

Chapter 11 – Muscle Fitness

Muscle Fitness Basics (pg. 175-176)

- Muscle fitness is comprised of 2 health related parts of physical fitness: _____ & _____.
- _____ is the ability to contract muscles many times without tiring or to hold muscle contraction for a long time.
 - Muscular endurance is developed by doing an exercise many times with less resistance
- _____ – the amount of force a muscle can exert. OR the amount of weight a muscle group can lift one time.
 - Strength is developed by doing an exercise a few times with a lot of resistance
- _____ – the gradual increase in resistance used to improve muscle fitness
- Strength training tends to _____ the size of muscles as they become stronger.
- _____ is the increase in muscle size
- **Power** – the rapid application of strength.

Muscle Fitness Terminology (pg. 176)

- _____ – the number of consecutive times you do an exercise
- _____ – a group of repetitions

Isotonic & Isometric (pg. 177)

- **Isotonic contraction** – _____
- _____ – an exercise that involves isotonic contractions and in which body parts move
- Two types of Isotonic muscle contractions are _____ and _____.
 - _____ – shortening
 - _____ – lengthening
- **Isometric contraction** – _____
- **Isometric exercises** – involve isometric contractions & body parts do not move. STATIONARY
 - Example: wall push & hand push

Muscle Fibers (pg. 177)

- **Slow Twitch Muscle Fibers** – contract at _____ rate and usually _____ in color
 - Generate less force than fast-twitch but are able to resist fatigue.
- **Fast Twitch Muscle Fibers** – contract _____ and white in color
 - Generate more force when they contract and are important for strength activities.
- Types of fibers in your muscles are determined by your _____. But you can increase strength and endurance with proper training.

Resistance Exercise (pg. 179)

- **Weight Training** – improves muscular strength and endurance
- _____ – same as weight training except machine provides resistance used rather than weights.
- _____ – a type of physical activity program in which the person performs a group of exercises in a sequence with brief rests between exercises.
- **Weight Lifting** – the lifting of weights to build strength; also called resistance training. Athletes try to lift a maximum load.
 - 2 exercises: _____ & _____
- **Powerlifting** – competitive sport using free weights. The athletes try to make _____ for each type of lift.
 - 3 exercises: bench press, squat, deadlift
- **Body building** – competitive sport where athletes are concerned about the _____ of their bodies. Athletes are judged on how large and well defined their muscles are.

Muscle Fitness Assessment (pg. 180)

- **One Repetition Maximum (1RM)** – measures strength
 - A 1RM test requires a person to determine the amount of weight that can be lifted in 1 repetition.
 - Example: a person lifts 100 lbs. 1 time, but not twice. The 1RM is 100 lbs.

Building Strength (pg. 185–186)

- If your muscles regularly work against heavy load, they will stay _____. If you do not use your muscles they will become _____.
- Muscular strength can help prevent some _____ problems.

- Muscular strength can also strengthen bones & reduce the risk of osteoporosis.
- Muscular strength can help prevent muscle injuries and soreness.
- Muscle burns more calories than _____.

Myths & Misconceptions (pg. 186-187)

- _____ – a term used to identify a condition that occurs when people become obsessed with building muscle.
- Muscle fitness for females
 - Some females fear that strength training will cause their bodies to look masculine, BUT the _____ in female bodies prevent them from developing large bulky muscles.
- _____ – having bulky muscles that decrease a person's flexibility

Fitness Principles and Strength (pg. 187-188)

- **Principle of Overload** – muscles must work against a greater load than they normally have o in regular daily activity.
 - Muscle must contract to at least 60% of 1RM if it is going to increase in strength.
- _____ – overload gradually
 - Increase the load over a period of time to get the best improvement in muscle strength.
 - **Double progressive systems** – perform a low number of repetitions in each set. As you improve, increase the number of _____ you perform. When you can do _____ reps, drop back the number of reps and increase _____.
- _____ – you must exercise the specific muscles you wish to develop.
 - 8-10 exercises to build each of the specific muscle groups in the body.
- _____ – you need to allow muscles time to rest and recover after a workout.
 - Should allow at least one day between workouts.
 - Some people choose to workout each day, but do leg exercises one day and arms the next.

The FIT formula & Strength (pg. 188)

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Resistance Training Guidelines (pg. 189)

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