

**CHAPTER 9 Basics of Resistance Training**

**Lesson 3 Resistance-Training Myths**

**What You Will Do**

- Compare differences between the muscles of males and females.
- Identify the age at which a program of resistance training can safely be started.
- Recognize how resistance training can benefit older adults.



**CHAPTER 9 Basics of Resistance Training**

**Lesson 3 Resistance-Training Myths**

**Terms to Know**

- testosterone
- osteoporosis
- muscle tone



## CHAPTER 9 Basics of Resistance Training

### Lesson 3 Resistance-Training Myths

#### Resistance Training Myths

There are several myths about resistance training that may prevent some people from making it a part of their workout.

Exploring some of these myths will help you understand the reality of resistance training and its benefits.



## CHAPTER 9 Basics of Resistance Training

### Lesson 3 Resistance-Training Myths

#### Resistance-Training Myths Associated with Females

**MYTH** Females who lift weights will develop big, bulky muscles.

**FACT** Several factors assure that females who engage in strength training will not develop big, bulky muscles.



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**Resistance-Training Myths Associated with Females**

The average female compared to the average male:

- Smaller and lighter skeleton
- Narrower shoulders
- Less muscle mass
- Fewer muscle fibers
- Lower **testosterone** levels



**Term to Know**

**Testosterone**

A chemical produced by the body that plays an important role in building muscles.

**CHAPTER 9 Basics of Resistance Training**

**Lesson 3 Resistance-Training Myths**

**Resistance-Training Myths Associated with Females**

**MYTH** Female muscles will not develop increased strength.

**FACT** Although females typically have less muscular strength than males, this does not mean lesser strength gains.



**CHAPTER 9 Basics of Resistance Training**

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**Resistance-Training Myths Associated with Females**

Females who follow regular weight training programs have a reduced risk of **osteoporosis**.



**Term to Know**

**Osteoporosis**

A bone disease that causes decreased bone mass and density, especially in older women.

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**Other Resistance-Training Myths**

**MYTH** Weight training is harmful to the growth and development of teens.

**FACT** With proper supervision and training under a certified fitness trainer or coach, weight training can be done by children as young as age 5.



**CHAPTER 9** Basics of Resistance Training

Lesson **3** Resistance-Training Myths

**Other Resistance-Training Myths**

**MYTH** Older adults should avoid weight training.

**FACT** Older adults can rapidly acquire strength gains and can reap many benefits from resistance training.



**CHAPTER 9** Basics of Resistance Training

Lesson **3** Resistance-Training Myths

**Other Resistance-Training Myths**

**MYTH** With enough time and effort, anybody can be a world-class bodybuilder or power weight-lifter.

**FACT** Although anyone can expect strength and size improvements with regular weight training, not everyone will obtain the same results. You are limited by your heredity.



**CHAPTER 9 Basics of Resistance Training**

**Lesson 3 Resistance-Training Myths**

**Other Resistance-Training Myths**

**MYTH** Muscle can turn into fat if a person stops lifting weights.

**FACT** Muscle and fat are different kinds of tissue. They are not interchangeable.



**CHAPTER 9 Basics of Resistance Training**

**Lesson 3 Resistance-Training Myths**

**Other Resistance-Training Myths**

**FACT** Strength training improves lean body mass and tones muscles.

People who stop lifting weights may see a decrease in muscle size and **muscle tone**.



**Term to Know**

**Muscle tone**  
A muscle's firmness and definition.

**CHAPTER 9 Basics of Resistance Training**

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**Other Resistance-Training Myths**

**MYTH** Resistance training will limit or reduce your flexibility.

**FACT** Proper weight lifting will help you maintain and improve your level of flexibility, as long as your fitness program includes proper stretching.



**CHAPTER 9 Basics of Resistance Training**

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**Other Resistance-Training Myths**

**MYTH** Larger muscles will hinder athletic performance.

**FACT** Increased muscle strength improves coordination and allows your body to move *more* quickly.





## CHAPTER 9 Basics of Resistance Training

### Lesson 3 Resistance-Training Myths

1. **Recall** Why are females unlikely to develop large, bulky muscles?
2. **Recall** How can weight training help prevent osteoporosis?
3. **Vocabulary** What is *muscle tone*?

#### 3. Vocabulary

A muscle's firmness and definition.

## CHAPTER 9 Basics of Resistance Training

### Lesson 4 Resistance-Training Equipment and Gear

#### What You Will Do

- Evaluate the advantages and disadvantages of various weight-training devices.
- Identify different pieces of equipment in resistance-training areas.
- Evaluate consumer issues related to weight-training equipment.
- Participate in activities to evaluate and develop muscular strength.



## CHAPTER 9 Basics of Resistance Training

### Lesson 4 Resistance-Training Equipment and Gear

#### Terms to Know

- |                   |                          |
|-------------------|--------------------------|
| ■ free weights    | ■ plyometric exercises   |
| ■ spotter         | ■ calisthenic exercises  |
| ■ weight machines | ■ weight-training gloves |
| ■ exercise bands  | ■ weight-training belts  |



**CHAPTER 9 Basics of Resistance Training**

**Lesson 4 Resistance-Training Equipment and Gear**

**Resistance-Training Equipment and Gear**

Using equipment safely is an important aspect of safety in the weight room.

Resistance training is performed using a variety of methods and equipment.



**CHAPTER 9 Basics of Resistance Training**

**Lesson 4 Resistance-Training Equipment and Gear**

**Resistance-Training Equipment and Gear**

**Free weights** are called “free” weights because of the unlimited direction and movement capabilities of this equipment.



**Term to Know**

**Free weights**

A term applied collectively to dumbbells and barbells, as well as plates and clips.

## CHAPTER 9 Basics of Resistance Training

### Lesson 4 Resistance-Training Equipment and Gear

#### Resistance-Training Equipment and Gear

A *dumbbell* is a short bar with weights at both ends, designed to be lifted with one hand.

A *barbell* is a long, metal bar with weights at both ends, designed to be lifted with both hands.



## CHAPTER 9 Basics of Resistance Training

### Lesson 4 Resistance-Training Equipment and Gear

#### Resistance-Training Equipment and Gear

The weights placed on a barbell or dumbbell are referred to as *plates*.

Plates are fasted to the bar using *clips* and *collars*.



**CHAPTER 9 Basics of Resistance Training**

**Lesson 4 Resistance-Training Equipment and Gear**

**Resistance-Training Equipment and Gear**

When using free weights, it is vital to have a **spotter**.



**Term to Know**

**Spotter**

A partner who can assist with the safe handling of weights and offer encouragement during a training session.

**CHAPTER 9 Basics of Resistance Training**

**Lesson 4 Resistance-Training Equipment and Gear**

**Resistance-Training Equipment and Gear**

Most **weight machines** target a single muscle area. They require little or no balance on the part of the user.



**Term to Know**

**Weight machines**

Mechanical devices that move weights up and down using a system of cables and pulleys.

## CHAPTER 9 Basics of Resistance Training

### Lesson 4 Resistance-Training Equipment and Gear

#### Resistance-Training Equipment and Gear

**Exercise bands** are a low-cost alternative to free weights and weight machines.



#### Term to Know

##### Exercise bands

Elastic bands of tubing made of latex that are used to develop muscular strength and endurance.

## CHAPTER 9 Basics of Resistance Training

### Lesson 4 Resistance-Training Equipment and Gear

#### Resistance-Training Equipment and Gear

Many **plyometric exercises** require jumping, leaping, and bounding.

They can place stress on tendons, so they are not recommended for beginners.



#### Term to Know

##### Plyometric exercises

A quick, powerful muscular movement that requires the muscle to be prestretched just before a quick contraction.

## CHAPTER 9 Basics of Resistance Training

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#### Resistance-Training Equipment and Gear

**Calisthenic** exercises are low-level resistance activities that include such well-known exercises as pull-ups, push-ups, abdominal curl-ups, and jumping jacks.



#### Term to Know

##### Calisthenic exercises

Exercises that create resistance by using your body weight.

## CHAPTER 9 Basics of Resistance Training

### Lesson 4 Resistance-Training Equipment and Gear

#### Resistance-Training Gear

Remember these tips when choosing clothing and footwear for strength training:

- It should be nonbinding to allow for a full range of motion.
- It should keep you at a comfortable temperature.
- It should be free of parts that could become tangled in the equipment.
- It should fit properly.



**CHAPTER 9 Basics of Resistance Training**

**Lesson 4 Resistance-Training Equipment and Gear**

**Resistance-Training Gear**

Always wear properly fitted footwear, designed to give you good arch support and provide traction.



**CHAPTER 9 Basics of Resistance Training**

**Lesson 4 Resistance-Training Equipment and Gear**

**Resistance-Training Gear**

**Weight training gloves** will improve your grip and protect your hands.



**Term to Know**

**Weight-training gloves**

Gloves that prevent blisters and calluses from forming on your palms.

**CHAPTER 9 Basics of Resistance Training**

**Lesson 4 Resistance-Training Equipment and Gear**

**Resistance-Training Gear**

**Weight-training belts stabilize the spine.**



**Term to Know**

**Weight-training belts**

Belts that protect your lower back and stomach when you lift heavy weights.

**CHAPTER 9 Basics of Resistance Training**

**Lesson 4 Resistance-Training Equipment and Gear**

**Resistance-Training Gear**

Straps and wraps are canvas-like strips that give additional support to joints.

They are wrapped around your wrist and then twisted around a bar.



## CHAPTER 9 Basics of Resistance Training

### Lesson 4 Resistance-Training Equipment and Gear

1. **Vocabulary** What is the collective name by which dumbbells and barbells are known?

2. **Recall** What are *plyometric exercises*? Who should do them?

3. **Recall** What are the advantages of wearing weight-training gloves while lifting?

#### 3. Recall

They reduce the development of calluses and prevent bars from slipping.