Number 10
Exercise decreases obesity and obesity related illnesses such as diabetes and hypertension. Cardiovascular conditioning has repeatedly been proven to reduce the risk of obesity-related illnesses. It is estimated that a major portion of the American population is overweight or obese. The top two causes for this phenomenon are overeating, including too many soft/fruit drinks and large portion sizes, and lack of physical activity. With careful portion control and a moderate physical activity program, obesity and obesity related illnesses will be reduced.

Number 9
Exercise reduces the risk of cardiovascular illness. Obesity and hypertension are both risk factors for cardiovascular illness. As people increase in weight, the incidence of cardiovascular illness increases. Cardiovascular disease and obesity-related illnesses are some of the more easily preventable illnesses. A comprehensive conditioning program which includes aerobic, strength, and flexibility training can prevent the onset of these illnesses.

Number 8
Strength training increases your base metabolic rate. Most individuals know a cardiovascular conditioning program will improve their health, but did you know strength training can give your archery workouts a boost? Muscle fiber requires more energy, even at rest, causing an increase in the total number of calories burned by your body everyday. An added benefit is increased capacity for weight (fat) loss. Make sure you include a total body strength workout into your routine three times a week.

Number 7
Conditioning allows archers to shoot with greater intensity during training sessions. A fit archer will be able to work with more intensity during archery training sessions. Overall fitness allows archers to increase the intensity of their shooting. Even new archers notice their improved ability to shoot once they have started a conditioning program. While the point is often debated, strength training can help an archer increase his or her bow weight, especially strength training for the back, shoulders, and rotator cuff area.

Number 6
Conditioning allows archers to shoot more frequently. Not only will archers be able to shoot with more

Having heard all of the excuses and arguments, here are—

The Top Ten Reasons... Archers Must Exercise

Physical conditioning is rated the number one stress reliever.
intensity during training, fit archers are able to shoot and train more frequently. Contrary to what some coaches tell their archers, strength training will not interfere with your ability to shoot. A well designed, properly executed strength program will improve the muscle structure involved in the shot. To maximize both your strength training program and your archery training program should follow these guidelines: perform your strength routine after you shoot, never lift more weight than you can (or should) handle, always use proper form when lifting, warm-up before lifting and shooting and cool down after each session, give your muscles a rest between strength training and shooting, and decrease your lifting program at least one week before a tournament. These guidelines should be tailored to each individual archer. For example, a beginning archer/strength conditioner should only lift minimal weights and allow at least 24 hours between strength training and shooting. A highly conditioned archer with years of strength training experience will even train before shooting and during the competitive season without any decrease in shooting ability or adverse effects.

Number 5
**Exercise, particularly weight and flexibility training, reduces the risk of injury.**

Strength and flexibility training are the cornerstones of injury prevention. Weight bearing strength training, e.g. working with free weights, increases bone density. Increased bone density indicates stronger bones. Strength training also increases muscle mass, reducing the risk of overuse injuries. Flexibility training pulls it all together. Flexibility training increases the range of motion of joints and suppleness of the muscles. This decreases the risk of joint and muscle injuries.

Number 4
**Conditioning provides archers with a stronger base.**

Any archer who has shot a tournament in the wind knows the importance of a strong base. While many archers can be convinced of the importance of developing the “archery muscles,” well developed core and base muscles are of equal and perhaps greater importance. The core muscles of the chest, abdomen, upper and lower back, and gluteus provide a strong core for the archery draw. The base muscles of the legs provide a strong support structure for archery. Every muscle used in the archery draw places stress upon the core and base muscles. The core muscles are particularly important for stability in the archery draw.

Number 3
**Cardiovascular conditioning can improve performance in high stress situations.**

If you do not believe this one, try the following experiment. Set up for an archery training session (indoors or out), put on all of your equipment so you are totally ready to shoot. Place your bow in its stand. Have a stopwatch or timer. Now run to the 30 meter line and back (if you are indoors or using a shorter distance, run to the target and back twice). Immediately pick up your bow and shoot 3 shots. Allow no more than 45 seconds for the three shots. Put your bow down and repeat the sequence two more times. How did you feel? How was your shooting affected by your elevated heart rate? This experiment simulates the elevated heart rate of competition and high stress situations. Next, start and adhere to a cardiovascular conditioning program. After one month, two months, six months, repeat the experiment. You will notice the difference. A cardiovascular conditioning program will lower your resting heart rate. Such a program will also keep your heart rate lower in stressful situations reducing the effect of nervousness and excitement on your archery shot.

Number 2
**Archers are athletes.**

This one is included as a personal conviction. Archers, particularly target archers who compete or aspire to compete on the national and world level, are athletes. As athletes, archers have an obligation to themselves, their sport, their sponsors, their national governing body, their Olympic Committee, their country, their families, and their supporters (not to mention their teammates), their fellow archers (including those who did not make the team), and their coaches to act like athletes. This includes a comprehensive training program including strength, flexibility, and cardiovascular training in addition to their archery training program.

Number 1
**Physical conditioning improves mental and over-all performance.**

Physical conditioning is rated the number one stress reliever. Research also indicates exercise is effective at reducing minor depression. Exercise releases chemicals Continued on the Next Page
into the bloodstream which enhance your mood and your sense of well being. Regular exercise increases mental acuity and results in a positive mental outlook. The extra boost from exercise may just be the one element you need to improve your archery shot, your score, and your competitive standing. Add an improved mental outlook from exercise along with a lower heart rate, a healthy body, and an impressive physique to your archery arsenal and see the results!

Just do it!

Annette Musta is a certified personal trainer who owns and operates her own business, ARH Sports and Fitness in Pennsylvania. She has been shooting for 24 years, but not seriously (she says) until the last five years. She has been a professional ballet dancer (which is why she is known around the ARCO Training Center as “the dancer”) and is currently a licensed pilot. She is the founder and Executive Director of the Pass the Torch Foundation, which matches school age children with athletes training for international competition.