



# 10 REASONS TO STRENGTH TRAIN

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 10 reasons to strength train:

## 1. AVOID MUSCLE LOSS

Adults who do not strength train lose between 2.2Kg and 3.2Kg of muscle every decade. Although endurance exercise improves 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. Research indicates that an average adult experiences a 2% to 5% reduction in metabolic rate every decade in life. Because regular strength exercises prevent muscle loss, it also prevents the accompanying decrease in resting metabolic rate.

## 3. INCREASE MUSCLE MASS

Because most adults do not perform strength exercises, they need to first replace the muscle tissue that has been lost through inactivity. Fortunately research shows that a standard strength training program can increase muscle mass by about 1.4 Kg over an eight week training period. This is the typical training response for men and women who do 25 minutes of strength exercise, three days per week.

## 4. INCREASE METABOLIC RATE

Research reveals that adding 1.4Kg of muscle increases our resting metabolism by 7%, and our daily calorie requirements by 15%. At rest, a kilogram of muscles required 77 calories per day for tissue maintenance, and during exercise muscle energy utilisation increases dramatically. Adults who replace muscle through sensible strength exercise use more calories all day long, thereby reducing the likelihood of fat accumulation.

## 5. REDUCING BODY FAT

In a 1994 study, strength exercise produced 1.8Kg of fat loss after three months of training, even though the subjects were eating 15% more calories per day. That is, a basic strength training program resulted in 1.4 more muscle, 1.8Kg 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 strength also increases bone density and mineral content. A 1993 study demonstrated significant increases in the bone mineral density of the upper femur after four months of strength exercise.

## 7. IMPROVE GLUCOSE METABOLISM

Researchers have reported a 23% 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. REDUCE LOW BACK PAIN

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 found that low-back patients had significantly less back pain after 10 weeks of specific (full range) strength exercise for the lumbar spine muscles.

## 9. REDUCE RESTING BLOOD PRESSURE

Strength training alone has been shown to reduce resting blood pressure significantly. A 1995 study revealed that combining strength and aerobic exercise is an even more effective means of improving blood pressure readings. After two months of combined exercise, the study participants dropped their systolic blood pressure by 5mm Hg and the diastolic blood pressure by 3mm Hg.

## 10. IMPROVE BLOOD LIPID LEVELS

Although the effect of strength training on blood lipid levels needs further research, several studies 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 endurance and strength exercise.