# Youth Strength Training

By Susan Ellis

Youth strength training has long been a controversial subject. Hopefully this article can help to alleviate some of the fears and myths. Strength and power are the foundations of speed skating, especially short track and sprints in long track. That is not to say that endurance is not important, should not be neglected. However, laying a good foundation for future years of strength training is as important for young speed skaters as laying a sound endurance base.

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# Youth strength training: It's OK as long as you do it correctly

The young athlete in your family is disciplined and devoted, squeezing in practice whenever he or she can. Now your child wants to start strength training. You've heard coaches and other parents talk about strength training, but you wonder – is strength training really good for a child?

The answer is yes. Strength training exercises that are supervised, safe and ageappropriate offer many bonuses to young athletes.

The American Academy of Pediatrics, the American College of Sports Medicine, and the National Strength and Conditioning Association all support strength training for kids – if it's done properly. Today's children are increasingly overweight and out of shape. Strength training can help put them on the lifetime path to better health and fitness.

# Strength training, not weightlifting

Strength training for kids – not to be confused with weightlifting, bodybuilding or powerlifting – is a carefully designed program of exercises to increase muscle strength and endurance. Weightlifting, bodybuilding and powerlifting are largely driven by competition, with participants vying to lift heavier weights or build bigger muscles than other athletes. Strength training for kids, however, isn't about lifting the heaviest weight possible. Instead, the focus is on lighter weights and controlled movements, with a special emphasis on proper technique and safety.

"Heavy lifting can put too much strain on young muscles, tendons and growth plates, especially when proper technique is sacrificed in favor of lifting larger amounts of weight," says Edward Laskowski, M.D., a physical medicine and rehabilitation specialist at Mayo Clinic, Rochester, Minn., and co-director of Mayo Clinic's Sports Medicine Center.

Your child can build muscle strength using:

- Free weights
- Weight machines
- Resistance bands
- His or her own body weight

### Benefits abound for young athletes

Strength training for kids has gotten a bad reputation over the years. Lifting weights, for example, was once thought to damage young growth plates – areas of cartilage that have not yet turned to bone. Experts now realize that with good technique and the right amount of resistance, young athletes can avoid growth plate injuries. Strengthening exercises, with proper training and supervision, provide many benefits to a young athlete.

Supervised strength training that emphasizes proper technique:

- Increases your child's muscle strength and endurance
- Protects your child's muscles and joints from injury
- Helps improve performance in a particular sport

Your child may gain other health benefits from strength training, too. These include:

- Better heart and lung function
- A healthy body composition
- Stronger bones
- Lower blood cholesterol levels
- A good fitness habit that lasts a lifetime

Some studies suggest that improved self-esteem and a decreased chance of depression also are upshots of strength training. Your child may get a feel-good boost after improving his or her performance.

#### Who benefits most?

Strength training benefits older preteens more than younger kids, according to Dr. Laskowski.

"It's certainly not necessary for 5- or 6-year-olds to be lifting weights," Dr. Laskowski says. "At that age, kids should be learning body awareness and body control, balance, running, jumping and throwing – movement skills we used to learn in P.E. class."

Strength training also helps those kids who have a focused interest in a particular sport.

"A figure skater who has a goal of jumping higher will be able to improve with strength training," says Dr. Laskowski. "Football players, soccer players – just about all young athletes – can enhance their performance with a strength training program."

Because technique and proper form are so important, don't let your child begin strength training until he or she is mature enough to accept directions. A good rule of thumb is if your child is old enough to participate in organized sports, such as hockey, soccer or gymnastics, he or she is ready for some form of strength training.

# Guidelines for youth strength training

The right strength training program for your child isn't just a scaled-down version of what an adult would do. A youth strength training program needs to focus on:

- Correct technique
- Smooth, controlled motions
- Less resistance and many repetitions

That's the opposite of many adult programs, which focus on fewer repetitions with heavier weights.

Your child's coach or athletic instructor can tailor a strength training program for your child according to your child's age, size, skills and sports interests.

The general principles of youth strength training are:

- **Provide instruction**. Show your child how to perform strength training exercises using controlled breathing and proper form. You might ask a trained professional to demonstrate. If you enroll your child in a class, make sure there's at least one instructor for every 10 students to ensure that your child receives proper instruction.
- **Supervise**. Adult supervision is important to reinforce safety and good technique. For instance, if your child lifts weights to strength train, a spotter someone who stands ready to grab the weights can step in if the weight becomes too heavy. As a parent, you can get involved in strength training, too. You can supervise your child and serve as a positive reinforcement for healthy lifestyle habits.
- Warm up; cool down. Have your child begin each workout with 5 to 10 minutes of a
  warm-up activity, such as walking, jogging in place or jumping rope. This makes
  muscles warm and ready for action, all the while minimizing the risk of injury. End
  each workout with a cool down, including some light stretching.
- Think light weights, controlled repetitions. One set of 12 to 20 repetitions at a lighter weight is all it takes. Kids don't need weights specially sized for them. They can safely lift adult-size weights as long as the weight isn't too heavy. The resistance doesn't have to come from weights, either. Resistance tubing can be just as effective especially for younger kids.
- **Rest between workouts**. Establish a rest period of at least a day between strength training workouts. Two or three sessions per week are plenty.
- **Track progress**. Teach your child how to fill out a chart of which exercises, how many repetitions, and what weights or resistance he or she uses during a workout. It will be helpful in monitoring progress.
- Add weight gradually. Only when your child masters proper form should you add weight. If your child can't do 10 repetitions at a certain weight, it's too much.
- **Keep it fun**. Vary the routine often. Kids are more likely to stick with strength training if they don't get bored by it.

Results won't come overnight. But over time, you and your child will notice a difference in your child's muscle strength and endurance.

### A healthy habit for a lifetime

If your child shows an interest in strength training, know that it can be a safe and effective activity.

"Strength training is one part of a well-rounded fitness program, along with aerobic exercise and stretching," says Dr. Laskowski. "If you establish a habit of strength training with good technique early on, your child will likely reap benefits for a lifetime."

Encourage physical activity in your child – it's a key step to becoming a healthy adult.

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Additional articles on youth strength training can be found on the web at:

InfoSports – Strength Training for Young Athletes (https://www.infosports.com/?req=clvclinic&page=strength-training)

KidsHealth – Strength Training (https://kidshealth.org/en/parents/strength-training.html?WT.ac=ctg#catstaying-fit)

American College of Sports Medicine – Youth Strength Training (https://www.acsm.org/docs/default-source/files-for-resource-library/smb-youth-strength-training.pdf?sfvrsn=85a44429\_2)