

healthy & fit on the go

strength training

what is it? - Moderate to high intensity resistance exercise that increases muscle fitness and bone strength*. Resistance can be achieved with handheld or machine-type weights, calisthenics, or your own body weight.

how much? - Adults should do muscle-strengthening activities involving all major muscle groups on 2 or more days a week*. Perform at least one set of 8-12 repetitions for each muscle group. Use enough resistance so it's difficult to finish the 12th repetition. *Source: 2008 Physical Activity Guidelines for Americans www.health.gov/paguidelines

major muscle groups - Regardless of the type of weight resistance, use slow controlled movements throughout the range of motion in each exercise.

chest - push-ups (on the floor or against a wall)

upper back - push-ups, pull-ups, "rowing"

shoulders - push-ups, pull-ups, "shrugging" (shoulders to ears with resistance)

biceps - curls (hold upper arm still and curl hand to shoulder with resistance)

triceps - extensions (hold upper arms still at sides, bend and extend at elbow)

abdomen - plain old bent knee sit-ups or curl-ups are very effective

thighs - front (quadriceps): start with knee bent, straighten leg out to front with resistance. Back (hamstrings): start with knee straight and pull heel to buttocks with resistance. (resistance: a weight or stretch band)

hips - leg lifts out to the side, and out to the back against resistance

calves - toe-raises (lift heels off floor, shift weight to balls of feet & hold)



free and nearly free resistance tools

body weight - The weight of your own body and limbs can be a very effective resistance tool. You use your torso as the weight or resistance for sit-ups, your body weight for toe raises and you can use your leg weight as resistance for leg lifts to the side to strengthen your hips. In fact, it's a good idea to learn new strengthening exercises without any added weights or resistance. Once you're proficient, you can add weight. Two very popular and effective types of strength training – Pilates and Yoga – need no added weight or resistance.

household items - Be creative, try some of these common items as weights, just remember to start light (one to five pounds) to avoid injury:

- Soup cans or other cans of food, available in weights of 6 ounces and up
- Books
- Sand bags
- Stretch bands can be made from surgical tubing, wide elastic, or large rubber bands
- Rocks (put a few in an old tube sock and tie a knot)

free weights and resistance machines - Muscle isolating machines (like Cybex), barbells with weight plates, and hand-held dumbbells are the most common tools used for strength training in schools and fitness gyms. Check with your local school or gym for an orientation or training session where you can learn how to strength train under the supervision of a trained coach. Once you learn the exercises, you can continue strength training at home.