Gym & Fitness Terminology

(Ron Jones, MS, ACSM Health Fitness Specialist, Corporate Wellcoach)



Aerobic: Aerobic exercise means the body is using oxygen. The intensity level is moderate. Jogging, cycling, and other moderate forms of exercise are aerobic.

Anaerobic: Anaerobic exercise means your body is not using much oxygen. The intensity level is hard. Sprinting and intense weight lifting is anaerobic.

Barbell: Full-length bar that holds weight plates on each end. The amount of weight can be adjusted by sliding plates on or off the end of the bar. Weight plates are secured by a clip mechanism or some sort of safety clamp.

Belt: Refers to a lifting belt that is very wide and heavy for securing your low back when lifting extremely heavy weights. *Belts will not prevent injury*—good form, technique, and core muscle strength (and endurance) prevents injury.

Burnout: Lifting weight until your muscles "burn" so bad you cannot continue. The burn comes from muscle fatigue during hard exercise.

Chalk: Some people use chalk on their hands to dry up the sweat and give them a better grip on the weights. Usually in a block form similar to soap.

Circuit Training: A weight program where you perform a series of exercises one right after the other with minimal or no rest. The amount of reps is usually higher with less weight. It has an aerobic benefit in addition to strength gains because of the minimal rest. Your heart doesn't have time to go back to a full rest because you move right into another exercise. Examples: squats for legs then bench press for chest, or back rows then jogging in place, etc.

Contraction: Muscles can be shortened, lengthened, or develop force without dynamic movement—all of which are contractions. *See "Muscle Actions."

Core Muscles: Refers to postural muscles surrounding your whole torso. This is your "center of strength and endurance" that allows for good posture, breathing, maintaining a healthy back, and more efficient movements.

Dumbbell: Hand-held weights that have a short bar in-between the end weights. They can have plates that are secured into the end of the bar by bolts or be molded together as a one-piece unit.

Free Weights: These are weights that are not attached to a machine. Dumbbells and barbells are free weights. The "weights" go onto the end of dumbbells and barbells. Kettlebells are also considered free weights. Machines for weight lifting are different--the weights on a machine travel up and down along a guide or rod. The lifting bar, or handle, is then attached by a cable or belt system. Free weights can be better for you, but they do involve more safety and technique. Because of this, many people avoid them. However, free weights can be very safe and effective if handled correctly.

Machine Weights: These can be easier for beginners because the weights are fixed on a tracking system. They usually have a pin that inserts into a slot or hole that designates how much weight you will lift. They are faster than free weights but do not allow you to use your postural muscles as much for support because the lifting bar is in a more "fixed" position. Better designed machines fit multiple populations from larger men to smaller framed women.

Muscle Actions: There are basically three types of muscle actions you should be aware of when training.

- 1. Concentric: When the weight is lifted, the muscle shortens.
- 2. Eccentric: When the weight is lowered, the muscle is lengthened in a controlled manner.
- 3. <u>Isometric</u>: When a muscle is activated and develops force but no movement occurs.

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Olympic Bar: A full-length barbell of heavy construction. This bar is designed to hold hundreds of pounds on each side. The bar alone weighs 45 pounds.

Plates: Refers to the weight plates that go on the ends of dumbbells, barbells, or a weight machine. Weight varies from $2 \frac{1}{2}$ to 100 pounds each. The most common plate weights are: 5, 10, 25, 35, and 45 lbs.

Rack: Can refer to placing the weight plates back onto the weight tree ("racking" the weights) or lifting the barbell, or dumbbell, back onto its rack. A rack is sort of like a hanger—the weights are placed, or they "hang," on the rack.

Rep: Stands for "repetition." Lifting the weight once and returning to the starting position would be "one rep." A number of reps performed simultaneously equal "one set."

Resistance Training: Also known as strength or weight training or strength conditioning. This type of exercise requires the body's muscles to move, or attempt to move, against an opposing force. The opposing force is usually presented by some type of equipment but can be just your own body weight.

Rest Periods: Refers to the amount of time you take to rest in-between sets. During a standard program, you would rest about 2-2 ½ minutes before performing another set. Some circuit training programs replace the rest period with another exercise, so your "rest" is spent working something else.

ROM: This stands for Range of Motion. ROM is the distance or range that a limb or joint can "safely" travel. It is best to lift with a full ROM so you gain strength throughout the whole ROM instead of just increasing strength in a limited ROM.

Safety Clip or Clamp: A simple device that slides, or clamps, onto the end of barbell to keep the weight plates from sliding off if the bar is tipped on one side.

Set: A set is compromised of many reps. Reps can vary depending upon program design. The standard number or reps per set is about 8-15.

Spotting: A safety technique that involves one person standing close to the person who is lifting. If the person who is lifting gets in trouble, the spotter helps them to lift the weight back up, or onto, the rack.

Weight Tree: A stand that holds the weight plates. The stand usually resembles a tree or 'A' shape. It has rods that stick out. The plates hang on the tree by these rods. A weight tree is a safe place to store plates out of the way.

Reference: Designing Resistance Training Programs by Fleck and Kraemer. 2nd Ed. Human Kinetics: Champaign, IL. 1997.

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