

12 Reasons Every Adult Should Strength Train

Dr. Wayne Wescott

During the past few years, more and more studies have shown that sensible strength training produces many health and fitness benefits. Key researchers have provided a wealth of data on the positive physiological responses to basic programs of strength exercise. Consider these 12 reasons to strength train.

1. Avoid Muscle Loss

Adults who do not strength train lose between 5 and 7 pounds of muscle every decade (Forbes 1976, Evans and Rosenberg 1992). Although endurance exercise may slightly improve our cardiovascular fitness, it does not prevent the loss of muscle tissue. **Only strength exercise maintains our muscle mass and strength throughout our mid-life years.**

2. Avoid Metabolic Rate Reduction

Because muscle is very active tissue, muscle loss is accompanied by a reduction in our resting metabolism. Information from Keyes et al. (1973) and Evans and Rosenberg (1992) indicates that the average adult experiences a 2 to 5 percent reduction in metabolic rate every decade of life. Because regular strength exercise prevents muscle loss, it also prevents the accompanying decrease in resting metabolic rate.

3. Increase Muscle Mass

need to first replace the muscle tissue that has been lost through inactivity. Fortunately, research (Westcott 1995) shows that a standard strength-training program can increase muscle mass by about 3 pounds over an eight-week training period. This is the typical training response for men and women who do 25 minutes of strength exercise two to three days per week.

4. Increase Metabolic Rate

Research reveals that adding 3 pounds of muscle increases our resting metabolic rate by 7 percent and our daily calorie requirements by 15 percent (Campbell et al. 1994). At rest, a pound of muscle requires 35 calories per day for tissue maintenance and during exercise muscle energy utilization increases dramatically. Adults who replace muscle through sensible strength exercise use more calories all day long, thereby reducing the likelihood of fat accumulation.

5. Reduce Body Fat

Campbell and his co-workers (1994) found that strength exercise produced 4 pounds of fat loss after three months of training, even though the subjects were eating 15 percent more calories per day.

That is, a basic strength-training program resulted in 3 pounds more muscle, 4 pounds less fat, and 370 more calories per day food intake.

6. Increase Bone Mineral Density

The effects of progressive resistance exercise are similar for muscle tissue and bone tissue. The same training stimulus that increases muscle myoproteins also increases bone osteoproteins and mineral content. Menkes (1993) has demonstrated significant increases in the bone mineral density of the upper femur after four months of strength exercise.

7. Improve Glucose Metabolism

Hurlev (1994) has reports a 23 percent increase in glucose uptake after four months of strength training. Because poor glucose metabolism is associated with adult onset diabetes, improved glucose metabolism is an important benefit of regular strength exercise.

8. Increase Gastrointestinal Transit Time

A study by Koffler (1992) showed a 56 percent increase in gastrointestinal transit time (transit time is faster) after three months of strength training. This is significant due to the fact that delayed gastrointestinal transit time is related to a higher risk of colon cancer.

9. Reduce Resting Blood Pressure

Strength training alone has been shown to reduce resting blood pressure significantly (Harris and Holly 1987).

10. Improve Blood Lipid Levels

Although the effect of strength training on blood lipid levels needs further research, at least two studies (Stone et al. 1982, Hurley et al. 1988) have revealed improved blood lipid profiles after several weeks of strength exercise. It is important to note that improvements in blood lipid levels are similar for both aerobic and strength exercises (Hurley 1994).

11. Reduce Low Back

Years of research on strength training and back pain conducted at the University of Florida Medical School have shown that strong low-back muscles are less likely to be injured than weaker low-back muscles. A recent study by Risch (1993) found that low-back patients had significantly less back pain after 10 weeks of specific (full-range) strength exercise of the lumbar spine muscles. Because 80 percent of Americans experience low-back problems, it is advisable for all adults to strengthen their low-back muscles properly.

12. Reduce Arthritic Pain

According to a recent edition of the Tufts University Diet and Nutrition Letter (1994), sensible strength training eases the pain

of osteoarthritis and rheumatoid arthritis. This is good news, because most men and women who suffer from arthritis pain need strength exercise to develop stronger muscles, bones, and connective tissue.

There are at least 12 physiological reasons to perform regular strength exercise. On a more basic level, it is important to understand that proper strength training helps us to look better, feel better, and function better. Remember that our skeletal muscles serve as the engine, chassis, and shock absorbers of our bodies. Consequently, strength training is an effective means of increasing our physical capacity, improving our athletic performance reducing our injury risk, and improving our self-confidence.

*Wayne L. Westcott, Ph.D.,
Fitness/Research director at the
South Shore YMCA in Quincy,
Massachusetts, and author of
the college textbook Strength
Fitness.*