

Becoming Your Physical Best

Muscular Strength and Endurance

Muscular strength is the ability of a muscle(s) to use the maximum force you're able against a resistance one time, through your full range of motion. To a child this is the ability to lift and carry objects without help.

Muscular endurance is the ability of a muscle or muscle group to use a less-than-maximum force repeatedly

over time. To a child, this means, for example, their legs don't get tired as quickly when climbing steps. Often, physical activities that develop muscular strength also develop some muscular endurance. For our purposes, we explore them together as muscular fitness.

Parents' Corner

No need to try to create the next body builder at your house—simply have fun playing together to get the most benefit. A healthy level of muscular fitness (muscular strength and endurance) helps us:

- Be stronger.
- Play longer.

Muscular Strength and Endurance Safety

Elementary aged children do a number of things in the course of typical play to build muscular strength and endurance—run, climb, swing from monkey bars, lift, hop, and so on. Indeed, these are the most appropriate type of activities for children to participate in for muscular strength and endurance. In addition, under proper supervision, children may safely do more formal

“body weight” activities, such as curl-ups and push-ups. Elementary-aged children should *not* participate in any type of weight lifting, although equipment such as resistance bands may be appropriate under supervision in the upper grades. Ask your child's teacher for guidance for using this tool. Any new activity should be approached slowly. Encourage your child to gradually build up muscular strength and endurance through typical play and fun activities, such as those described elsewhere in this newsletter.



How Much Is Enough?

Your child is participating in the Physical Best program, created by the physical education experts of the National Association for Sport and Physical Education. This program teaches your child the following "FITT Guidelines" to guide participation and enhance health-related physical fitness:

- **Frequency**— how often
- **Intensity**— how hard
- **Time**— how long
- **Type**— what kind

Here are down-to-earth guidelines for muscular strength and endurance training:

- **Frequency**— 2-3 times per week, including related play activities
- **Intensity**— Moderate, a challenge level equal to that a child might do in play
- **Time**— Short bursts of play or short sets of body-weight repetitions with rest times long enough to ease any discomfort, not to exceed 20-40 minutes.
- **Type**— Play activities (all grades); bodyweight exercises (4th-5th grades)

Kids' Corner

Monkey Madness (K-2 grades and older)

Go to a nice playground with an adult to help keep you safe. Do these fun challenges:

- At a playground, practice how many rungs you can go on the monkey bars.
- See if you can pull up to your chin on one bar. How long can you hold this position?
- Climb steps and slide back down on a pole or a slide. How many times can you do the same steps in two minutes? (Be careful, though. Do this only when the piece of equipment is not crowded. Watch your step, too!)

Curl-Up and Push-Up Challenges (3rd, 4th, and 5th grades)

Once your physical education teacher has taught you how to do a curl-up correctly, see how many you can do each commercial break while watching TV. Record your total for each break on a piece of paper. Add up your grand total at the end of the show. Do push-ups instead of curl-ups. Or, do pushups one commercial break, curl-ups the next commercial break, and then push-ups, and so on. Add up your grand total at the end of the show. Get a friend to join you and find your combined grand total.

Family Fun

Explore what your community has to offer to develop muscular strength and endurance for everyone in the family. Younger kids may enjoy "park hopping": Visit a variety of city parks, one after the other. Only stay 15-30 minutes at each to keep interest high. Join in the fun: Travel through the playground equipment and explore the grounds follow-the-leader-style and get some fresh air yourself! Take a picnic lunch, plenty of water, and enjoy some real quality time.

Older children may enjoy finding a pool, gym, Water Park, or climbing wall at which to build their muscular strength and endurance. Visit the sites ahead of time via the Internet, by phone, or by sending away for brochures. Use these tools to screen for each facility's attention to safety, proper supervision, certified instruction, cleanliness, and comfort. Ask your friends, neighbors, or child's physical education teacher for recommendations of child friendly spots.

