

## **BETTER AGING – HOW?**

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We all want to age better, live longer, be healthier, and avoid that visit to the doctor's office except for preventive measures. We are constantly exposed to information bites about which vitamins, antioxidants, foods, and exercise choices to make. It makes interesting reading to go through the book, "Real Age," by Dr. Michael Roizen because it is actually possible to weigh in on each factor how much it adds or takes away from your lifespan if you adhere to a certain nutritional or other lifestyle change.

"The China Study" by Colin Campbell tells us that the diseases of affluence are heart disease, stroke, diabetes, and cancer, while the diseases of poverty are lung disease, intestinal and parasitic diseases, nutritional deficiencies, and infections. We know that the average cholesterol of the Chinese small land farmer is about 80-90 (due to physical exercise, a diet high in fiber, and low protein, fat, and sugar intake), which compares to our average of nearly 200 in this country.

If you are familiar with the literature on the vegetarian lifestyle, you know that there are advantages such as decreased cholesterol and overall less obesity, but also some nutritional deficiencies based on the diet itself. The moderate vegetarians who eat occasional eggs, cheese, and fish seem to have a good handle on how to maintain a well-rounded diet and as a population group seem to be quite healthy overall.

It's interesting to look at diseases in this country in the light of food habits. We know that the increased intake of sugar and flour products over the years has pushed the obesity level very high, with many people not even aware of what's causing this problem of weight gain. They feel that they don't eat much, but somehow seem to gain or maintain excessive weight. In the early 1900's there was no such thing as eating large quantities of hydrogenated and transfat until the edible oils industry changed all that in 1908. There was almost no coronary artery disease until the dietary intake of this type of oil began to increase. By the 1940's one out of three men was dying of coronary artery disease in the US. Much of this can be attributed to hydrogenated and transfat rather than saturated fat which has been blamed, but which has always been a staple in our diet. We know that the average dietary intake should include about 30% fat, 30% protein, and 40% carbohydrates to keep the diet well rounded.

Another way to think about better aging is to consider how to keep your insulin levels down. We hear so much about low glycemic foods these days, and I think that some of you may wonder what this means. Everything that we eat goes into our gastrointestinal tract where it is partially or completely absorbed into the body organs. The glycemic index of food predicts the level of blood sugar which results after eating certain foods. For example, protein is low glycemic, whereas anything made with flour or sugar is high glycemic. There are lots of foods in between these wide ranges, and they each have an

impact on your body insulin level. If a food has a high glycemic index, then your blood sugar will be raised and your insulin response will be greater to accommodate the additional blood glucose that has been generated. If your insulin levels are high, it makes your body store more fat. Type 2 diabetics have high insulin levels because most of these people are overweight and have this problem because they eat high glycemic index foods. The way to reverse this is by eating a low glycemic balanced diet and exercising to reduce the blood sugar and insulin levels. Coronary artery disease is more closely associated with elevated serum insulin levels than your cholesterol levels are. Keeping your insulin levels down, picking the proper glycemic level food, and eating a balanced diet gives you a greater advantage when it comes to insulin response.

What about vitamins and supplements? It is a known fact that in today's world, we get vegetables and fruits that are mass produced on large farms and are often lacking in the nutrients which might be present in organic foods grown in different circumstances. Therefore, it's wise for all of us to supplement with vitamins. The question is, how many and what kind? There are several hundred vitamin preparations listed in many of the catalogues produced by the companies that sell them. It's a pretty good bet that if you take some extra antioxidant vitamins plus a multivitamin and eat a balanced diet that you will thrive. We do know from the Women's Health Initiative Study that those who took multivitamins, who exercised, and who were not overweight lived longer and healthier than the other study participants. However, we are now subjected to megavitamin therapy, and many who understand the science of supplements feel this is not a good pathway. Taking a moderate amount of supplements and not overdoing any one thing because it's the most recent "hype" is the best pathway. Certainly, Vitamin D, fish oil, and multivitamins should probably be the least that you should take.

Now we come to the one that is truly the deciding factor in laboratory animal and primate studies, and is obvious in epidemiological surveys in humans. Last week I read a newspaper article that said for every 14 pounds of being overweight, the mortality from breast cancer is increased by 11%. We know there are a lot of overweight people in this country and many obese as well. We also know from other studies that if one is overweight yet exercises well, it puts them back into a healthier category because of the beneficial effects of exercise. However, there is nothing that can dispute the fact that if you eat less but still eat a balanced diet, you have the potential to be healthier and live longer. Animal studies show that moderate caloric restriction will increase life extension by 30-50%. In primates, this has also been shown to be the case. We also know that if you are leaner, you have more energy to exercise and move about and it actually changes your basal metabolic rate. The way to achieve this is to eat smaller portions of a well-balanced and highly nutrient diet. This means that empty or useless calories should not be included in what you eat. A lot of extra bread, bagels, or sugar-containing foods and soft drinks simply add calories and don't give anything back in return.

To age better and live longer, you have to think about every aspect of your body and its interface with the world we live in. However, with a little diligence in all of these areas discussed, you can live healthier and longer.