

# WEIGHT TRAINING

## Benefits of Strength Training:

Strength training is exercise that uses resistance—for example, weights—to strengthen and condition the musculoskeletal system, improving muscle tone and endurance. "Strength-training" is used as a general term synonymous with other common terms: "weightlifting" and "resistance training." Physiologically, the benefits of consistent strength training include an increase in muscle size and tone, increased muscle strength, and increases in tendon, bone, and ligament strength. Strength-training has also been shown to improve psychological health as well, by increasing self-esteem, confidence and self-worth.

These improvements have a great influence on our physical performance, metabolic efficiency, physical appearance and risk of injury. I'll go into each of these in detail, outlining some very exciting benefits of a good strength-training program that most people overlook or don't realize.

## TERMINOLOGY:

**Frequency:** How often each training session occurs.

**Intensity:** The tension or stress put on a muscle which is dependent on the number of sets, reps, rest period, duration and load.

**Time:** The rate of work or how it takes to complete a prescribed movement, set of movements and / or training session.

**Type:** The type of exercise or activity engaged in.

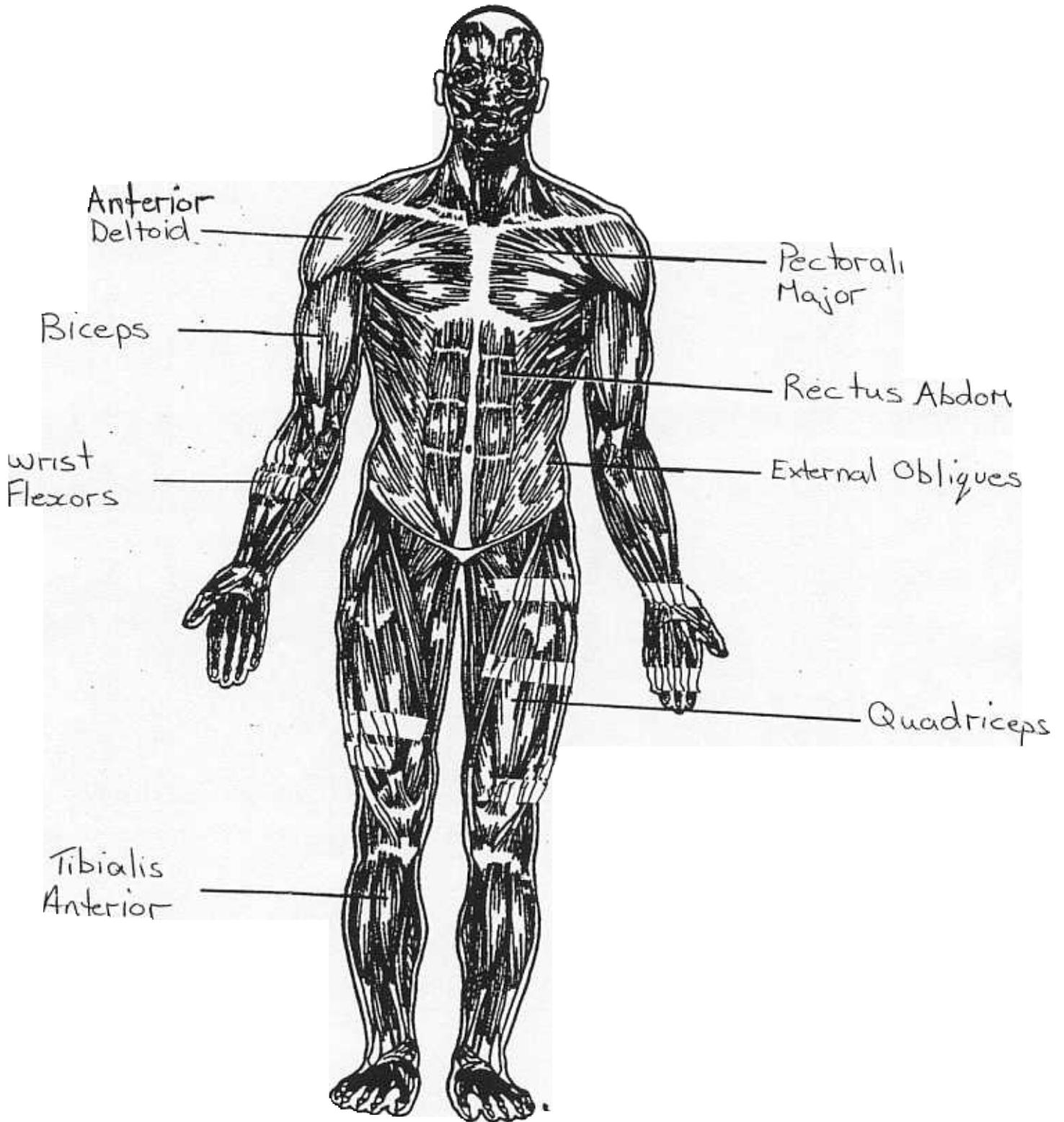
**Reps:** Number of times an exercise movement is repeated.

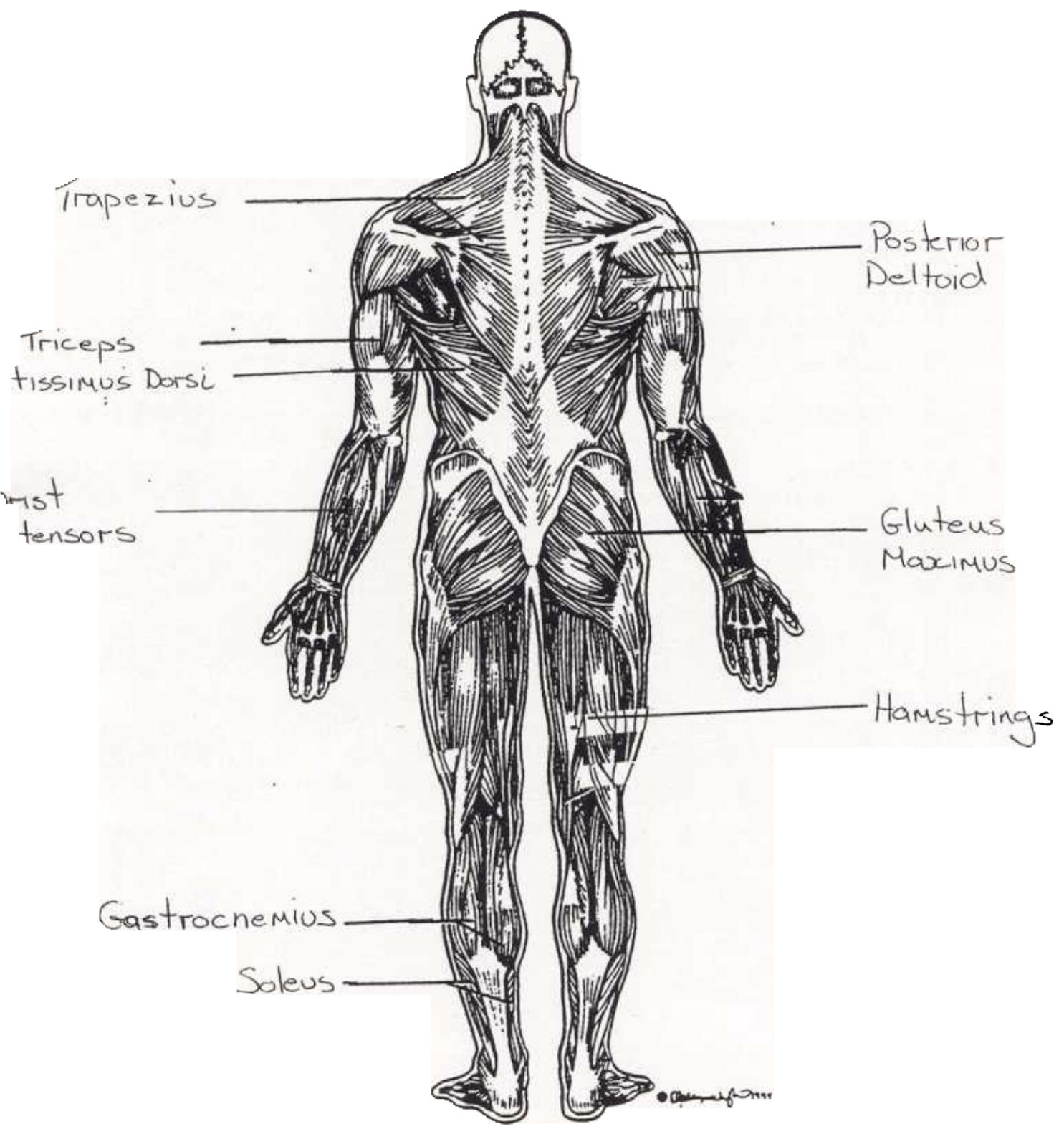
**Sets:** A group of repetitions.

**Load:** Amount of weight being handled, usually measured in lb. or Kg.

## Principles of Training

- 1. OVERLOAD:** A muscle will only strengthen when forced to operate beyond its customary intensity. The load must be progressively increased in order for further adaptive responses as training develops, and the training stimulus is gradually raised. This is accomplished by progression.
- 2. PROGRESSION:** Overload is accomplished by;
  - increasing the resistance, e.g. adding 5 lbs. to the barbell
  - increasing the number of repetitions with a particular weight
  - increasing the number of sets of the exercise
  - increasing the intensity. More work in the same time, i.e. reducing the recovery (resting) periods





Trapezius

Posterior Deltoid

Triceps  
brachii

Wrist  
extensors

Gluteus  
Maximus

Hamstrings

Gastrocnemius

Soleus

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