Resistance Training for Health

People of all ages and abilities who regularly participate in resistance exercise reduce risk of numerous diseases, improve quality of life and reduce mortality.

Key Physiological Benefits of Resistance Exercise

- Muscle strength, endurance and power
- Bone, muscle and connective tissue growth and durability
- Communication between brain and muscle
- Growth hormones
- Blood glucose regulation
- Aerobic fitness
- Muscle
- Endurance
- Power
- Bone, muscle and connective tissue growth and durability
- Communication between brain and muscle
- Growth hormones
- Blood glucose regulation
- Aerobic fitness

Resistance Exercise Can Help Manage and Treat Many Conditions Including:
- Arthritis
- Cancers
- Cardiovascular disease
- Dementia
- Depression
- Diabetes
- Fall risk
- Frailty
- Hypertension
- Insomnia
- Low back pain
- Mental health
- Movement disorders
- Obesity
- Osteoarthritis
- Osteoporosis
- Pulmonary disorders
- Peripheral vascular disease
- Stroke

Training can be time efficient and effective for health benefits:

For health benefits, muscles need to be challenged with a combination of weight lifted, repetitions and speed of lifting. The addition of resistance training to aerobic programs can also enhance other health gains throughout the life span from childhood to old age.

Exercise Plan:
- Free weights, machines and/or bands can be used
- Perform 8-10 multi-joint exercises that stress the major muscle groups
- Perform 2-3 sets of 8-12 repetitions with good form
- Lift and lower the weight in a controlled manner (2 seconds each up and down)
- The last repetition should be difficult to complete
- Perform exercise 2-3 times per week
- Progress weight lifted over time so that it feels like an 8 out of 10 difficulty (where 0 = no effort, 10 = hardest effort you can give)

Authors: Fiatarone Singh, Maria; Hackett, Daniel; Schoenfeld, Brad; Vincent, Heather K.; Wescott, Wayne. 2019