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## The Game of Life-Style and Longevity: It's Your Move!

Thirty years ago, through business dealings, I became acquainted with John Lundquist and his wife, a couple about fifty years old, who lived just south of Portland, Tennessee. John was doing some woodworking on the side, together with his full time self employment in his own auto repair business. His wife was active in her church and church school. Both were Seventh Day Adventists.

They were missionaries of a sort, but their zeal centered chiefly on the wholesome vegetarian diet which they both practiced and heartily recommended.

The couple raised their vegetables organically, used no pesticides or sprays of any kind. They ate no refined sugar, no commercially prepared flour. Their meat was soybean substitute: their milk also was a substitute processed from soybeans.

For their bread, and cake, they each morning ground wheat in a little hand type mill, and used the full product as their flour. For sweetening, they used only honey or raw sugar.

My Mother and I tried the bread and cake: it was certainly different from anything we had known. Still, it was excellent, conveying through its taste a satisfying sense of whole grain substance and unquestioned nutrition.

Out of curiosity we stopped more than once at their school and infirmary where we were permitted, as friends, to eat in the pleasant kitchen. The soybean substitute meats were not perhaps as satisfying as meat itself, but they were certainly quite edible as prepared by their skilled cooks.

Other than a pleasant interlude, the enjoyment of an unusual menu, and the acquisition of a hand crank type mill to grind wheat into flour (or corn

into meal) which I regret to inform you I have not used in the ensuing thirty years, we lost touch with the Lundquists.

Until recently I scarcely remembered their telling us of the excellent health which they enjoyed. They did not go to the doctor at all: they stated that they simply had no need for doctors and medicines.

We listened and smiled, for we didn't want to be impolite while enjoying their hospitality. At the time their remarks were lost on us, because we had our own preconceived ideas of what constituted a proper diet and, at least at that time, retained a healthy respect for doctors and their medications.

I did remember the Lundquists recently, during the reading and assembling of data from a variety of books, all written by doctors, concerning health and the factors related to it, for in one of these books I found the statement "Seventh-Day Adventists have about a third less cancer of the large intestine than other Americans."

In still another recently published book, "Odds On Your Life," this statement is made: "In Asians, whose diets are very low in total fat, breast cancer is rare. But in Japanese who move to Hawaii or the continental U S and adopt the high-fat western diet, breast cancer becomes as common as it is for native Americans. American vegetarians, on the other hand, have cancer rates as low as the native Japanese."

In "Stay Well," written by Dr. Donald Louria, mention is made that the colon cancer rate is very low in Africa.

Dr. David Reuben, in his book "The Save Your Life Diet," begins his book with this arresting statement, "Consider a medical Garden of Eden. Imagine a society where heart attacks don't exist, where the two major forms ofdeath-dealing cancer are virtually unknown, where phlebitis and the resulting blood clots in the lungs are almost unheard of. Think of a world where many of the petty ailments of

modern society have been virtually eliminated---appendicitis, hemorrhoids, obesity, diverticulitis of the colon, and varicose veins. Is this the United States in the year 2500?"

"No. It's rural Africa in the year 1975. It's a society and a way of life that has <u>almost completely avoided the major scourges of the modern world</u>. Most important of all, buried in the tribal life of these Africans is a secret that can make a better life for nearly every man and woman in America."

This secret, according to Dr. Reuben, is roughage, or fiber in the diet. Again, the Lundquists and their whole grain flour came to mind.

The cause-effect relationship is pin-pointed by the experience of Black Africans who adopt a Western style diet, i. e., a diet without a high percentage of roughage. These Africans gradually develop the characteristic Western Diseases. Of these, the first to appear is appendicitis. Following this, in inexorable statistical fashion, come cancer of the colon, heart attacks, diverticulosis, in fact the whole spectrum of conditions we generally associate with aging and general debility.

But wait, you say, couldn't the explanation lie in something as simple as racial differences? Not so, for the Black Africans who move to the United States and change their diet find themselves victims of these same degenerative diseases. After about thirty years the conditions assume alarming statistical proportions.

Also, native Japanese who maintain their traditional diet preserve their immunity to these degenerative diseases in the same measure as native Africans.

Confronted by staggering differences in the incidence of illness, and in the statistical pattern of death rates in the United States and Britain as opposed to Africa and Asia, medical researchers carefully analyzed many factors, including diet, and concluded that what had heretofore been assumed

to be progress in diet had been a disastrous mistake, which had exacted a tremendous toll on the more civilized segments of the world's populations.

There is an important message in their findings and their conclusions for us.

Let us make our approach in the time-honored way for an Athenaeum paper. Each paper should have a bit of history. So, to relate the epidemic of varied degenerative diseases which we suffer today to its source in our unsatisfactory twentieth century diet, let's turn the clock back to about 1880.

Flour mills, until the 1880's, had ground flour with rough stone grinding wheels. The Industrial Revolution spawned an improvement, the steel rolling mill. Before that time "black bread," made from the fibrous coarsely milled whole wheat flour, was a staple of the diet. If you were wealthy, white flour was available, but it was made by sifting through cloths, was terribly expensive, and hardly anyone could afford it.

The greatly improved steel rolling mill could pulverize wheat grains so effectively that the fiber could be removed with ease. At last white flour could be produced at low cost. It was no longer an expensive delicacy, and the poorer people who had previously been deprived of this superior luxury product lost no time in availing themselves of it.

The millers were delighted to find another unexpected advantage in white flour. Amazingly, the white flour did not attract insects: it simply wouldn't keep the bugs alive. Not fit for bugs, and largely scorned by rats, it was at the same time considered a greatly improved product for humans.

Prior to the milling revolution the average person ate about a pound of the whole wheat or "black bread" per day. (Today we eat an average of six ounces a day of white bread.)

Moving back a few more years, to 1815, we find that each person ate about ten pounds of sugar per year. That compares to present per capita consumption of ten pounds per month.

Keep in mind that both refined sugar and refined white flour have no fiber. These foods are not alone in this characteristic. Consider for example white rice and instant potatoes.

Remembering that the substantial reduction of fiber in flour started about 1880, the medical researchers traced certain revealing statistics in subsequent events.

- 1. Heart attacks were extremely rare in the United States and Britain then, and until the 1920's. From that time heart attacks made the statistical charts, and could be depended upon to increase either steadily or spectacularly. For example, between the years of 1931 and 1971 in England and Wales coronary heart disease—the cause of heart attacks—increased at a catastrophic rate of 800 percent.
- 2. Appendicitis was all but unknown prior to 1880. Following that, the rate soared alarmingly to epidemic proportions.

In this connection we can respect the English physician who, about 1920, made what was, for that time, an astute observation. He noted that appendicitis occurred frequently in wealthy school boys who dined at their exclusive private schools on low-fiber white bread, cakes, and pastry, whileappendicitis was all but non-existent in orphans who through necessity ate the cheap, coarse, high-fiber bread in the orphanages.

Again, a pattern emerged when investigators found that appendicitis was practically unknown in the undeveloped countries where natives maintained their traditional high roughage diet. In one area of Africa, less than 3 percent of the abdominal surgery on Africans was for appendicitis, but in that same area 30 percent of the abdominal surgery on Europeans was for appendicitis. The chief difference cited by the investigators was the amount of roughage in their respective diets.

A few nations having appendicitis as a rare disease are Kenya, Uganda, the Sudan, Ghana, Nigeria, Rhodesia, South Africa, Rumania, Egypt, and India. It is revealing to note that in these same nations foreigners on a low-roughage diet were found to have the normal Western rates of appendicitis.

During World War II the rate of appendicitis dropped in Switzerland. This makes sense, for during that time the Swiss ate less white bread, less sugar, and more vegetables. Thus we can assume a diet relation to the reduced incidence.

One more observation about appendicitis; those who have had appendicitis do have a far greater tendency later to develop cancer of the colon. The association appears diet related.

3. Diverticular disease of the colon did not assume an important statistical incidence until the late 1920's. Subsequently, in Britain, the death rate from this disease sourced between 1931 and 1971 a full 600%.

Proponents of the high-fiber diet state that the evidence is overwhelming that as the amount of roughage in the diet decreases, there is an inverse increase in the incidence of heart attacks, cancer of the colon and rectum, diverticulitis of the colon, and the related conditions. Appendicitis appears first. With the other conditions there is a lag.

To recapitulate:

- 1. The diseases are practically unknown in persons or cultures subsisting on the historical, natural, high-roughage diet.
- 2. These very same diseases are, to a catastrophic degree, evidenced in persons and cultures where the ancient dietary patterns have been discarded in favor of low fiber fare.

The question arises: how much additional fiber do we need to enjoy the same health and immunity from these diseases as these natives? The answer is--- an amazingly small amount, less than an ounce a day, about two or three cents worth.

We Americans consume, on average, about one-quarter ounce (8 grams) of fiber a day. The African intake is closer to 25 grams, still less than an ounce, a difference of 17 grams, or about half an ounce. Add this to your diet, and turn back the historical clock to the pre-1880's. If it isn't already too late, you may avoid any of a host of horrendous diseases which are spawned by nothing more than our accepted, everyday civilized diet.

Dieting has been a big thing the last few years. Thin to emaciated is beautiful. Remember Metrecal? What about the drinking man's diet? Other liquid diets, the eat all you want diet. They had one thing in common. They didn't work.

There is a diet that really does work. First, though, let's discuss Obesity itself. Not morbid obesity, just moderate obesity.

Obesity predisposes one to arteriosclerotic heart disease and to two diseases that precede heart disease and stroke, diabetes mellitus and hypertension (high blood pressure). Heart disease in the presence of hypertension is known as hypertensive heart disease.

In the last hundred years Obesity has appeared and grown, along with its poor victims, to a strange and terrifying epidemic, a slow but effective black plague in itself. In the United States there are more than one hundred million overweight candidates, plump and prepared for their own statistical debilities. Never forget it: obesity is lethal!

Metropolitan Life Insurance Company provides these statistics: a man over 45 and 10 pounds overweight has lowered his chance for survival 8 percent. At 20 pounds overweight the percent increases to 20, and, should you happen to carry 50 too many pounds, you face a statistical <u>fifty-six percent</u> greater likelihood of an earlier death. This of course worries Metropolitan no end, for dead men pay no premiums; their widows collect on the policies, depleting the coffers and stopping all that beautiful interest.

Here are the reasons for earlier deaths:

- 1. As before mentioned obesity renders a person far more vulnerable to such potentially fatal diseases as diabetes, heart attacks, high blood pressure and thromboembolism (blood clots which can travel through the veins to the lungs and kill both quickly and surely.)
- 2. Obesity brings a higher death rate from diabetes, kidney inflammation, cirrhosis of the liver, gall bladder conditions, appendicitis, and post-operative complications. Add to this the likelihood of developing varicose veins, arthritis and, for the weaker sex, complications in pregnancy.

Without doubt obesity is a major problem. Let's get back on the track, though, and see whether we are overlooking a simple and effective solution. Consider the following:

Strict vegetarians are hardly ever obese. While the rural Africans and Asians eat about 3000 calories a day, they seldom if ever suffer from overweight. Both their diets are characterized by high roughage.

Remember that in Europe prior to 1880, those unfortunate people ate mostly coarse flour and cereal foods, admittedly high in calories. Strangely, though, they stayed thin. While bread today has no place in a diet, those people ate a pound a day!

Consider the observation of a British missionary who served as a young man in Africa and returned after many years to visit his mission. When his plane landed, he was totally surprised and appalled to see something he had never seen before, <u>fat</u> Africans. There had been none in the earlier years. What could possibly have happened?

Upon questioning he discovered that the only changes over a period of forty years in their diet had been the addition of sugar and white flour, Those same items, you will recall, rotted the teeth of the Samoan natives.

It is thought-provoking to note that the very first authenticated heart attack in East Africa occurred in 1956. Its victim was an African who for years

had eaten low fiber Western foods.

In the toll that it exacts, obesity has emerged as a disease in itself, something relatively new in the history of humankind, a vicious killer.

We can fight this killer by returning to the wholesome high fiber diet that worked for thousands of years before obesity existed as a problem of massive proportions in and for its victims.

It is ironic to observe that our millers of flour remove the bran and wheat germ, which material is then sold for animal food formulations. So the animals get the essential wholesome portions of the grain, generally made more palatable by the addition of black strap molasses.

Enough about roughage, at least for the time. Let's talk now about playing a serious game. The moves are free choice and they are all yours. If your moves are wise, the payoff will be even better than the devil usually offers for your soul in the works of fiction. The payment is in additional years of health and life, ten or more in some cases. This game offers no guarantees——you will be strictly at the mercy of the statistical spreads——but the odds are remarkably good, and the rules of the game are simple and explicit.

- RULE 1. Accept the fact that each of us is responsible for his own health. Leave the doctor out of this game. His interest is primarily in the end game. That's where the money is, and by that time you will probably have lost the game anyway.
- RULE 2. Play the game seriously and skillfully. Stop unhealthy practices, develop healthy habits.
- RULE 3. Know your opponents. They are seeking your very life. As an example, from age 40 onward, your most deadly opponent, as an American white male, is arteriosclerotic heart disease, an incredibly capable killer. We can, by changing a few habits, dramatically reduce our chances of having cardiovascular disease. The chart lists some of your other opponents as well. Any one of them may have a contract on your life.
- RULE 4. <u>Learn your own strengths and capitalize on them.</u> Certainly, if you were in a game, a game for stakes, with a great deal of money riding on your choices and

actions, you would, knowing the odds, exercise every ounce of will power, every possible restraint and caution, and bring your full powers of concentration to bear on the game. Knowing this, listen to a foolish rhetorical question; which is more important, your money or your life? Unless you are Jack Benny, this question easily answers itself, and the answer should translate itself into appropriate responses.

RULE 5. Know the odds. We all tend to discredit statistical data. You know the statement about degrees of deception; "Lies first, then damned lies, then, worst of all, statistics." Still, a great deal of good and useful information is available in statistical form. The two sheets which have been passed out to you carry just a few of the more pertinent figures. I chose to cite the probability of death in the next ten years for fifty, sixty, and seventy year old white males from specific causes. (Attached to my paper will be complete data for 15 to 70 year olds in four categories: white male, white female, black male, and black female.) Statistics have been described as "people with the tears wiped off." The bad thing is there's a lot of unnecessary grief, alot of untimely grief, here. The figures are expressed in terms of deaths per 100,000 in the next ten years for the named ages. As an example, let us take the sixty year olds.

Note the number one killer:

Arteriosclerotic heart disease	9,859
Cancer of the lungs	2,606
Vascular lesions affecting the C. N. S. ("stroke")	1,355
Cancer of the large intestine and rectum	782
Cirrhosis	603
Bronchitis and emphysema	509
Diseases of the arteries	435
Cancer of the prostate	421
Pneumonia	404
Diabetes	359
Other causes	7,894
Total deaths	25,227

The figures I have given you can roughly be doubled for 70 year old white males, except for cirrhosis. One can only assume that the heavy drinkers have all succumbed earlier, thus the absence of statistics for cirrhosis in the seventy to eighty year old category.

The cause-effect relationship of tobacco, alcohol, obesity, stress, lack of exercise---to lung cancer, cirrhosis, cardiovascular disease, accidents, etc.,

is well known. Much has appeared in periodicals and the news media.

It is encouraging to note that there has been anstriking decrease in cardiovascular disease between the years 1960 and 1979. Death rates for the population as a whole are down, per 100,000, from 400 per year to 270 per year, approximately. What is the reason? The doctors may have contributed in some measure, especially as teachers (this is really what the word doctor means), but there has been a great deal of independent life style modification; reduced smoking, reduced cholesterol intake, increased exercise (we have our own avid joggers and bicyclists in the Athenaeum), as well as diet modification, including the addition of fiber.

This is something individuals have done for themselves. They listened to good advice, drank less alcohol, ate less meat, less saturated fat, did their jogging and other exercises, cut down or quit smoking, and it worked!

Ultimately, this is something you must do for yourself, too. This is <u>primary prevention</u>. Not only is it the most effective approach to health, it is the least expensive.

Unfortunately, too much of doctoring is in the category of <u>tertiary</u> <u>prevention</u>, i. e., the treatment of established disease to prevent relapse or further deterioration. This is enormously expensive: this is what doctors and hospitals live on, coupled of course with <u>secondary prevention</u>, which is early intervention.

Look over the charts at your leisure. Weigh the pleasures of your particular life style against the maximum life extentions due to changes which only you can make. Stop smoking at age 55---add 9 statistical years to your life. Stop smoking at age 65, and add 13 statistical years to your life. The payoff on stopping drinking for the alcoholic is nearly the same. A free choice game. It's your move. Read the statistics.

A few nights ago, on the chance that they might still be living, I obtained the number and called the Lundquists. Both are still living, both past eighty. Mrs. Lundquist, at eighty-one, told me that she had not been to a doctor for thirty-five years. That episode was caused by an automobile accident, which left her with a broken hip and assorted other injuries. In its aftermath she suffered arthritis. Her doctor informed her that nothing could be done, that she should resign herself to taking aspirin for the pain, that in the not too distant future she could expect to be confined to a wheel chair.

Taking aspirin was definitely not for her. She took one or two, then quit. Her medicine was her life style, including her wholesome vegetarian diet, and

whole wheat, or "black bread."

At eighty-one she has no trace of arthritis, and continues to walk as she pleases, a living testament for the vegetarian diet, moderation, and roughage.

I know the lady told me the truth. She is not capable of doing otherwise. Statistics I could doubt, but not Mrs. Lundquist.

Maybe, considering the odds, I should put my little hand crank mill to work. If you would like to see it, I brought it with me tonight. You might want one too.

Now, if I just had a glass of carrot juice, laced with a jigger of wheat bran, I would propose a toast---Here's to your very good health, and a long, long life to every one of you!