



## **Ageing Well**

### **Part I - A Matter of Changing and of Choices**

**By: James L. Holly, MD**

In November of 2002, *Your Life Your Health* commented on “Aging: What Can Be Done About It?” Recently, television has been filled with advertisements for products which help you “appear to be younger than you are.” Each one promises a “youthful appearance,” “better skin” and/or “no wrinkles.” None of these products or procedures addresses the fundamental problems which cause wrinkles, thinning of the skin or graying of the hair – all manifestations of aging.

Yet, as we discuss the issues of aging, there are realities which we must face. One is “*apoptosis*” -- “programmed cell death. “Apoptosis” enables the elimination of single cells or groups of cells when their natural biological function has come to an end, or when the cell has become damaged or mutated to such an extent that its further existence might be dangerous to the whole organism.

First introduced as a concept in 1972, “apoptosis” is of Greek origin, meaning a “falling off or a dropping off,” analogous to leaves falling from trees or petals from flowers. “Apoptosis” is a natural phenomenon, which plays an important role in the regulation of the cell population in tissues under both normal and abnormal conditions. Dysfunction or abnormal regulation of “apoptosis” is implicated in a variety of pathological conditions, such as immunodeficiency (such as HIV), auto-immune diseases (such as SLE), neurodegenerative diseases (such as MS), and cancer.

In some ways, “apoptosis” is not unlike the Biblical truth which declares, “It is appointed unto man, once to die and after that the judgment.” (Hebrews 9:27) The reality is that there is a limit to how long men and women can live. What that limit is is unknown, but it may be 120-130 years.

There is no “fountain of youth,” which will allow you to be ageless forever. However, there are things which you can do to age well, or as one group says, “age youthfully.” And, this is not by means of a superficial concealment of the aging process which is manifested in the skin, but it is by addressing the mechanisms in the body which contribute to aging.

The commonly recognized signs of aging are:

1. Graying of the hair
2. Wrinkling of the skin
3. Gaining of weight, particularly around the abdomen
4. Changing in sleep patterns
5. Changing in bowel habits
6. Decreasing strength and energy
7. Demineralization of the bones and consequent loss in height
8. Decrease in mental acuity
9. Decreasing of vision acuity
10. Disease and death

It is not our purpose in this discussion to address the known and/or suspected causes of each of these manifestations of aging, but to recognize that superficial answers may stroke our ego, but they do nothing for our health.

How can we change this aging process? The operative word is “change.” In order to age slower, or maintain health longer, we must change a number of things and at first none of these have to do with the taking of pills, or the submission to procedures. For the reality is, if we don’t change, all of the pills we can take and/or all of the procedures we can have, will have little impact upon our long-term health.

Changing involves choices! It would be nice if we could just “take a pill” which would correct the effects of all of our bad choices but we can’t, and we never will be able to. Event though “apoptosis” is a natural process – the scientific expression of Hebrews 9:27 -- remember also that “apoptosis” can be accelerated by DNA damage which can result from inflammation, free radicals, ultraviolet radiation and a host of other insults to the human body.

It is possible to measure the degree of DNA damage and the degree of “apoptosis” in your body.” In fact, the values associated with these measurements, along with the measurement of antioxidant levels in the body, can give you a good idea as to how you are prepared for “youthful aging” and/or how well you are aging. Of course, there would be no benefit in knowing these values if there were nothing which you could do about the condition. The good news is there are many things we can do about the aging process

**The first thing you can do is change!** First, and most critical for everyone is, *change your diet*. Few things affect the inflammatory status of the human body as the diet. A diet high in non-fibrous carbohydrates – such as sugar, fruit juices, melons, cakes, cookies, candies, colas, etc – will contribute to:

- increased insulin levels,
- increased hunger,
- increased calories,

- increased fat stores in the body and eventually to
- increased free fatty acid circulating in the blood, which will result in
- the metabolic syndrome and eventually
- Diabetes Type II.

It is worth noting that the vicious cycle of uncontrolled eating is easily recognized. You will hear yourself or others say, “I am hungry all of the time and I am gaining weight.” **The solution to hunger, except in cases of malnutrition from starvation, is not to eat more, but to eat differently and most often to eat less.**

Try this simple experiment. Eat a large meal in the evening; including potatoes, high caloric drinks such as coca cola, and a large, sugar-filled desert. Invariably, the next day, you will wake up hungry. The solution to hunger in the morning is what you ate for dinner the night before. If you moderate your caloric intake, changing the content of your meal, balancing an adequate portion of protein with high-fiber carbohydrates such as vegetables and/or fibrous whole fruits, eliminating sugar and desert and add a small amount of “good fat” such as olive oil, you’ll discover that even though you have eaten less, you are not as hungry the next day.

Of course, everyone knows that when you’re hungry you should eat. Therefore if instead of decreasing what you have for dinner, you continue to wake up famished and consequently eat a big breakfast of pancakes, syrup, sausages, and a very large glass – actually two – of re-constituted orange juice, you’ll be hungry again before noon. Of course, because you’re hungry, you eat another large meal. Before long, you’ve gained 20-30 pounds and can’t stand yourself.

In order to compensate for your sadness over your weight gain, you “reward” yourself with ice cream and cookies after dinner, but then you wake up very hungry the next day. The cycle continues and before you know it, you’ve gain 50-60 pounds and can hardly walk across the parking lot of your workplace.

Now, you decide to go on a diet!!! But is this the right choice? Will “going on a diet” change the cycle described above? It will for a short while. With enthusiasm, you’ll “starve yourself,” loose some weight and then start the cycle all over again. Here is how it typically happens. You discipline yourself for a while, maybe even for three years. Then you go on vacation, or you go to a party, or you visit family for a holiday. You overeat, wake up hungry, and eat more.... Then, here come the pounds.

Once again, “dieting” often focuses on the superficial – appearance – rather than on the health or ill-health of the entire body. The problem with excess body weight – with fat – is much more serious than how you appear to others. If you are a male and your waist size is greater than 40, or if you are a female and your waist size is greater than 36, you have multi-fold higher incidence of a host of diseases than those who are not overweight.

The reality is that we know that the only diet which contributes to longevity is a modified starvation diet – i.e., eating slightly less than your body needs each day. This is

impractical, but a healthy diet is not. And, if men get their body fat below 20% and if women get their body fat below 25%, then fat composition of the body is eliminated as a risk factor for disease and aging.

The first choice which everyone must make if they are interested in aging well is to “eat to live,” rather than “living to eat.” In previous issues of *Your Life Your Health*, we have discussed numerous aspects of food which are critical for you to understand in order to make an informed choice for health. Those discussions can be review by going to [www.setma.com](http://www.setma.com). Under Your Life Your Health, you can read and/or download all of the information you need. Pay particular attention to:

1. The Four Part Series entitled, “A Comprehensive Health Plan for your Life”
2. The Three Part Series entitled, “A Nutritional Primer.”
3. Numerous other articles on nutrition and its impact upon your health.

Next week, we will continue with our discussion of issues surrounding aging and what you can and should do about it. In coming weeks, I will discuss what I am personally doing with my own health and with the health of my family and friends to address aging.

Remember, it is your life and it is your health.