“Spending your golden years in a retirement home with a low-salt diet will convert your last years to a long, chronic illness.”

So wrote a Canadian cardiologist who for 5 decades had treated elderly patients. He believed that the falls and fractures that so often spelled the end to a productive and enjoyable life would decrease dramatically if seniors were placed on a regular diet instead of a low-salt diet. Based upon his long personal experience, he felt that salt-reduced diets caused hyponatremia (low sodium levels in the blood) and other dangerous conditions, such as confusion and decreased consciousness.

He felt obliged to post his concerns in writing because of his own personal experience. After 49 years of a productive career in cardiology practice, he was looking forward to an active retirement punctuated by occasional travels abroad. No longer having someone to share his old age with, his daughter thought it best to place him in a comfortable retirement home where he would not have to be bothered with the routine chores of cooking and cleaning. Upon entering the retirement residence, he was immediately placed on a low-salt diet, with lunch at 1 PM and dinner at 5 PM so that he would not get hungry and would go to bed early. Within a few months, he totally lost his appetite and found he was beginning to get drowsy in the afternoons. As time went on he became steadily more inactive.

Upon later analysis, he believed that his low-salt (sodium chloride) diet did not provide sufficient chloride to allow for the stomachs normal production of digestive acid. He felt that this insufficiency of stomach acid led to a cascade of negative effects including an inadequate extraction of key nutrients such as vitamin B12, which in turn led to reduced production of red blood cells and the development of neurological disorders in the nervous and muscular systems.

The bottom line of all this was a loss of stability and balance, leading to a much greater susceptibility to falls. In fact, the rate of falls with broken hips, ribs and fractured skulls happens to be two to three times as frequent in retirement and nursing homes than in the rest of the community.

Within a few years of taking up residence at the retirement home, he fell and broke his hip. After that hip surgery, he was forced to use a walker, but within months fell again (this time while holding the walker) and broke his shoulder.

That was the end of the line as far as he was concerned. Being a physician, he decided to go back to basics and treat himself. The first thing his research into his symptoms revealed was that he suffered from chronic hyponatremia and dehydration. He abandoned the low-salt regimen and went back to a regular diet. This immediately helped him regain his appetite, his interest in life and his energy. He began to exercise regularly and managed to avoid the wheelchair and bed confinement that he felt he was being driven to by the low salt diet.
One might think that this is simply one man’s isolated anecdotal account that has little to do with the rest of us, however that is not the case.

We are now living longer than we ever have in history. Between 1940 and 2040 the population above the age of 85 will increase 40-fold. In fact, one of the fastest growing segments of the population is people over the age of 85. They accounted for about 12% of all elderly people in 2000 and are expected to grow to 20% by the year 20402.

Because of this meteoric rise in the number of elderly people, geriatric problems are on a steep and steady rise. Falls, fractures, cognition, attention deficits and sensory disorders are now becoming much more commonplace.

Mild hyponatremia is the most common form of electrolyte imbalance in older people and has been shown to be associated with walking impairment, attention deficits and a much higher frequency of falls. Indeed, there have recently been a number of publications that found a direct relationship between mild hyponatremia and falls, bone fractures, unsteadiness and attention deficits3,4. Falls are a major socioeconomic problem in the elderly. About 30% of people over 65 fall every year5,6. Fall-related injury in the elderly is associated with numerous psychological and physical consequences and is a leading cause of death and disability. Falls are also associated with bone fracture in 4–6% of cases and death occurs from complication of fall in around 2% of cases mostly in patients with hip fracture7. Almost 5.3% of all hospitalizations in people aged 65 years or older are due to fall related injuries8.

The elderly should very carefully consider any broad, sweeping recommendations to go on a low salt diet. A well balanced diet, replete with salads, vegetables and fruit is the best approach to enjoying a healthy, active retirement.

(Dedicated to Dr. Isaac Shleser, MD, FRCPC, FACP)

2www.merck.com/mkgr/mmg/contents.jsp also CDC figures