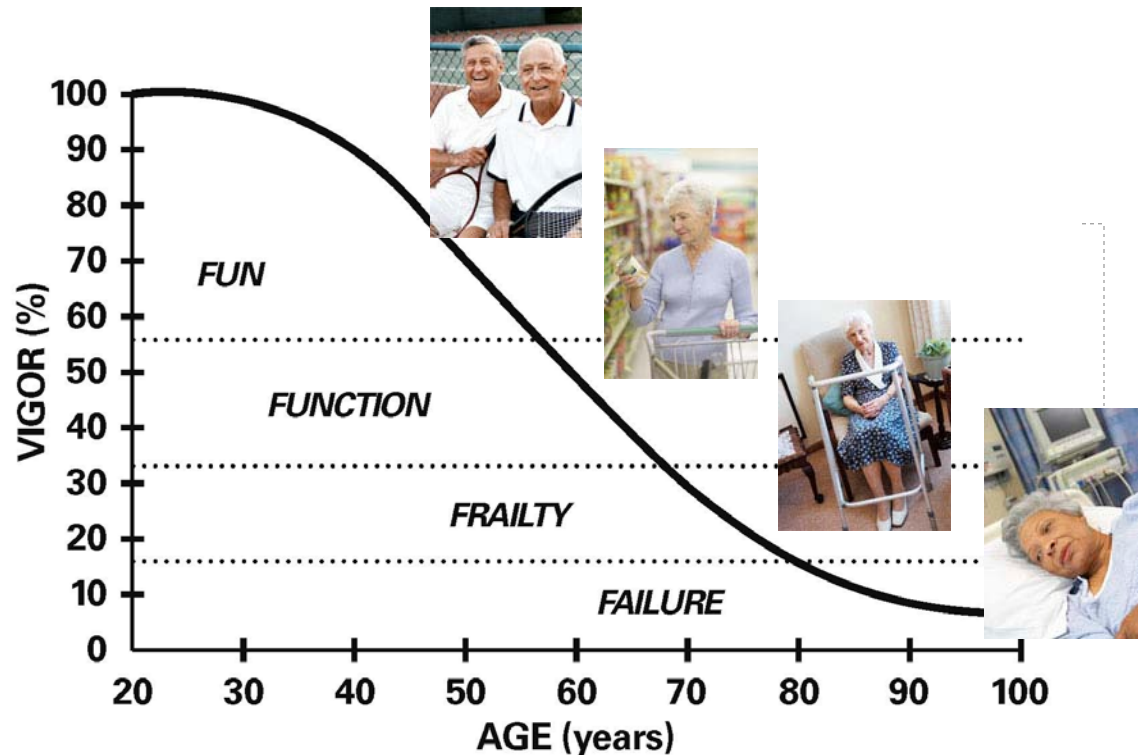


ARE YOU STRONG ENOUGH? THE SLIPPERY SLOPE OF AGING



Schwartz, RW, 1997

The Slippery Slope of Aging graph depicts the effects of age-related changes in muscle strength related to level of vigor. Simply put, it states that the stronger a person is, the more able they are to fully participate in enjoyable activities. What is critical to understand is that while there is a natural age-related regression or weakness (a sliding down the slope), exercise can offer a fun reversal of this weakness – a traveling up the slope. There are many people that are having fun well into their 80s and 90s.

The following simple functional markers will help determine where you are currently on the Slippery Slope of Aging. With this knowledge, you will be able to decide: Are You Strong Enough? Are you strong enough to survive a slip down the Slope of Aging, following a fall or an illness? Remember, no matter where you are currently, with an appropriate exercise program performed at an effective intensity and frequency, you can improve your place on the graph. And, regardless of how high up on the graph you may be, you can always get higher, and thus farther away from failure, regardless of your biological age.

There is an overwhelming amount of clinical research documenting the benefits and effectiveness of exercise in the management of many chronic health conditions. In a recent article in the Journal of the American Medical Directors Association, Dr. John E. Morley, MB, BCh, wrote:

“Exercise is a cornerstone in increasing strength and balance and decreasing falls, improving functional decline and frailty, improving mobility in Parkinson’s patients, reducing injuries, improving glycemic regulation, slowing loss of bone mineral density, constipation, fear of falling, enhanced sleep, quality of life, and decreasing incontinence.”

Healthy individuals naturally lose about 1% of their muscular strength per year after the age of 30. This rate of natural strength loss increases to 2 – 3% after the age of 50. Regular exercise and activity will help to reverse strength loss so that most people can remain active and healthy individuals, participating in work and leisure activities at productive and enjoyable levels. However, without exercise (performed at a frequency, duration and intensity to increase muscular strength), our vigor and vitality will gradually decrease. At this point, you will not have enough energy to do the things you enjoy doing. Wouldn’t you like to consistently have enough energy to do what you have to do every day (get out of bed, shower, get dressed, cook breakfast), and also have enough energy remaining to leave your home, visit with friends, go to a show?

Chronic health conditions or acute injuries which cause periods of decreased activity or sedentary lifestyle will accelerate the aging process by increasing the rate of muscular weakness. For every one week of bedrest during illness or hospitalization, 3 months of regular activity are required to regain the strength lost during that period of hospitalization. An individual will lose approximately 1% of muscle strength for each day of bedrest. Of course, this recovery time may lengthen depending on the type of health issue that resulted in the hospitalization.

Muscle weakness leads directly to functional decline, increase in falls, reduction of activity level and participation in enjoyable activities, and decreased quality of life. Deconditioned people walk more slowly, have more falls, complain of shortness of breath with walking, and have more difficulty rising from chairs or couches.

The benefits of physical activity include:

- Increase strength
- Increased flexibility
- Improved cardio-pulmonary function
- Improved balance
- Decrease falls
- Decrease frailty
- Better walking ability
- Decreased pain
- Reduce injuries
- Improved bone density / Reduce Osteoporosis
- Decreased constipation
- Decreased fear of falling
- Improved sleep
- Decreased incontinence
- Decreased shortness of breath
- Improved heart function
- Increased quality of life.

What chronic health conditions can be managed with exercise?

- Parkinson's Disease
- Diabetes
- Cancer
- Heart disease
- Vascular disease
- Osteoporosis
- Joint replacements
- Multiple sclerosis
- Alzheimer's Disease
- Arthritis
- Joint and back pain

ARE YOU STRONG ENOUGH? THE SLIPPERY SLOPE OF AGING KEY POINTS

- Healthy people lose about 1% of their strength per year between 30 – 50 years old
- After 50, 3% of strength per year
- Chronic health conditions or acute injuries will accelerate the aging process
- One week of bed rest requires 3 months of activity to regain lost strength
- Exercise performed at a moderate to high intensity can help to reverse the natural weakening associated with age
- People at any age and at any stage along the slope can improve their strength, and thus improve their ability to participate in enjoyable activities
- No one is too old to exercise
- Physical and occupational therapists specialize in assessing strength and ability, and are the health professionals best able to develop an appropriate exercise program for seniors
- Please consult your physician, or physical or occupational therapist to discuss and appropriate exercise program for you.