

William B. Dickinson
1617 Alvamar Drive
Lawrence, Kansas 66047
785-832-1899; wdicki2@LSU.edu

November 1, 2011

Dear Fellow Citizen:

Many years ago, when I was young, the preoccupation of old folks with their health both amused and annoyed me. Now that I am in my 81st year, I well know the feeling. Friends, relatives and colleagues pass away on a regular basis. Those of us who have temporarily outwitted the actuarial tables know all too well that we are moving up in the queue. Joints wear out, hearts flag, eyes dim, hearing fades, nerves fray and memory becomes unreliable.

But we remain determined to escape the stereotypes associated with aging. We feel insulted when TV ads and sitcoms portray us as crotchety or mindless or guilty of bad driving. Still, the positive images that depict us as alert, "sprightly" and perfectly capable of sustaining romantic feelings (need I be more specific?) don't ring true for many of us who find ourselves in the "old-old" category.

Gerontologists don't make our lives any easier by reminding us of our frailties. Our brain can shrink up to 15 percent as we age, unlike our closest animal relative, the chimpanzee. We're not only getting older; we're getting shorter, too -- men lose 2 inches by age 80, women 3.1. Don't even mention hair loss. Somehow we manage to keep our sense of humor, or at least perspective. (Q. Who would *want* to live to be 90? A. Someone who is 89.) Author Kurt Vonnegut captured the insouciance of our cohort in a commencement address at MIT. "Wear sunscreen," he advised the graduates. "Get plenty of calcium. Be kind to your knees. You'll miss them when they're gone." Alas, Mr. Vonnegut has since returned to Nature at the age of 84.

* * * * *

Now comes a study by an expert in longevity that will either encourage or frighten you. James Vaupel of Duke University and the Max Planck Institute for Demographic Research projects that if we continue to make progress in reducing mortality, "most children born since the year 2000 will live to see their 100th birthday in the 22nd century." In case you are wondering, the Census Bureau estimates the number of centenarians in the United States at 2,300 in 1950, 79,000 in 2010, and 601,000 by 2050. Vaupel points out that in countries with the longest life expectancies, average life span over the past two centuries has grown at the remarkable rate of 2.5 years per decade. His caveat: When the aging process does begin, it is still taking place at about the same pace. "Deterioration, instead of being stretched out, is being postponed." Optimists beware.

Better medical care and rising living standards account for most of the increased life expectancy. Filtration and chlorination of urban water cut child mortality in half. From 1900 to 1940, U.S. life expectancy at birth went from 47 years to 63 years, according to Charles Fishman in a new book, *The Big Thirst*. Advances in surgery are of relatively recent origin. I recall the suffocating feeling from ether when I underwent tonsil surgery in 1939. Antiseptic surgical procedures date only to 1867 when medical science accepted germs as the cause of infection. It was 1901 before major blood groups were identified, facilitating the development

of safe blood transfusions. Another landmark, described by Dr. Nicholas L. Tilney in *Invasion of the Body: Revolutions in Surgery*, was the development of the antibiotic penicillin during World War II.

Researchers now believe that future progress in longevity will be fueled in part by a deeper understanding of genetics and the root causes of aging in humans and other species. Breakthrough work in immunology also holds promise of a vaccine against cancer that already is said to have worked on mice. Tissue engineering, in which human organs are grown or rebuilt in laboratories and then transplanted into sick humans, is no longer science fiction. And many in my generation already wryly describe themselves as an assemblage of spare parts.

* * * * *

The social, political, environmental and economic ramifications of a futuristic fountain of youth must give us pause. High-tech medicine and the public's demand for access to it drive health costs ever higher. Few doubt that Medicare and Medicaid face inevitable cuts and rationing down the road as graying baby boomers put stress on the health-care system. Today, for example, 5.4 million Americans suffer from Alzheimer's or similar dementias. Unless a cure is found, by 2050 anywhere from 13 million to 16 million Americans are expected to suffer from the mind-destroying disease, costing \$1 trillion for medical and nursing-home care.

Most oldsters I know don't fear death itself so much as the prospect of the dehumanizing process of dying. The late Dr. Murdock Head summed it up in a book with the hopeful title *Living Younger* when he wrote: "We pray for the will to finish the course with dignity and for the strength, judgment and luck to cross the finish line under our own power." Quality, not just quantity, of life does matter.

Some believe that a longer span of healthy years will lead to greater wealth and prospects for happiness. Sonia Arrison so argues in a new book with the descriptive title: *100 Plus: How the Coming Age of Longevity Will Change Everything, From Careers and Relationships to Family and Faith*. "There can be no more basic obligation than to help ourselves and future generations to enjoy longer, healthier spans on the Earth that we share," she writes. Medical technology will lead the way.

A less positive view is taken by columnist David Brooks, who has developed a passion for parsing the big cultural shifts in American life. Brooks (*New York Times* op-ed page, July 15, 2011) argues that the nation's fiscal crisis is about many things "but one of them is our inability to face death – our willingness to spend our nation into bankruptcy to extend life for a few more sickly months....Most of us will still suffer from chronic diseases for years near the end of life, and then die slowly." (Did you know that one out of three Medicare patients undergoes expensive – and often futile -- surgery in the last year of life?)

This is the beginning of a debate that surely will convulse the political system for decades. Those of us on the cusp of eternity have been thinking about the implications for a long time. Is the decision to hasten an end to life a personal matter or one of public policy? America's growing population – now 312 million heading for 400 million in just 40 years – will strain public and private health resources. If our swelling cadre of centenarians becomes a drain on the public purse, and on family finances, we may not throw grandpa under the train. But we won't want him lingering too long, either.

#####