Hospital Hopes And Hazards

Historically The Hospital was an institution created for centralizing a place for administering care and medical treatment to the ill of the community. A place to get the patient away from his home environment and offer him expert services and nursing care. Today the Hospital is a major institution dedicated to the preservation of life and the study and treatment of acute and chronic illnesses. At the same time every hospital has a teaching and monitoring responsibility for the health and wellness of its community. The larger teaching hospitals are the bringing together of specialists in the various disease categories and elaborate structures for teaching every phase of the medical team.

There is an infinite variety in what we call the hospital today from the barely adequate to the best there is to offer. All hospitals have this in common: the expense or cost of running the hospital continues whether or not any patients are present. An empty bed does not lower the expense, but merely lowers the income. Also another common denominator is that the hospitals are the most controlled industry in the USA. There are federal, state, local and sometimes special rules and regulations that must be followed.

At the same time there are constraints upon the medical care and its quality by the above agencies as well as the hospital committees on quality of care, mortality and morbidity, and medical ethics. The most recent invasion of this world of constraints and regulations is by the insurance companies, that do pay most of the patient's bills. They have determined the maximum length of hospital stay of patients regardless of the clinical condition of the patient. Thus the insurance company will deny certain charges, often without any good clinical reason, in order to keep their payouts as low as possible. The hospital's stated mission is the preservations of life. This often means that in spite of "living will" stipulations (do not resuscitate orders) the patient may be put on life support machines contrary to the wish of the patient and the family.

Once this is instituted it is becomes almost impossible to remove the machines even though the cost are mounting and no benefit is derived to the patient. The greatest hazard to hospitalization is the nosocomial infections (or hospital acquired infections). The institution is the home of many germs, viruses, toxins, and allergens that one is not familiar with in his own environment. So the patient is susceptible to massive new infections since he has no natural immunity. And, of course, antibiotics are given at once often without the desired testing and matching of the antibiotic and the offending organism, and frequently without patient consent as it is considered covered by the blanket permit signed upon admission. We all know of the serious consequences of indiscriminate and often unnecessary antibiotic use.

Another great problem is the food that is served to the patient. If one is vegetarian, he will not be able to get a good vegetarian diet-the nutritionists do not understand the concept. The other food is also often inadequate to the patient needs. It has been said that malnutrition is very common in the modern hospital without supplemental and very expensive feeding. Because of the current litigious nature of our society excessive testing is done especially the latest and most expensive technics..even though a simple test may give the same results. This is merely to satisfy the medical and hospital protocols. The patient can control many of these "errors" by insisting that he be part of every decision that his physician makes. The patient must be an active participant in his own care, he shall demand that some things be treated on an outpatient or hospice basis rather than being hospitalized. He has the right to know what his disease is and what the are options of treatment. He also has a right of a second and third opinion. Most hospitals due not allow alternative methods to be used in the hospital

which denies the patient the right to choose between allopathy, homeopathy, Ayurveda, traditional herbal medicine and such other alternatives as acupuncture, healing by laying on of hands, Reiki, and even chiropractic adjustments. There are many other things that are contrary to the patient's interest in the modern day hospital; but we must also admit that we have the best treatment in the world today.

## 92. Antidotes For Andropause

Are you a man 45 years or older who is finding himself becoming more irritable and argumentative than before? Have you become a procrastinator? Do you feel you are not the “hunk” that you once were whose libido seems to be decreasing as your spouse’s is increasing? Are you more emotional and sentimental these days, frequently responding to situations with tears? Has proving your virility gained a new importance, enough to have you change your style of dress to a more sporty look—no longer donning subdued and drab colors? Have you been tempted to buy a flashy new sportscar recently, perhaps a red Jaguar or Mercedes Benz? Or do you say to yourself, “It is not my fault that I cannot respond intimately anymore. It must be my wife.

Maybe I should take on a mistress.” Finally, do you tend to blame others for all of these changes? If you fit this picture, you may be passing through male menopause, known in the US as andropause and in Europe as viropause. Symptoms during this changing time in life include a definite, although slight, change in physical and mental attitudes toward sex. Usually there is no hormonal cause to explain this midlife crises, as men remain fertile into late life. Normally there is no decrease in the male hormone, testosterone, although a slow abatement may develop, usually after age 65. However, the anxiety that is felt during this period of natural readjustment to life and its demands may not only be traumatic but catastrophic. Since most men take pride in their virility, fitness and physical prowess, it is truly a shock when they discover they are not as agile or adaptive as they once were. Retirement may become a real problem.

If work is no longer there to take up active time, and it has not been replaced with other tasks, life may seem tedious and useless. A man’s self-esteem can be threatened, making him defensive and miserable. He may experience high stress levels for the first time in his life, which may result in complications, such as alcohol abuse or perhaps even drugs. Primarily andropause occurs among white-collar men who have high goals, perhaps higher than their life’s achievements. Frequent thoughts of getting old and fears of death, loss of confidence during intimacy, retirement and of being fired from his job can amplify the stress. If that weren’t enough, psychological changes can provoke a fear of losing physical and mental stability. The more a man is “me” oriented, the more likely he is to have symptoms of andropause. It is far more common in the West than in calmer Oriental cultures; however, this is changing as the East becomes more Westernized. Not all men pass through this andropause, and it is possible to prevent the occurrence altogether by consciously adopting more realistic goals.

Treatment of andropause is primarily psychological and philosophical. Controversial hormone replacement therapy is not recommended. Simply recognizing and understanding it as a syndrome may in itself decrease the severity of symptoms. Male menopause is very real and can be serious, but adhering to a dharmic path can aid in diminishing or even bypassing the experience.

### 93. DHEA: Menace or Miracle

Stop aging now!" "do we have the fountain of youth?" These are some of the exaggerated claims found in the lay press and in ads selling the "food supplement" DHEA (dehydroepiandrosterone). In the human body DHEA is a natural hormone produced by the adrenal gland and is intimately involved in the manufacture of testosterone, estrogen, progesterone and cortisone. It is a vital factor as a hormone precursor in the human endocrine system. It reaches its peak level in both men and women between ages 20 and 30, then gradually decreases. At age 70 the level is 10 to 20% of that at age 20. Logic tells us that if the blood level is lower at the time aging symptoms appear, then we may be able to reverse these symptoms by an exogenous dosage or replacement of the hormone. To some extent this seems to be true, at least there seems to be a decrease in the aging symptoms and a certain well-being as the levels are elevated to those seen in one's youth.

There are reports that adding DHEA to the diet can be anti-depressant, antiaging, anti-obesity, anti-dementia, give protection to the thymus and reduce stress. It can also protect against heart disease, chronic fatigue syndrome, cancer, viral disease, and postmenopausal syndrome. Most of the evidence is backed only by animal experimentation, and extrapolation from these studies to human use is not very reliable. There is some data from human studies that tend to support the less exaggerated claims in the advertisements. Yet, there are no long term reports sufficient to claim that life is prolonged, or that this is "truly the fountain of youth" or the "wonder hormone of the 90s."

According to Dr. Billie Jay Sahley, a pain clinic operator, DHEA treatment can result in "increased energy and less susceptibility to the ravages of chronic pain and depression." DHEA is beneficial only if a blood test shows a level much lower than expected for one's age. Otherwise DHEA should not be taken because the body can stop producing it naturally resulting in a dependency on the external source. Should treatment begin, it is important that every six months the blood level be tested and an adjustment made in the dosage if it is excessive. Higher levels can produce a total disruption of the endocrine balance in the body and result in many concurrent symptoms as well as an increased incidence of cancer of the breast in women or prostate cancer in men. Fortunately, side effects from DHEA are relatively few—acne and headaches are among them. Hirsutism may also occur among women, but all of these symptoms are reversed by decreasing or stopping the dosage.

Only top grade pharmaceutically pure DHEA should be used, and vegetarians should be aware it may come from an animal source. Most brands made from the South American yam are not trustworthy, as there is no evidence this precursor source can give a reliable dose or be absorbed and utilized by our bodies. As aging occurs, most people compensate by adjustments in their lifestyle, making aging the truly natural phenomenon that it is. If one has a good regimen of hatha yoga, sadhana (including meditation) and an adequate vegetarian diet, he is not likely to suffer from aging symptoms.

## 93. A Toxic Monster In Your Mouth

If you have silver amalgam dental fillings, you may have a time bomb ticking in your mouth. Amalgam is a mixture of silver, copper, indium, palladium and 43 to 50.5 percent metallic mercury. Mercury is a liquid at room temperature but becomes solid when combined with other metals. It is more toxic than lead, cadmium or arsenic and has the property of giving off mercury vapor. Even in a compacted dental filling, vapor can be inhaled and distributed into tissues of the body, especially the brain, kidneys, liver and nerves.

The Australasian Society of Oral Medicine and Toxicology has affirmed, "Mercury is poisonous. There is no safe form of mercury in living tissue." It has been proven that mercury continuously leaves the amalgam. The amount exuded depends upon the number of fillings in the mouth and the length of time the fillings have been there. Its release increases when chewing, when the intraoral temperature is raised by smoking and drinking hot fluids, by grinding of teeth and even by brushing the teeth. The mercury vapor is absorbed through the lungs directly into the arterial blood at a rate of 80 percent. In the brain it is preferentially stored in the pituitary gland and hypothalamus. It binds to hemoglobin, causing decreased transportation of oxygen to the tissues and can destroy kidney cells, leading to kidney failure.

The greatest affect of elevated mercury in the system is neurotoxic, leading to memory loss along with a tingling and loss of sensations in the peripheral nerves. There may be hormonal changes, since it is selectively stored in the pituitary, the grand conductor of the nervous and hormonal system. Mercury also passes the placental barrier and can adversely affect the fetus with possible physical and mental defects. There are studies that implicate increased mercury levels with Chronic Fatigue Syndrome and the dreaded Alzheimer's disease. In one Alzheimer's patient, all the amalgams were removed and mercury purged from the body by chelation. All symptoms of the disease disappeared. What can we do about this controversial subject? Select a family dentist who does not use amalgams. Many dentists still deny it is a hazard to health.

If your doctor feels there is sufficient cause, you may opt for a more extreme course of action: replacing the amalgams with porcelain or non-amalgam fillings. Your dentist must proceed cautiously, following a prescribed pattern of replacement. The mere manipulation of the fillings will tend to release more mercury vapor, which may be inhaled. While removing the amalgams, the effects of mercury in the system can be offset by a diet rich in greens, high fiber, garlic, onions, distilled water, and supplements of vitamin A, C, and E, beta carotene and selenium. We discussed other aspects of dental hygiene in the August 1989 issue of *Hinduism Today* and warned of another toxic element, fluoride, found in fluoridated toothpastes and mouth rinses. Fluoride produces marked and irreversible changes in the teeth and bones.

On Nov. 14, 1996, a London Telegraph headline confirmed, "Colgate pays out for fluoride damaged teeth." It was proven that a 10-year-old boy had the condition called dental fluorosis which developed due to small but frequent swallowings of fluoridated toothpaste.

## 94 Coming of Age, From Lass to Lady

A girl's puberty may be a tumultuous time, but careful tutelage can guide her into adulthood. There are three important milestones which we reach in our lifetimes— childhood, from birth to age 16 (kapha), adulthood from 16 to 50 (pitta) and old age from 50 onwards (vata). These three cycles co-exist with the cycle of the body's constitution, and at the juncture of each period a great turmoil naturally occurs. During the first transition, called puberty, the body and mind are growing, maturing and adjusting to a new purpose in life; i.e., procreation. Puberty brings with it a collision between kapha and pitta which, in itself, is trying and explosive. Parents should teach their daughters what to expect when puberty begins. On average it starts at about age ten but may occur as early as eight. The first signs are budding of the breasts and growing of pubic and underarm hair. Coarse hair on the legs and arms may also appear.

The body experiences a surge of growth that begins at the feet and leads to an awkward gait. This is followed by a lengthening of the legs which may produce even more clumsiness. Often a skin condition called acne develops which brings great concern to the girl because it is unsightly, and she may be the only one in her class to be so marked. This can best be treated, as can all of the indications of puberty, by eating a pitta-satisfying ayurvedic diet, by having plenty of exercise and by seeing that the digestive process is always functioning at an optimum. While these external metamorphoses are happening, marked changes are going on within the body. The sexual organs begin to grow, as well as an awareness of them. Hormonal changes commence which will initiate menarche, but this beginning of the menstrual cycle comes fairly late in the puberty process. It may initially occur as a feeling of dampness or only as a spot of blood.

As she develops further, the flow increases. When the ovaries begin producing eggs, the flow usually becomes more regular. In the meantime, the breasts continue to enlarge, and their ultimate size is determined by genetic and other factors which cannot be predicted. Along with physical changes come psychological transformations which may lead to erratic behavior, moodiness, inactivity and self-protecting attitudes. These must be understood as a part of the grand process of growing into adulthood. Many children may not desire this change because they have developed a dependency on being a child. On the other hand, most welcome it with excitement and look at it as a time of great challenge.

A blooming young lady may feel a need to experiment with her independence by desiring to do more things for herself and separating at times from authority figures. Usually this is not a troublesome phase if it is understood as a normal part of development. The main emotional problems to be dealt with are selfconsciousness, a feeling of isolation and of "being different." Teaching celibacy and planning early for the coming-of-age samskara, the ritukala, will help her to adjust to this period of change and prepare for adult responsibilities. A persistent healthy diet, good exercise, meditation, parental guidance and understanding siblings will insure that she grows and matures into a graceful, beautiful, loving, alluring, mystifying and exciting embodiment of Shakti, capable of bearing wonderful children.

## 95. Boys Will Be Boys, But Not for Long

A boy's puberty is a time to prepare him for the responsibilities of adult life. Puberty in boys proceeds about the same as in girls, except the changes are more external due to the differences in anatomy. On the average, puberty begins between 12 and 13 but may occur as early as nine. In some cases, the process of growing into manhood may be delayed as late as the 14th and 15th years. Parents should help prepare their sons before puberty on what to expect. One of the first signs is some swelling of the mammary glands. This often leads to a brief but very sore and swollen nipple area. It gradually recedes and returns to a normal flatness, and the underlying muscles become harder and more prominent. This period of change may take up to one and half years to complete, but some boys may not go through this phase. Concurrently hair will begin to grow in the pubic area and the armpits.

The sweat glands in these areas will tend to produce copious amount of sweat, more than in females. The facial hair starts as a very fine fuzz, and in late puberty it may not only be more coarse but also be quite visible. The boys take a lot of teasing about their "peach fuzz" from their peers and adults. The gangly gait and awkwardness produced by the rapid growth of the lower extremities may be much greater than in girls. But what boys lack in grace they make up in speed. The musculature of the upper body is emphasized with a squareness to the shoulders and hardness of the muscles, unlike the soft curves of the females. Another change that opens the boys to teasing and ridicule is the change in the voice. It begins by becoming deeper and deeper in pitch, but it is not a smooth transition. The boy may be speaking or reciting in class when the voice "breaks" and returns to its soprano pitch momentarily.

This may occur with concomitant blushing, something which seems to develop slightly more with boys. Of course, this occurs at all of the inopportune moments, again leading to teasing and moderate discomfort. One of the earliest changes develops in the sex organs. The testicles tend to enlarge. It is normal for one to be larger than the other, and it is also normal for one to suspend, when standing, lower than the other. The male organ is made of erectile tissue and when it is filled with blood becomes hard and erect. This may occur at any time without provocation or apparent cause. This leads to blushing and teasing which should be understood by everyone. As the external organs are growing in prominence there are internal hormonal changes occurring which eventually lead to the production of semen.

There may be spontaneous, sometimes nocturnal, emissions. Yogis say this is perfectly normal, but masturbation should be discouraged. Boys should be taught to save the sacred seed and trained prior to puberty to re-channel sexual desire by learning to transmute their vital energies and sacred fluids. Other internal changes are in the boys perception of girls. The childhood joshing of "those dumb girls" changes to a new appreciation for them. But the vital life force must be focused on studies and spiritual pursuits. The sexual drives and impulses are natural but should be confined within a sanctified marriage. Celibacy until marriage will enable the boy to merit a good wife and a happy life together.

## 96. Ayurvedic Principles For Pubescence

Hatha yoga, exercise and a pitta-reducing diet: prerequisites for boys and girls during puberty. We have emphasized that exercise is very important for boys and girls going through puberty. Exercise is one of the main activities that stimulate the body to work normally and stay in good health, and is of two types. Hatha yoga, an organized form of asanas, or physical postures, will maintain healthy functioning of the muscles through stretching and contracting. Minimal asanas to perform daily are called Surya Namaskar. Done slowly, they exercise every muscle in the body and aid in proper respiration. The second form of exercise is called aerobics. Aerobics will raise the heart and respiratory rates, resulting in an increase in metabolism.

Some of the best aerobic exercises are walking, jogging, swimming, running, calisthenics and team sports. The heart rate should be raised to 60% to 80% of its maximum (270 minus age) and maintained for about 15 to 30 minutes. After exercising there should be a cooling-off period to allow the heart and respiratory rates to return to normal. During puberty, team sports are beneficial for boys, helping them get through this period without excessive wet dreams and will help them to harness sexual fantasy and avoid carnal temptations.

Acne can be a problem, due to a high pitta, or a fire humor condition. There are no good creams or other applications that can help, except for very advanced cases in which an antibiotic cream can be used. Keeping the skin very clean is important, and light exposure to sunlight is acceptable if a screening agent is applied to prevent burning. Still, most creams are nostrums. A pitta pacifying diet is necessary to overcome the excessive pitta influence. Acceptable foods are too numerous to mention, but a list of foods to avoid is given below as a guide. The emphasis during the years of puberty should be on bitter, sweet and astringent tasting foods.

The time of the year, the freshness and variety of foods and how they are prepared may alter the effects of the diet. While preparing food, mothers should also keep in mind the health requirements of other members of the family. This may require making separate dishes for the various doshas, or individual bodily constitutions, and the different age groups within the home. Few fats or oils should be used for cooking, and should not be reused. Use heat-producing spices and vegetables very sparingly. Pitta-aggravating vegetables to avoid include beets, raw carrots, chilies, daikon, eggplant, olives, onions, peanuts, pumpkins, radishes, spaghetti squash, spinach and tomatoes. All fruits should be ripe and sweet. Avoid apricots, bananas, berries, cranberries, green grapes, grapefruit, kiwi, lemon, lime, papaya, peaches, rhubarb and strawberries.

Grains to avoid are brown rice, buckwheat, corn, millet, dry oats, rye and quinoa. Stay completely away from lentils, brown sugar, molasses and old honey. Other foods to steer clear of, especially if acne is present, are alcohol, chocolate, coffee, ketchup, mayonnaise, mustard, pickles, salt, tea and vinegar. Parents can help guide their growing sons and daughters into a happy, healthy, successful young adult life by keeping themselves informed and talking regularly and frankly with their youngsters about the natural, wonderful process called puberty.

## 97. Ways to Soothe That Heartburn

Antacids, “H-2 blockers” and surgery have their place, but it’s best to adjust your lifestyle. Thirty percent of the American public suffers from it at least once a month and 10 percent suffer daily. Heartburn is a burning pain in the substernal (upper torso) area or in the back at heart-level between the shoulders. The pain may be localized, but may also extend up to the throat. The usual cause is dietary indiscretion: overeating, overdrinking, too much coffee, alcohol or very spicy food. When one overeats or partakes of the wrong foods, there is a tendency for stomach contents to regurgitate into the lower end of the esophagus. This is especially true when one lies down to sleep. Pain results when the stomach acid irritates and burns the delicate mucosa lining of the esophagus. The cause of heartburn is malfunction of the valve at the lower end of the esophagus. It is most common in the older population. This simple form of heartburn can be readily treated with antacids (Maalox, Gaviscon, etc.) or H2-blockers (Tagamet, Axid, Pepcid, etc.)

A recent study found that conventional antacids gave quick relief usually lasting two hours. The H2-blockers often took two hours just to have any effect—a good case for not spending extra money on such high-tech drugs. Manufacturers advertise that one should take medication before anticipated dietary indiscretions, which is really showing a seller’s bias. If the heartburn is only intermittent or occasional, antacids and H2-blockers can relieve the symptoms. But if it becomes a daily symptom, the condition should be looked into for more serious problems. Chronic heartburn is usually caused by a loose esophageal gastric junction (at the entry to the stomach) so that reflux (reentry of stomach fluids to the esophagus) is frequent. There are also times when herniation pushes the stomach into the lower thorax, allowing ready pouring of the stomach contents into the esophagus. Both conditions may require a simple surgical operation. Chronic heartburn must be diagnosed and treated. On very rare occasions it may be a symptom for heart disease and even cancer.

Daily use of antacids may be harmful, due to their content of magnesium or aluminum. These metals cause problems when their level in the blood gets too high. Antacids containing calcium can disrupt the sensitive balance of the body’s minerals, leading to bone and joint problems. As safe as the H2-blockers seem to be, excessive dosage can lead to a dangerously low level of gastric acid—inadequate for proper digestion or absorption of vitamin B12 and possibly causing pernicious anemia. Dietary changes can reduce heartburn. Start by eliminating offending foods, such as caffeine, chocolate, tomatoes, citrus juices and fried, fatty or spicy foods. Have the largest meal at midday and limit the size of meals so that the stomach is not overdistended. Do not bend or squat after eating. Perhaps elevating the head of the bed will help. Eliminating aspirin and alcohol is desirable.

Smoking should be discontinued. It has been shown that smoking only two cigarettes over twenty minutes reduces the strength of the esophageal valve by fifty percent and increases the stomach’s acidity. The simple Vedic diet, even though spicy, is ideal, and will usually not allow this symptom to occur.

## 98. Stevia Rebaudiana: How Sweet It Is!

A little-known South American medicinal plant is 300 times sweeter than sugar. Stevia rebaudiana has been growing wild in upper South America for centuries and is now cultivated in China, Japan, South Korea, Israel, Malaysia, Brazil, Paraguay, Mexico and USA. A member of the chrysanthemum family, it has been used by the Paraguay Guarani Indians since ancient times, primarily as a sweetener but also as a medicinal herb. It may seem too good to be true, but stevia is a noncaloric, nontoxic, natural sweetener that even has health benefits. The natural leaf is 200-300 times sweeter than sugar in the concentrated white powder form. This plant's active ingredients are two glucosides, steviosides and rebaudiosides, the latter being somewhat better tasting. As a whole leaf, or liquid extraction, stevia has three major uses: flavor enhancer, herbal tea and medicinal.

The common use is as sweetener and flavor enhancer. In Japan, where artificial sweeteners are banned by law, stevia has 41% of the sweetening market. Its use as an herbal tea, alone or with other herbals, is popular. Medicinally it has a beautifying effect on the skin, and benefits glucose levels in diabetics—blood—a stabilizing effect that can lower their blood sugar levels (but not in nondiabetic users). It never elevates blood sugar, allowing a diabetic to have sweets without adverse effects on his condition. Stevia also has mild antibacterial action, making it suitable for use in mouthwashes, tooth paste and cold or flu remedies—common traditional usages of the Guarini Indians. It is further used (in tea form) as an appetite stimulant, digestive aid and in weight management. Combined with ginseng and other herbs, the tea is thought to prolong a good life. Some reports say stevia could be used as a contraceptive; however, this has not been proved. It is generally accepted that the mutagenic studies (to detect for cancerous properties) done so far were not based on valid or proven assumptions; thus there is slight question of a possible mutagenicity, as is true of the artificial sweeteners Saccharine and Aspartame. With many years of use and no evidence of toxicity or side effects, scientists do not seem to think it is necessary to do further studies.

Machinations of the US Federal Drug agency have not approved stevia for use other than as a nutritional supplement. It cannot be labeled as a sweetening agent, yet it is approved in most other countries as a safe, noncaloric sweetener. If labeled as a food supplement, it can be purchased in many pharmacies and most health food stores in the US (\$9/oz. in one shop) and is generally available in the Eastern countries and Europe. For some years, importation of the plant to the US in any form was not allowed. But this was changed recently. Stevia is also stable in heat, allowing its use in cooking to replace sugar (one Tsp of stevia equals one cup of sugar). When used in cookies and cakes, it lacks a browning effect that sugar has, so adjustment in determining doneness must be made.

There is a slightly bitter aftertaste if refined leaves are used in excess—less true with less refined leaves—and a hint of a licorice flavor (also a natural sweetener) that many desire. It seems that personal use of stevia will be permitted in the USA; but generalized use in the food industry to replace the less than innocuous Aspartame and Saccharin seems unlikely in the foreseeable future.

## 99. Cures For BHP, the Older Man s Curse

Potent herbs, antioxidants and continuing abdominal exercises can relieve this affliction. BHP stands for Benign Prostatic Hyperplasia, or enlargement of the prostate, a small, walnut-sized gland found in men at the base of the bladder. Encircling the urethra, it supplies the seminal fluid that transports sperm from the testes to the outside. In most men 40–50 years of age (sometimes beginning as early as 30) there is evidence of hyperplasia (enlargement) of the gland's inner portion. The urethra is then encroached upon, causing difficulty with frequency and urgency of urination, distension of the bladder and discomfort such as backache due to the increased intraurinary tract pressure of the retained urine. The major symptom is an inability to properly empty the bladder, a feeling that there is always some retained urine.

The sphincter, a muscle controlling urinary retention, seems to be spastic and does not relax enough to allow normal urination. In the condition's early stages, sitting in a tub of hot water (Sitz Bath) will relax the sphincter somewhat, and urination should be attempted while in the bath. One of the complications of this condition, when untreated, is a backing up of urine into the kidneys, thus preventing proper urine production and possible deterioration of the kidney tissues. This leads to nonflow of urine and probable infection of the tract. Much kidney damage may be the result of this condition, which may necessitate emergency surgery. Irreparable damage to the kidneys may lead to death. Medical science is not entirely clear about this condition's cause.

Many believe it is due to a loss of testosterone level (and subsequent increase in estrogen level) that stimulates hyperplasia of the gland's central portion. Some also claim it may be due to sagging of the abdominal organs due to inactivity of more mature males. There also may be a dietary contribution of low levels of zinc, vitamin C, E and other antioxidants. Several suggested surgical procedures should only be utilized if the disease process has become uncontrollable. Two prescription medications also available—but not suggested—are Proscar and Hytrin. Both may cause impotence, ejaculatory dysfunction or possible birth defects in male offspring.

They are not very effective in reducing the swelling. Saw palmetto and pygeum are two effective herbs with no side effects. Dr. Julian Whitaket says in his Sept., 1993, newsletter, "The saw palmetto berry extract has been shown by scientific studies to be about three times more effective than the Merck drug Proscar for alleviating symptoms of prostate enlargement, such as poor urinary stream, urine retention and nighttime urination." Pygeum has been used for centuries in Africa for all kinds of urinary tract problems in men. Combinations of saw palmetto, pygeum, zinc and other natural substances are available and recommended for prevention of disease in general as well as treatment of this condition. Taking the combination starting at age 45 and continuing in controlled doses past age 70 is advisable. Dietary advice is to eat plenty of tomatoes, tofu and other soy products, nuts and grains, leafy green vegetables and yogurt. A good exercise program to keep abdominal muscle integrity is essential. There is no connection between this abnormality and malignant tumor of the prostate, the most common cancer in men.

## 100. BSE: The Ruminant Empire Strikes Back

Containment efforts for “Mad Cow Disease” fail to curb spread of the incurable illness. We have previously discussed Great Britain’s epidemic of bovine spongiform encephalopathy. BSE “Mad Cow Disease” belongs to the class of TSE’s (transmissible spongiform encephalopathy) that also infect other ruminant animals, such as reindeer, elk, and in the lamb as scrapie. Herds in Great Britain have been scrutinized and thousands of cattle burned in an attempt to stop the disease’s spread. There has also been a ruling passed that no cattle feed should contain remnants of other animals which may carry the disease, specifically sheep, who may have scrapie.

In spite of this, diseased cattle have been shipped to Europe, where officials believe there are more cases of BSE than are reported. According to Reuters, there are 214 reported cases in Ireland, 230 in Switzerland, 58 in Portugal, 27 in France, 5 in Germany, 2 in Netherlands and Italy and one in Denmark. It is undeterminable how many cases are not reported. Europe also has a trade in meat and bone meal, which is the ground bone and rendered leftovers from the slaughtering of cattle—so nerve tissue, which carries the infective agent, is also getting into the food stream. Sixteen cases of Creutzfeld-Jakob diseases—now called variant CJD—have been reported in Britain.

Unanimous opinion says these cases resulted from eating infected beef. There is a serious problem containing the diseased animals, partially because there is no good way to diagnose the condition until symptoms appear. An unscrupulous herder may allow a diseased animal to enter the food chain without reporting the illness. Governmental agencies are not equipped to inspect every bit of feed for its compliance to the regulations. This is serious to the entire world, as there is no cure or treatment for BSE or CJD. It is always fatal. Any nation that has imported cattle from Britain in the past ten years may have BSE lying latent in the herds. Through ignorance of the disease and its manifestations, some sick animals may enter the food stream. Transmission through bovine gelatin (a protein obtained from animal skin, bones and tissues) is also possible. There is apparently no way to sterilize gelatin, which is used in so many food products. The UK has banned shipping gelatin to Europe; however it is still being imported to the USA and possibly other countries. There is no proof that gelatin can transport the disease, but there is also no proof that it cannot.

Bovine tissue that is most likely to transmit the disease includes brain, spinal cord and nerves. Although these need not enter the feed or food stream, it has happened because of the methods of slaughter which allow fragments to scatter and be picked up in the meat stream. Officials are very dogmatic about BSE’s not being in the USA flocks. The FDA has recently revised its rules regarding ruminant feed. It does not allow the feed to contain animal protein from mammalian sources. However, this is just for ruminant feed, as they believe that hogs are not subject to this disease. What is to prevent accidental mixing of the feed? To prevent the possibility of CJD, it seems obvious that we should all stop eating meat and follow a purely vegetarian diet as told by the rishis of old. There is no good evidence that milk is able to transmit the disease, contrary to prior belief.

## 101. Better Ways to Help an Overactive Child

Nature can solve “Attention Deficit Hyperactivity Disorder,” without drugs—side effects. When children are in adults presence or environment, many of them are fidgety, cannot sit still, whine and are an overall distraction to the adults. For some this may be perfectly normal, because what is important in the adult world is usually not important in the child’s world. For many this may merely be a lack of education, discipline and proper guidance from the parents. For others, however, it may be a symptom of a condition known as Attention Deficit Hyperactivity Disorder. It is a neurological condition that usually sets in about age 6–7 (often as early as age 3) and may go into the teens, though rarely on into adulthood. Those with ADHD have a very short attention span, act impulsively, appear hyperactive and sometimes out of control of their physical movements and emotions. They do not take directions well and sometimes appear to not have heard the parents at all, which may even suggest deafness. This is a serious condition needing professional help.

The help usually received from an allopathic doctor is a prescription for stimulant agents such as Ritalin, Dexedrone or Cylert. These are potent, with side effects such as appetite loss, stomach aches, nervousness and insomnia. There may also be some temporary growth retardation. Additionally, a class of drugs called beta-blockers are used for those patients who do not respond to stimulants. I recommend a different approach. The child or young adult should see a competent homeopath who can give a remedy specific to the person with ADHD. An ayurvedic doctor should assure whether the patient’s diet and lifestyle is balanced and appropriate. Parents should not “bribe” their children with sweets, especially white sugar—although not causative in this condition, it often aggravates ADHD, much like pouring gasoline onto a fire.

With so much energy released, the child is unable to cope and “goes off the deep end.” Misbehavior is not his fault, and he should not be punished for it, as some parents do. There may be a need for counseling of both parents and children to bring a true understanding of the multiple sources of ADHD. I recommend a powerful antioxidant as a dietary supplement, along with Beta Carotene, Zinc Gluconate, Vitamin E, EsterC, selenium and Ginkgo Biloba. That antioxidant is pycnogenol—a patented, registered, maritime pine bark extract supplied in two forms: Pycnogenol (plain pine bark substance) and Pycnogenol Plus (pycnogenol supplemented with the above vitamins.)

The dosage is not difficult, but must be followed faithfully with both Pyc and Pyc+ twice daily, preferably with meals, in an amount according to the patient’s weight. There may be no relief of symptoms for a period of 10–39 days or until saturation has been achieved. After this, a maintenance dosage is used and slowly decreased as the symptoms come under control. The dose is from 2–8 Pyc+ pills and 1–8 regular pills twice a day for ten days or until saturation. Maintain saturation for two months and then, perhaps after symptoms have subsided, slowly withdraw the pycnogenol. If symptoms are still present, continue treating for another couple of months. This eliminator of “free radicals” will gradually bring about more responsive and civilized behavior of the ADHD patient.

## **Dr. Tandavan: A Brief Biography**

Dr. Devananda Tandavan, MD, was a member of the American Medical Association, the International College of Surgeons, the Society of Nuclear Medicine, the American Federation of Astrologers, the International Reiki Association and the International Center of Homeopathy. He had been the president of one of Chicago's major hospitals and involved in the arcane science of nuclear surgery. But his love of humanity, medicine and healing took him into many traditions, ultimately incorporating the Indian Science of Life, Ayurveda, and the Indian astrological science, Jyotish, into his repertoire. Dr. Tandavan's many journeys in India and his years of personal meditation and sadhana under the guidance of Satguru Sivaya Subramuniaswami endowed him with remarkable, syncretic insights into well-being and being well. He passed in 2003 at age 83, but his articles continue to guide many who need practical, proven techniques and lifestyle changes that will guide them in understanding how the body works, how the mind creates our physical and mental/emotional experiences and how life may be lived fully, joyfully and with a sense of the Divine that breathes life into us all.