In 1980 the "Head of the Charles" rowing regatta was held, as it had been every year since 1965, on the Charles River between Cambridge and Boston. The very competitive Veterans class (then 50 and older) consisted of men in their 50's and early 60's, with only a sprinkling in their 70's. As the Veterans swept up the river single file (racing the clock), a considerable gap in the train emerged when the announcer called out "Here comes Tom Crosby, more than 80 years old and still covering the three-mile course. Let's give him a big hand!" Crosby then rowed past the cheering crowd, occasionally waving to friends he recognized on the riverbanks. He was being applauded not for racing, but because he was actually able to row the whole distance -- a rare event in those days for a man of his age.

Now fast-forward to the year 2000. The Veterans class has since been split into senior masters (50 to 60), veterans (60 to 70) and senior veterans (70 to 80). There are two 80-year-olds competing, one of whom won the class last year at age 79. This letter asks "What happened in the last 20 years to account for this remarkable change in the age of competitive athletes?"

Just after the end of World War II, newspapers carried photographs of King Gustav V of Sweden playing tennis in his late 80's, and he was not even in a tournament. The photograph was newsworthy because it was considered remarkable that an octogenarian could still play tennis regularly. There were other well-known senior athletes such as Clarence Kelly, who regularly competed in the Boston marathon long after most of his peers had ceased to run. Today there are scores of men and women competing in marathons well into their 60's and 70's. Senior professional golf (over 50) is so popular today that it is regularly televised nationwide.

Examples of the elderly participating in sports abound, and those of us who still compete as seniors know and admire the famous athletes in our respective sports. Rowing is no exception; in the Masters National Championship Regatta in Oakland, CA this year, four men competed in the 1,000 m sprint for single scullers aged 80 and up, with the oldest being 90! In all races for those over 60, contestants receive an age handicap. Especially remarkable is the growing number of senior women competitive rowers, especially from my perspective as it seems only recently that women were allowed to compete at all. Thanks to Title IX, women's rowing is booming at many major universities, particularly those with powerful football and basketball teams that bring in so much television income. The largesse allows the women crews to purchase expensive new boats and coaching launches and to hire top crew coaches. Women rowers even have a well-known role model -- the doyenne Ernestine Bayer -- now in her 90's, who was still competing last year. Because my own experience comes from rowing, most of my examples are from that sport, but similar stories are common in swimming, track and field, tennis and even ice hockey. If this athletic phenomenon is indeed present in our country and if it was relatively rare 25 years ago, what stimulated the change? There are many causes, some of which this letter will examine.
A widespread cross-generational and cultural addiction in the USA is "sports" -- and not just such popular spectator ones as professional football and basketball. The proliferation of professional sport franchises can indeed test the tolerance of many a fan now subject to endless playoffs seemingly designed primarily to provide ever more television income to the team owners. Nonetheless, despite my cynicism about the professional sports scene, a healthy amateur sports world is booming with literally millions of athletes competing regularly in everything from bowling to ballroom dancing. Competitiveness is well ingrained in the American psyche -- we all want to be "number one!"

However, to be number one takes dedication, time and energy. A competitive athlete today must be virtually addicted to his/her sport and devote the requisite hours to perfecting technique and improving physical condition. A good example of such an athlete is rowing's Stephen Redgrave, Britain's sweep oarsman who won his fifth gold medal in Sydney in his fifth consecutive Olympics. For 20 years rowing has occupied almost his whole life, and at age 37 he recently announced his retirement from Olympic competition. The rowing community hopes that he will continue in the less demanding Masters rowing category where he would compete in his respective age group -- usually divided in five-year increments. I watched Redgrave win his 4th gold medal in Atlanta and he is probably the greatest "sweep oar" of our time. For him to compete as an amateur, it is essential that he live in a prosperous country where funds are available for training and equipment. Racing shells run from $5,000 and up for a single to $20,000 and up for a high-tech eight. Fortunately, in the USA commercial corporations are now sponsoring team activity in many different sports, benefiting from the good public relations that accrue. Thus the economic health of a nation has a direct bearing on the increased participation of senior athletes who can afford the financial cost of their effort.

In addition to living in a competitive culture and a prosperous country, senior athletes are also encouraged to participate in their sport of choice by the extraordinary expansion in sports medicine and in the science of gerontology. Long-term studies on rowers and other senior athletes, such as the research at the University of Texas in which I have participated for 20 years, have generated a critical mass of data now available to coaches and trainers. This knowledge allows them to determine appropriate exercise regimens for the senior athletes with whom they work. Clearly a 75-year-old cannot train as vigorously as a college undergraduate, but I have found that my endurance in a 22- to 25-minute rowing race is retained for far longer than I had imagined it would. What I have lost, however, is agility, balance and brute strength. Nonetheless, with regular practice and careful training, performance with age tapers off remarkably slowly. For me it has been the loss of about 30 seconds a year after age 75 in a 5 km race (23 to 25 mins.). Elapsed times vary annually because of changing wind strength and direction, but current is not a factor on the Charles River course. As knowledge of how human physiology changes with age, appropriate training can be matched with individuals to help them maintain their past performance standards.
The availability of new ultra-lightweight equipment also helps seniors stay competitive. For example, the use of carbon fiber (derived from space research) in tennis racquet frames, sculls, and sweep oars and shells of all sizes have made these products significantly lighter and stiffer than their wooden predecessors. The lighter and more rigid the hull of a racing boat, the faster it can be propelled through the water. Furthermore, the lighter the boat, the easier it is for the elderly to handle. The same principal applies to other sports equipment that an athlete must handle. Supplementing these lightweight racquets, vaulting poles, etc. are new sports clothing, shoes, sunglasses and other accoutrements that help enhance performance.

Finally, the peer support and bonding that are byproducts of sports participation provide a strong incentive for seniors to remain active. Rowing in particular fits this pattern because you often compete head to head in singles races, while the next day you row with your competitors in a double, four or eight. Also, it is one of the few sports other than tennis that allows one to race in mixed (male and female) crews. Mixed events are now regularly scheduled in all major regattas.

Our prosperous "first world" is becoming increasingly adapted to organizing and running large athletic events, thanks to the computer, instant communication and easy transportation. The New York and Boston marathons are good examples of tens of thousands of men and women of all ages running a grueling 26 miles. Even in a sport as esoteric as crew, about 4,000 rowers of all ages compete annually in the "Head of the Charles" over a day and a half. The event is so popular that a lottery is used to keep the number of competitors in hand. Many applicants (the number is not publicized) are rejected because their event was filled. A few years ago while waiting to start my race, I watched as 108 youth "eights" (19 and under) lined up single file for their start. They were about evenly divided between boy and girl crews and it was indeed an impressive sight.

The causes of major social change in our culture are varied and almost impossible to isolate. I have tried to point out some of the factors that I believe have caused the rise in senior athletic competition, but I am sure I have missed some. Other large scale social changes are equally hard to analyze. Why, for example, was smoking successfully curbed in the USA, when despite the well-known health hazards it appears to be increasing in other parts of the world? Active participation by seniors in sports is also common now in Europe, Australia and New Zealand, but will the phenomenon spread to rich Asian nations such as Japan and Singapore? I suspect that eventually it will because the personal rewards are so great in proportion to the effort expended. I encourage all my readers to find an appropriate competitive activity and join in the fun.
After writing this letter, I sent it for comment to Rosemary Laird, MD, Assistant Professor of Medicine and Geriatrics at the University of Kansas. She wrote the following:

Nationally our country is moving toward a population with larger numbers of older adults and greater life expectancies than at any other time in history. The etiology of these gains in so-called "active life expectancy" is likely multi-factorial, but includes the public health measures that improved life for this cohort back in their childhood, improved treatment of heart disease and chronic illness, medical advancements such as joint replacements and medications to slow bone loss, and increased use of preventive medicine. In addition to quantitative gains, Americans are now remaining in good health and full function for more years; the rate of chronic disability among older Americans declined from 24% in 1982 to 21% in 1994. Overall quality of life and health status among those 85 and older was reported to be higher today than in 1986.

In the last 10 years, increased attention has been paid to the effect of exercise on the aging body. Significant evidence exists demonstrating the broad and sustained benefits of exercise into later years. Participation in regular physical activity is associated with lower cardiovascular death rates, lowered risk of developing hypertension and diabetes, increased muscle and bone strength, and improved balance. Other evidence demonstrates enhanced psychological well-being and reduced risk of developing depression.

In many ways, the life of the Master athlete is the epitome of "good aging." It is what geriatricians and gerontologists have been working toward for the past 20 years!

David Challinor
Phone: 202-673-4705
Fax: 202-673-4607
E-mail: ChallinorD@aol.com