Protein and Physical Activity

What is lean body mass?
Lean body mass includes everything in your body that isn't fat such as muscle, organs and bones.

Why is lean body mass important to you?
Maintaining adequate levels of lean body mass helps to prevent:
- Decreased physical strength
- Decreased energy
- Increased difficulty with flexibility and movement
- Increased risk of falls and broken bones
- Impaired ability to perform daily tasks
- Loss of independence

How is protein related to lean body mass?
Including protein in your diet throughout the day at all meals is important for your body to build muscle and to help make your bones strong. Recent research suggests that older adults need more protein than previously recommended and spreading the protein out evenly between all three meals is the most beneficial.

What can physical activity do for you?
A regular exercise program can assist you to:
- Reduce symptoms of arthritis.
- Improve your blood glucose readings if you are diabetic.
- Improve blood circulation to your arms and legs.
- Increase bone density and lowers risk of fractures.

How are protein, lean body mass and exercise related?
Eating enough protein and being physically active, when combined together, can help slow muscle loss that occurs with age.
Tips to Increase Physical Activity

Use canned goods to exercise your arms while watching television.

Leg extensions: Sitting toward the edge of a chair with good posture and bent knees, hold on to the sides of the chair with your hands. Extend the right knee out so that the toes come up toward the ceiling, being sure to keep the knee slightly bent without locking it through the entire movement. Lower the leg back to a bent position and repeat this movement 8 to 10 times, using about 2 seconds each to lift and lower the leg.

Arm circles: While sitting extend your arms straight out and do small circles forward and backwards.

Heel raises: Seated toward the edge of a chair with good posture and knees bent, place feet flat on the floor. Raise heels up off the floor, coming up onto the balls of the feet. Hold for 1 second, then release.

Tummy Twist: Sitting toward the edge of a chair with good posture and bent knees, hold on to the sides of the chair with your hands. Extend the right knee out so that the toes come up toward the ceiling, being sure to keep the knee slightly bent without locking it through the entire movement. Lower the leg back to a bent position and repeat this movement 8 to 10 times, using about 2 seconds each to lift and lower the leg. A ball is not required.

Elbow to knee: Seated toward the edge of a chair with good posture and knees bent, start with your right arm extended up overhead. Slowly lift the left knee up as you lower your right elbow down toward your left knee, taking about 2 seconds to lower down. Try not to bend over at the waist. Release and go back to the starting position. Repeat 8 to 10 times. Switch sides and do 8 to 10 repetitions, pulling one elbow to the opposite knee. Rest. Do another set of 8 to 10 repetitions on each side.

References:
*Exercises taken from Chair Exercises for Older Adults, prepared by the University of Georgia; access on 3/19/13 at: http://www.livewellagewell.info/study/2007/12-ChairExercisesUGA113006.pdf