



STRONGER AFTER 65?

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losing muscle cells, a process that accelerates gradually throughout adulthood. If we remain active physically during our 20s and 30s, we may scarcely notice. However, if our physical activity declines during this period, we experience a gradual loss of strength and health. Between 25 and 55, the average American loses 15 pounds of muscle and bone. After 55, these rates of loss accelerate, causing not only bone demineralization—osteopenia then osteoporosis—but also **sarcopenia**, smaller and weaker muscles. In addition to disabling us from many of our usual physical activities,

Of all human milestones, age 65 is the most ominous. At 18 we vote, at 21 purchase alcohol legally. On 30th, 40th, and 50th birthdays, family and friends rib us for a few days. But at 65 we are recognized relentlessly as elders: by Medicare; at restaurants and movie theaters; by eager retirement villages and legions of advertisers. We cannot ignore the avalanche of attention or that magical word “retirement,” creating visions of Mediterranean cruises, Caribbean beaches, golf, and butterflies. Inner voices tell us to slow down, quit work, and assume a life of physical ease.

Although retiring from one’s occupation at 65 can be healthy, retiring from—or merely reducing—daily physical exertion is not. To enjoy ongoing health, we must exert ourselves vigorously every day throughout life; there is no biological age of retirement. Actually, after 65 we need to be—not less—but more active physically than earlier. Why? At 20, we all begin

progressive strength training exercises achieve **sarcotrophy**, an increase in the size of their remaining muscle cells. These researchers tested nursing home residents, aged 88 to 96, for walking speed, body fat, muscle strength, etc., put them through a four-month strength training program, then retested. Amazingly, these trainees could now walk twice as fast as before and their blood pressures and body fat percentages were lower. Pre- and post-MRIs of their thighs demonstrated large increases in muscle size and decreases in fat, thus proving we can, at any age, increase our muscle mass through organized strength training.

Does this mean we can all have bigger muscles, lift more weight, and be stronger after 65 than when we were 25?

The answer to this question lives in the word “stronger,” a comparative adjective implying that someone or something is stronger than another. Yes, each of us can compare ourselves to who we were 40 years ago. We could also ask the same question

be stronger after 65?” Instead of comparing ourselves to who we were 40 years ago, let us look forward, which is much more relevant to our current and future health.

If on our 65th birthday each of us vows to become stronger and healthier by participating faithfully in a well-organized strength training program for one year, we have a new basis for comparison. 365 days later, we can compare the strength of the renewed person we have become at age 66 to the weaker person we would have become if we had not trained. Not only will we be much stronger than the 66-year-old slacker version of us who did not train, we will be stronger even than the person we were at 65. Thus, by this comparison we definitely can be stronger after 65. And the longer in life we train consistently, the stronger we will be relative to the non-trainee we would have become.

Imagine we are on a bus filled with hikers, aged 9 to 95, traveling toward a mountain range for an all-day climb. Disembarking at the base of the mountain, in

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sarcopenia causes obesity, heart disease, hypertension and arthritis, and leads directly to the premature loss of personal independence. Sooner than we should, we lose the ability to walk, do house and yard work, even to clothe and bathe ourselves.

Fortunately, we have another choice. In a 1980s study, Tufts researchers demonstrated that people of any age who perform

regarding other physical qualities of life. Is our vision better at 65 than it was at 25? Can we run faster? Jump higher? It is doubtful anyone can answer these questions affirmatively. The same is true for the human health quality of strength. If juxtaposing ages 65 to 25 is our basis of comparison, the answer is “no.” However, there is a much more important way to answer the question, “Can we

bright October sunlight and invigorated by the smell of spruce, we exchange stories as we begin our ascent. We feel strength in our calves and the rise and fall of our rib cages as we inhale and exhale vigorously. As our spirits rise, as we treasure the vitality strength training has afforded us, we are reminded, once again, of how and why we can and should be stronger after 75....