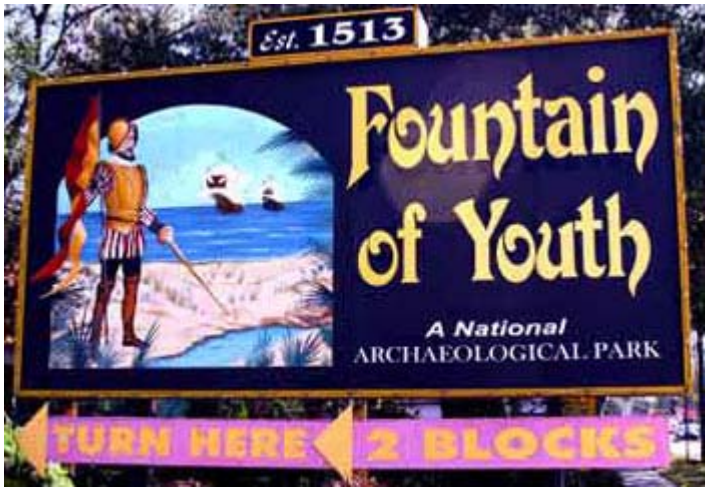

Volume 5 Issue 1

# Aging in Style
## Maybe to 100 with sensible care

I love life so much that I would eat a plateful of cardboard to spend another afternoon windsurfing, another hour playing with my grandson Jaysen, or another evening of pleasant conversation with my wife Mary. About to enter my seventh decade of life, I can hardly believe how young and healthy I feel. As long as I am functional, comfortable, and content, I want to live to be 100.




Aging is a normal part of life—a process that cannot be stopped or reversed; but age-associated diseases can be prevented and our functional lifespan can be prolonged. But for how long? The maximum human lifespan is believed to be about 125 years, but so far no one for certain has reached this limit. The oldest person of authentic record was a French woman who lived to be 122 years old. About 50 people are alive today at 110 years or older—and there are presently 80,000 known centenarians (people who have reached 100 years).[1] Interestingly, almost all of these "successful survivors" never saw a doctor until after age 90—obviously their exceptional longevity had nothing to do with medical intervention.[1]

**Life Expectancy Has Increased**

The average life expectancy was 25 years or less during most (99.9%) of human existence. No prehistoric remains have been found of people older than 50 years.[2] With few exceptions, war, accidents, starvation or infection ended lives before any of the signs of old age—graying of the hair, wrinkling of the skin, shortened memory, reduced strength, and decreased visual acuity—appeared. With the development of civilization people learned to control their environment and better protect themselves; with these advances some people then lived to a ripe old age. Passages from the Bible, written more than 2500 years ago, report that death from old age typically occurred at 70 to 80 years, and predict a maximum lifespan of 120 years. Since then what has changed is only the number of people who enjoy these later years.

**Bible Quotes:**
(Psalms 90:10) Seventy years are given us! And some may even live to be eighty.

(Genesis 6:3) Then Jehovah said, "My Spirit must not forever be disgraced in man, wholly evil as he is. I will give him 120 years to mend his ways."

(The Living Bible)

Over the last century the biggest boost in lifespan was due to the introduction of antibiotics, immunizations, and

proper sanitation. Life expectancy has increased since the beginning of the 20th century from age 47 to the current 77 years by effectively stopping infectious diseases that killed people from birth to young adulthood.

| The History of Average Lifespans (in years)[3,4] | |
|---|---|
| Prehistoric | 25 |
| Classical Greece | 28 |
| Classical Rome | 28 |
| Medieval England | 29 |
| USA 1800 | 37 |
| USA 1900 | 47 |
| USA in 1950 | 68 |
| USA in 2002 | 77 |
| Japanese in 2002 | 82 |
| All Adventists | 85 |
| Vegetarian Adventists | 87 |

**Conquer Chronic Diseases for the Next Big Boost**

People living in North America, Europe, Australia and New Zealand eat a rich diet that shortens their life in many ways:

- Fat and cholesterol infiltrate their arteries, eventually causing ruptures and blockages (heart attacks and strokes).
- Inflammatory reactions scar the heart muscle and decrease its function.[5]
- Food-borne environmental chemicals mutate the cells into cancer.
- Excess animal protein causes important loss of kidney function.[6]

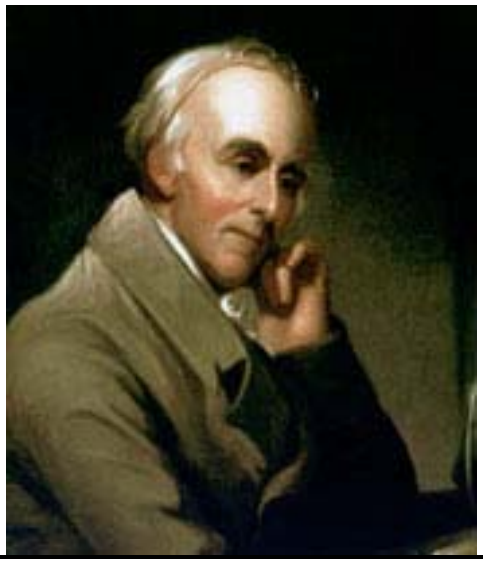
Even with all this disease from malnutrition, the average life span for USA women is 79.9 years and 74.5 years for men.[3]

Observing the health and longevity of people who eat better than Americans provides clues to the potential gains from reducing chronic diseases. Japanese people who eat a diet based on starches (rice and vegetables) with little meat and no dairy products have an average lifespan of 85.59 years for women and 78.64 years for men—four to five years longer than people following the American diet.[7] Vegetarian Adventists do even better with women living, on average, to 88.6 years and men to 85.3 years.[4] In fact, a direct comparison with other white Californians found vegetarian Adventists live an average of 10 years longer.[4] However, these vigorous vegetarians still include way too much dairy, eggs, soy protein, and vegetable oils in their diets to achieve the full potential of human longevity—leaving the opportunity to add a few more "good" years for people who are fully informed.

The November 2005 issue of *National Geographic* magazine carried an excellent article, "The Secrets of Living Longer." They reported on 3 groups of long-lived people from Okinawa Japan, Sardinia Italy, and Loma Linda California—and all had in common they followed a plant-based diet. At the very end of this issue there is a one-page "Do It Yourself" article with the subtitle, "Go Vegetarian."

There is also an excellent presentation on the internet on these people that you can access. Go to: http://www7.nationalgeographic.com/ngm/0511/sights_n_sounds/index.html

**The Harms of Rich Foods Are Universally Known**



Dr. Benjamin Rush wrote in 1776 an interesting comparison of the Native Americans to settlers from England:[8]

"In them (the Native Americans) the old proverb may well be verified: *Natura paucis contenta*—nature is satisfied with little—for though this be their daily portion, they still are healthy and lusty…they grow so proportionable and continue so long in their vigor—most of them being fifty before a wrinkled brow or gray hair betray their age…"

"The diet of the inhabitants of Philadelphia, during those years, consisted chiefly of animal food. It was eaten, in some families, three times, and in all, twice a day…Death was…common between the 50th and 60th years of life from gout, apoplexy, palsy, obstructed livers and dropsies."

**Dietary Restriction—the Real Deal**

Since antiquity, overindulgence in foods has been blamed for causing disease and the shortening of useful lives. Beyond common knowledge, dietary restriction is the only life-prolonging means accepted as effective by the scientific community. In animal experiments a 50% increase in longevity has been observed with a 30% to 60% decrease in calorie intake.

For the first time in 2006, researchers reported similar benefits in people. The hearts of people who had followed a nutritionally-balanced, lower-calorie diet resembled those of younger people, with better function and fewer tendencies to become inflamed and scarred.[5] People in the study had averaged only six years on the healthier diet, but their hearts looked 15 years younger.[9]

The first description of calorie restriction to prolong life was of an Italian nobleman, Luigi Cornaro, who in 1550 wrote *The Art of Living Long.*[10] Suffering at the age of 35 from diseases of overnutrition—including gout—he started a restricted diet where he limited his food to 14 ounces a day and cut way back on his meat intake. He lived to almost 100 years. He provides an example of how this therapy can be started later in life with profound benefits.

Recent animal experiments have demonstrated that the benefits of dietary restriction are primarily from reducing intake of fats and proteins rather than simply restricting food and calories.[11] These same principals apply to people: food restriction must be coupled with optimal nutrition for increased longevity. Bad food, even if only a little is eaten, still accelerates aging and causes diseases. You have witnessed many very trim people with heart disease and cancer—the results of eating half a hamburger and a small bag of greasy chips, washed down with a regular size diet cola. Furthermore, people who are thin won't live longer, even if they exercised to make themselves trim, as long as they eat poorly.

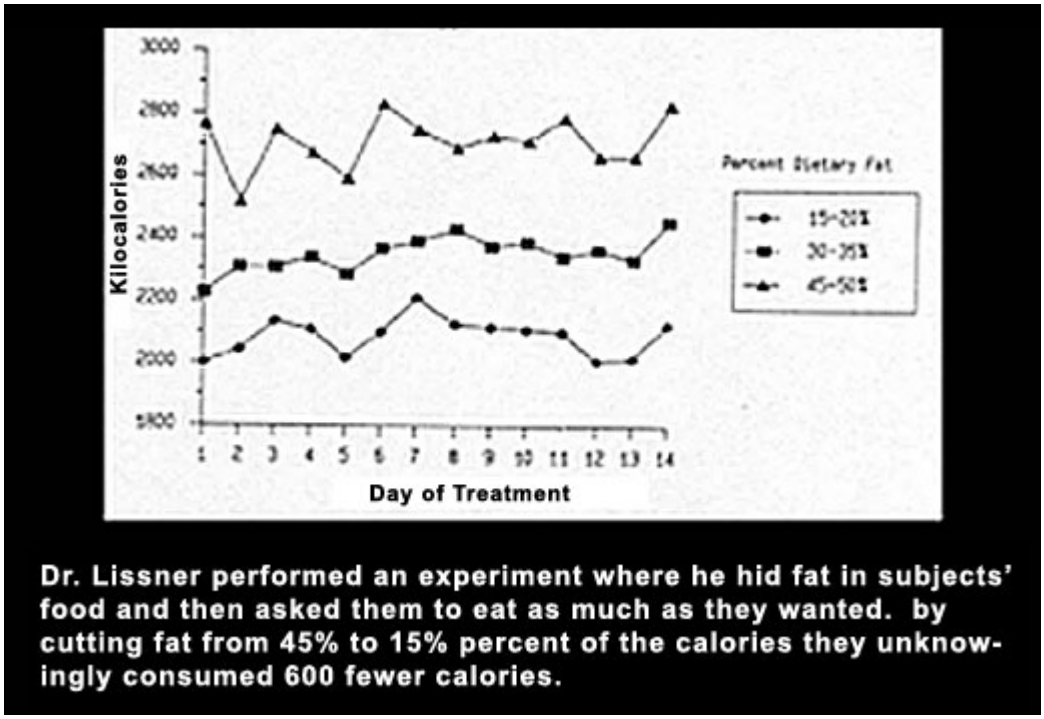
**Restriction without Punishment**

The semi-starvation that is typically recommended for prolonging survival results in constant hunger, slower metabolism, fatigue, reduced libido and sexual inactivity. Can you live that way? Is it worth the suffering? Is there an alternative?

The McDougall diet effortlessly restricts calories, fat and protein by ***its natural composition*** without requiring hunger. Switching from meat, dairy products and processed foods to starches, vegetables, and fruits will cause you to consume 400 to 800 fewer calories a day—without consciously restricting the amount of foods that you eat.[12] This

reduction in calories spontaneously happens because the foods have relatively few calories and are very satisfying for the appetite.

In addition to the 20% to 40% decrease in calories that occurs with a healthy diet; your fat intake decreases from 50% to 7% and protein from 20% to 12% of calories and you don't have to ever be hungry—now THAT is a program you can live with.




**Dr. Lissner performed an experiment where he hid fat in subjects' food and then asked them to eat as much as they wanted. by cutting fat from 45% to 15% percent of the calories they unknowingly consumed 600 fewer calories.**

**Youth Preserving Antioxidants**

The McDougall diet is also very high in another big player in the aging of our bodies' tissues--antioxidants. Antioxidants neutralize free radicals. Free radicals are highly reactive substances which damage cells and contribute to aging as well as encouraging many serious diseases, such as heart disease and cancer.[13] Substances with strong antioxidant activity are found in starches, fruits and vegetables. These include: Vitamin A, B-6, C, E, beta carotene, folic acid and selenium. (Get your nutrition from foods not pills. When antioxidants are isolated and concentrated into supplements they actually increase the risk of death and major diseases.[14])

**Growth Hormone Promotes Aging**

The hormone, *insulin-like growth factor-1 (IGF-1)* resembles insulin in its chemical structure and has special actions that accelerate the rate of growth of normal (like bone) and diseased (like cancer) tissues.[15] Animal experiments show that genetic defects in mice which lower IGF-1 levels cause them to live 40% longer. As these mice get older they look younger, and resist diseases. The mice are not just longer lived, but healthier—they have good eyes, joints, brains and immunity.[16] Presently, researchers believe our best hope for increasing longevity is by lowering IGF-1 activity.[17]

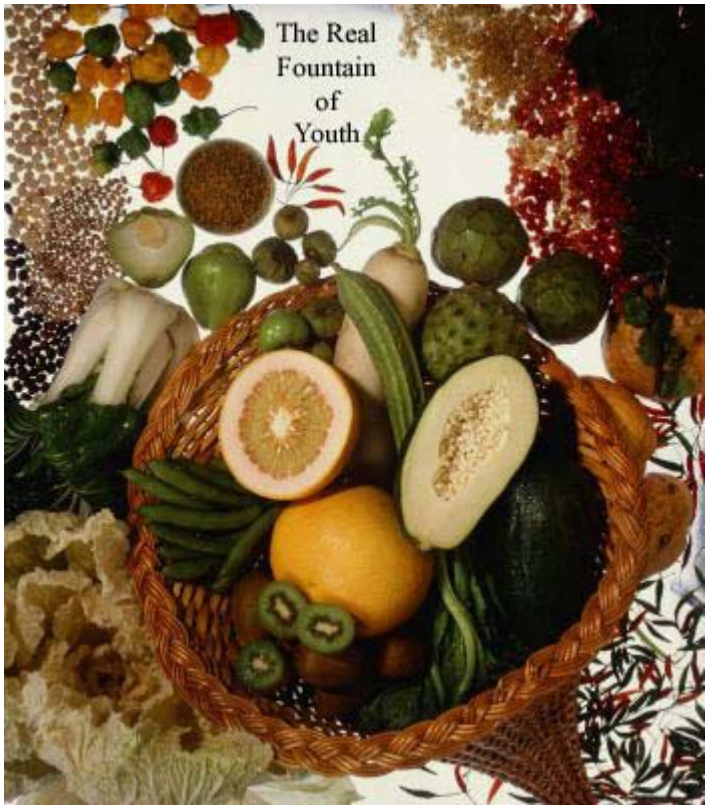
**Anti-aging Medicine—You Don't Want It**
Many people believe aging is a disease that destroys the mind and body and needs to be treated with powerful medications. There are presently in the USA over 2,500 doctors practicing "anti-aging medicine," which has become a $30 billion-a-year business revolving around pills, potions, and false promises.[31] "Anti-aging" and "longevity" practices usually include a combination of a traditional "healthy" diet along with advice to exercise, an overabundance of tests used to measure biologic age, and a prescription for nutritional vitamin and mineral supplements and hormones (like HGH, testosterone, estrogen, and DHEA). There is no evidence that it is possible to measure biologic age or that anti-aging medicines extend the duration of life.[32] The few benefits from any of these "rejuvenations" are better, and much more inexpensively, obtained with a low-fat vegan diet, exercise, and clean habits.

Within a single species of animals, those that are larger have higher levels of IGF-1 activity. These bigger animals also have shorter life spans. Dogs are a well-recognized example.[16] Big dogs, such as Dobermans and Rottweilers live an average of ten years. Chihuahuas and small terriers live for 13 years—and have lower levels of IGF-1 than big dogs.[18] People show the same inverse relationship between size and longevity—taller (and heavier) people have shorter lifespans.[19]

**Easily Reduce Your IGF-1 Activity**

Animal foods, and especially cow's milk, raise IGF-1.[20-22] You should not be surprised by this fact because the purpose of cow's milk is to accelerate the growth of a cow from 60 to 600 pounds. Protein is for growth and an excess raises IGF-1 levels. A good example of this effect is seen with the isolated soy proteins used in synthetic foods, from candy bars to burgers. This concentrated protein is an even more powerful promoter of IGF-1 than is cow's milk.[23] Lowering your IGF-1 activity is as simple as making sensible food choices and this benefit is seen in people.

A study of 292 British women ages 20 to 70 years found the serum IGF-1 activity was 13% lower in the 92 women who followed a vegan diet, compared to 99 meat-eaters and 101 lacto-ovo-vegetarians.[24] Similar effects have been found in men following vegan diets.[25]



| Foods That Raise IGF-1[26-28] |
|---|
| Protein in General |
| Soy Protein |
| Milk |
| Meat |
| Poultry |
| Fish |
| Shellfish |
| Eating plant foods, smaller amounts of food and exercising all lower the activity of this powerful growth hormone.[29] |

**Successful Living Means Graceful Aging**

Benjamin Rush in 1797 studied octogenarians and found them of sound mind. His recommendation for a happy old age, therefore, was not to overcome the laws of nature, but to understand them in order that the aging individuals remain productive members of society.[8] As is commonly believed, age is not a demeaning disease that destroys the mind and body; but an opportunity to be valuable, useful and creative. We should all seek long lives free of disease and disability, and then die quickly and quietly when we reach the end of the normal lifespan—when we are worn out through our natural processes of aging. With the elimination of disease a proper death from old age comes peacefully—ideally, one night we simply fall asleep and we pass on.

**Perfection May Not Be Ideal—the Theory of Hormesis**

*There may be some benefits from being a little bad.* Hormesis is the phenomenon in which low doses of otherwise harmful substances and activities cause improvements in the body's function.[30] Exposure to mild stresses for brief periods may challenge the body to adapt to better maintain and repair itself—which prolongs life. This may explain why moderate drinkers have less heart disease and live longer than complete abstainers. The stress of moderate exercise may work to improve health by the same mechanism. Even low doses of radiation improve lifespan in animal experiments (whereas high doses kill). In practical terms, hormesis works for moderate people, but most of us cannot limit ourselves to low doses of harmful substance—disease and death too soon follow our enthusiastic (lustful)

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