The primary health focus for the older adult population is improving quality of life through functional fitness. When you are working with the younger adult population, primary goals are to prevent adult-onset diseases, as well as allow the individual to maintain a higher level of activity for as long as possible. With the older population, disease prevention is not as much the issue, since many already have an adult-onset disease.

**What is functional fitness?**
Functional fitness means different things to different individuals since there can be a wide range of fitness levels within the older population. Only during the period from childhood through adolescence is there equally as wide a range of fitness levels and abilities as found in the older population. For some older adults, functional fitness may mean they are able to sit up and eat, while others will consider functional fitness as being able to remain active in competitive sports. Functional fitness is more formally defined as having the physical capacity to perform normal everyday activities safely and independently without undue fatigue.

**Quality of life and functional fitness**
Quality of life for the mature adult is directly related to the functional fitness that individual possesses. Research shows that it is never too late to improve physical fitness and functional ability. Research also shows that it is not necessarily age and disease which cause an individual to experience a decrease in quality of life, but rather the lack of physical activity that results in a loss of muscular strength as well as muscle mass. It is the job of the personal trainer to provide clients with the most effective and safest workout possible while addressing each individual’s functional needs and fitness goals. Individuals who set specific health and exercise related goals better adhere to their fitness programs. Thus, to prescribe exercise effectively, you must determine what exactly are the strengths, weaknesses and functional needs of the individual. This is accomplished by fitness testing.

**Fitness Testing**
When determining which tests are safe and appropriate for you to perform with the individual, all tests administered must assist in the development of an individual’s functional profile. Maintaining or improving muscular strength should be the primary concern of older adults. After the age of 50, muscular strength declines at a rate of about 15 to 20 percent per decade. One of the reasons for focusing on muscular strength is the role it plays in preventing falls. Falls are common among older adults, often leading to physical injury and psychological trauma. Falls are the leading cause of injury death among adults 65 years of age and older.

Another important consideration is flexibility. Maintaining flexibility becomes more important with age because it can have a direct impact on activities of daily living such as bending, lifting, reaching, walking and stair climbing.

There are many options for testing fitness levels. One of the ways to test for muscular strength and flexibility in older adults 60 to 90+ is using the Senior Fitness Test (SFT), which is a battery of tests that measure upper and lower body strength, flexibility, endurance, balance and agility. These tests are simple to perform and do not require a lot of equipment to complete.

The Senior Fitness Test is comprised of six exercises. The only supplies needed are a straight-back or folding chair, a stopwatch, a dumbbell (5 pounds for women, 8 pounds for men), and an 18-inch ruler.
1. 30-SECOND CHAIR STAND (measures lower-body strength)
2. ARM CURLS (measures upper-body strength)
3. TWO-MINUTE MARCHING STEP (measures aerobic endurance)
4. CHAIR SIT-AND-REACH (measures lower-body flexibility)
5. BACK SCRATCH (measures upper-body shoulder flexibility)
6. EIGHT-FOOT UP-AND-GO (measures motor ability and dynamic balance)

**Normative and Criterion-Referenced Standards**

The SFT is unique in that it was designed and tested in a nationwide study of over 7,000 independent living older adults. This provided data to establish both norm-referenced and criterion-referenced performance standards. Normative standards provide a basis for comparing an individual's scores to those of others of the same age and gender. Criterion scores suggest the minimum physical ability needed to perform common everyday functions.

As mentioned earlier, quality of life is affected by the amount of muscle mass that has been lost to physical inactivity. Particularly with older adults, loss in lean body tissue, not fat tissue, is usually the cause of weight loss. This corresponds to a decrease in strength and mobility. Testing of the amount of muscle mass compared to the amount of fat mass is done through a variety of body composition tests. However, for the purposes of determining body composition for older adults, bioelectrical impedance is probably the quickest and most accurate method of testing. It is not highly invasive. The individual does not have to disrobe. It also is quick to administer and provides measurements of healthy or unhealthy amounts of fat and lean body mass.

Once again, falls in older adults are the most threatening health risks. Good balance, controlling the body’s center of mass, is a very important factor in fall prevention for older adults. Good balance, when combined with muscular strength, is the foundation on which a healthy and active lifestyle is built. Testing for balance can be done through a few different methods. The Fullerton Advanced Balance Scale is designed to measure balance changes in higher functioning adults. The Modified Clinical Test of Sensory Interaction in Balance (M-CTSIB) is used to measure postural control through the sensory inputs. The Assessment of Motor Impairments Multidirectional Reach Test (MDRT) measures a person's ability to lean in forward, backward and lateral directions. Combining all of the balance tests provides a comprehensive base of information with which to determine the individual's level of functional balance.

These assessments of the multiple dimensions of physical function assist the personal trainer in many ways. They help in identifying older adults who are beginning to experience significant changes in body systems, affecting postural stability and mobility. They aid the fitness professional in developing an appropriate exercise plan targeting the issues identified. And when these tests are repeated at regular intervals, usually every three to six months, they can help guide the selection and deletion of certain exercises based on the improvements in strength or the further loss of function.

**References**