MUSCLE FITNESS BASICS & EXERCISES TO DO AT HOME

Tennessee On the Move at Vanderbilt
October 2005
What is Strength Training

Strength Training (also called *resistance training*) builds and tones your muscles. It works by making your muscles work against a resistance, for example, using the muscles in your arm to lift a heavy weight or even the muscles of just your abdominals to lift your whole upper body (i.e., a sit up).

Gold’s Gym, seriousfitness.net
Benefits of Strength Training

Resistance training can be used to improve **health** in many ways:

- Muscle tone and strength improvement
- Increased strength of bones and connective tissue (decreasing risk of injury)
- Injury rehabilitation
- Higher level of energy
- Improved sleep quality
- Increased quality of life
- Maintaining an independent active lifestyle
Benefits of Strength Training

Strength training can be very powerful in reducing the signs and symptoms of numerous diseases and chronic conditions, among them:

– arthritis
– diabetes (improved glucose control)
– osteoporosis
– obesity (weight loss/weight maintenance)
– back pain
– depression
Women develop less muscle mass and strength than men.

Women have more to gain from a functional standpoint:

- Untrained women generally experience more difficulty in doing daily tasks, e.g., walking, climbing stairs, carrying groceries.
- Difficulty in doing these tasks often leads to decreases in free-living physical activity.

Likelihood of weight gain, increase in difficulty of physical activity, further decrease in muscle fitness (and the cycle continues...)

Strength Training & Weight Maintenance

Strength training is crucial to weight control because individuals who have more muscle mass have a higher metabolic rate. Muscle is active tissue that consumes calories while stored fat uses less energy.

Strength training can lessen the decrease in muscle mass that occurs with aging.

Tufts Nutrition, Tuft University
Strength Training & Weight Maintenance

The amount of energy used by our bodies decreases as we age
- due to a decrease in muscle mass, decrease in level of physical activity, independent aging effect

Strength training can have a modest effect on energy expenditure (EE) (every little bit helps!)
- Gain of 2-4 lb of muscle over 4-6 months, could increase resting EE by 100 kcal/day
- Expend energy during training
- Possible increase level of free-living activity

Strength Training & Weight Maintenance

Must have sufficient intensity and effort!!
Maintain sufficient resistance and effort to cause muscle fatigue in 6-12 repetitions

Progress can be made in early stages of training on one set/exercise but continued improvement requires multiple sets

Questions before moving on??
EXERCISES

TO DO

AT

HOME
Next Class

Tis the Season to be Healthy
November 1 & 3

Guest Presenter: Stacey Kendrick from Health Plus