## Dynamic Chiropractic

SPORTS / EXERCISE / FITNESS

## **Better Health**

## THE WAY TO LIVE -- SECRETS FOR HIGH QUALITY OCTOGENARIANISM

Len Goodman

In my last column (June 5, 1995 issue of "DC") I speculated that the boom in fitness in America was a myth, that in reality only a small segment of the population really took hold of fitness and permanently changed their lifestyles. Fortuitously, this bold assertion on my part was bolstered by a study which was just published last month.<sup>1</sup>

The study surveyed over 34,800 U.S. citizens in most of the states. The authors found that though the incidence of inactivity has gradually decreased in many age/race/sex groups, still only one in 10 people are active in strenuous leisure-time activities -- activities intense enough (performed at 70-85 percent of peak oxygen uptake) to elicit all the favorable changes which are healthenhancing.

Another trend one often hears championed is that the current rate of mortality from coronary disease (CAD) has dropped over the past 30 years. But this, many argue, is simply due to improved symptom-based health delivery systems found in all industrialized countries. Stop-gaps like coronary bypass surgery, balloon angioplasty, vasoactive and cholesterol lowering drugs, etc., do not cure CAD. For example, bypass surgery temporarily improves/restores blood flow to the myocardium. Metabolically, the patient still has heart disease. Morbidity from CAD and atherosclerotic diseases is disturbingly high in North America. It still outranks cancer.

This leads to another related question: why do certain cultures still seem to avoid degenerative/occulusive diseases of the circulation, and attain high-quality longevity right into their eighties and nineties? Earlier studies indicated that during the Second World War in Europe, the incidence of CAD decreased. Most site the drastic reduction in food quantity and quality during the war when populations were on rationed diets. Animal studies have also shown conclusively that if you deliberately withhold food (i.e., fat, protein, and carbohydrate) from mice, they live longer than their well-fed control group colleagues. When the Japanese immigrated to the U.S., they did two things: they ate less seafood and vegetables, and they ate more processed high-fat food. They then started to develop CAD at the same rate as North Americans.

Has the incidence of coronary disease decreased in Bosnia? If one were to intrude into this awful world conflict and actually do the epidemiology, I think we'd find the rate had drastically decreased over the last few years.

Several years back, when I was completing my graduate work in Vancouver, I was privileged to be invited to a lecture by Dr. Kenneth Pelletier. Pelletier studied under the famed Hans Selye, who we all know as the individual who gave us our understanding of the stress response and general adaptation syndrome. Many of you now use these theories as adjunct treatment modalities in chiropractic care.

Dr. Pelletier's lecture was captivating and in the theme of cardiovascular disease prevention (it could be arthritis or cancer too), and the concept of facilitating long, healthy lifespans, I will summarize his key points that were put forth that day. They are still highly relevant and

provocative today.

He first presented an optimal health continuum, which from memory I will attempt to reproduce here. The scale starts with the standard Western medical approach to treatment of disease disability, symptoms, signs, which were conceived around 1900 and persist today. Pelletier proposes that we must evolve past this to a point where issues (that medicine even now bypasses) become paramount, such as consciousness of stress management. He believes stress is responsible for between 50 and 80 percent of all diseases. Diet and nutrition are next (which has started to make inroads in our health care paradigm), followed by environmental, pyschosocial and physical effects (here he mentions electromagnetic pollution). Next along the continuum are the effects of political and economic factors which affect population health, and finally the last step along the continuum, longevity.

Pelletier then asks what do groups scattered about the world who are known for their outstanding longevity have in common? What set of life situations/conditions do they exhibit which provide the setting where ages above 85, 90 and even 100 years is obtainable?

Five groups were identified who have remarkably similar attributes in common. They are the Georgians and the Arkhazians in the former USSR; the Vilcabunba in Ecuador; the Huza in Pakistan; and the Tarahumara in Mexico. These groups will be expected to live (barring unforeseen natural disasters) well into their nineties and 100s. Tooth particle analysis determination (accurate to +-2 years) was done).

Pelletier outlines the following common parameters and environmental/social conditions imposed upon these people:

- semi-mountainous habitat (chronic hypoxia, and acclimatization, physiological adaptations; exercise always just getting around)
- impoverished conditions
- genetic predisposition (albeit, small influence)
- age exaggeration occurs (but it is a key element in their psychology)
- dietary: lacto-ovo vegetarians who shun red meat; prolonged caloric restriction (1,800-2,000 per day vs. 3,000-5,000 per day for North Americans); restricted protein intake (40-50 vs. 90-100 grams per day for North Americans); emphasis on legumes, potatoes, grains, leafy vegetables
- regular moderate aerobic activity (subsistence farming activity)
- moderate alcohol consumption (raised HDLs) -- 40 oz. beer per day, but their pattern of consumption is telling: they drink gradually throughout the day, and combine it with food and socializing

- smoking is common, but how they smoke is different: no chemicals in tobacco; native grown; not inhaled; only smoke outdoors
- society promotes continued sexual activity well into old age (caloric restriction increases reproductive and sexually-active years). Women are also initiators of sexual relations
- "mid-life crisis" -- a nonexistent concept
- extended family units vs. nuclear families (North America and Europe)
- no possessiveness or jealousy
- religious orientation; alive vital universe of a unified functioning entity; not segmented like North America. Respect for higher values
- no concept of time urgency
- expectation of long life; elders have positions of social status -- are never made to feel useless. Grandparents care for children
- autopsy findings: some CAD, but their coronary vessels are large. Those few with CAD go through elder years with largely "silent coronary disease." If they sustain a myocardial infarction, they are small and recovery time is rapid

Clearly, an examination of these common elements explains why we have so far to go in our society in understanding how to go into old age with self-respect, vigor and vitality. Perhaps a greater understanding and appreciation of these concepts practiced for thousands of years, will be recognized in time -- before our health care systems collapse entirely.

## Reference

1. Caspersen C.J. et al. Physical activity trends among 26 states, 1986-1990. Medicine Science in Sports and Exercise. 27(5):713-720, 1995.

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