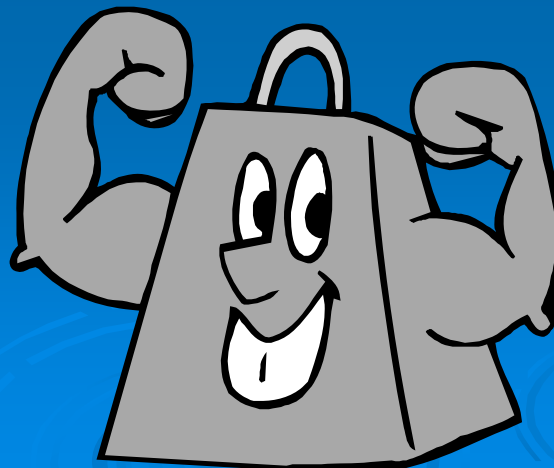
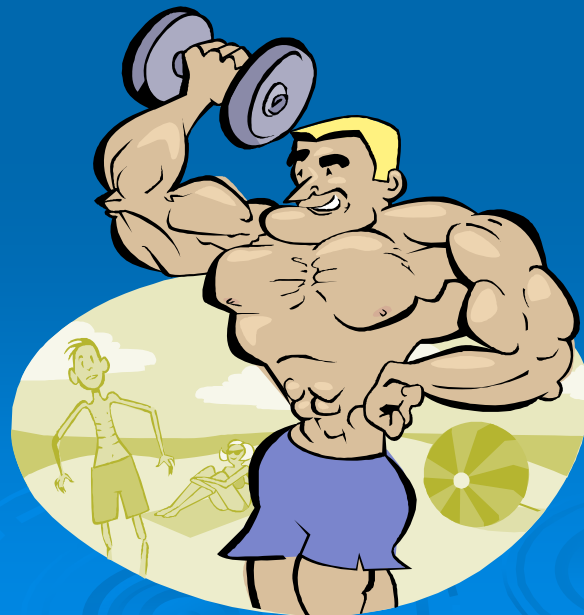


Chapter 8

Muscular Fitness



Muscular Strength

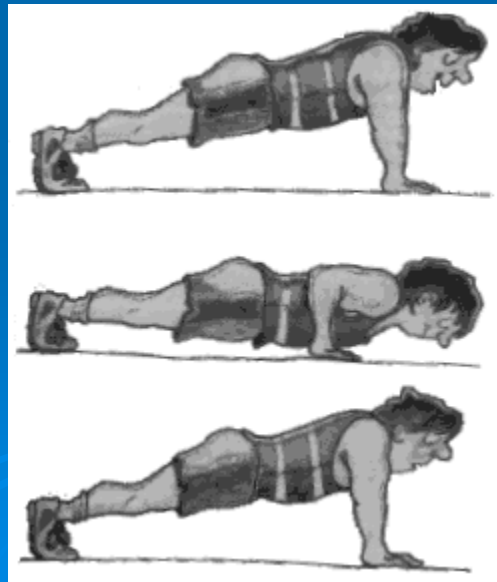




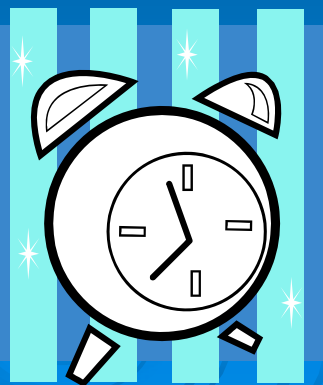
**Is the ability of a muscle
group to apply
muscular force against
a resistance one time.**



Muscular Endurance



Is the ability of the same muscle or muscle group to repeat a movement over a period of time.



To develop muscular fitness there are two types of exercises that provide resistance to make a muscle work harder than normal.

- **Isometric exercises**
- **Isotonic exercises**


Isometric exercises



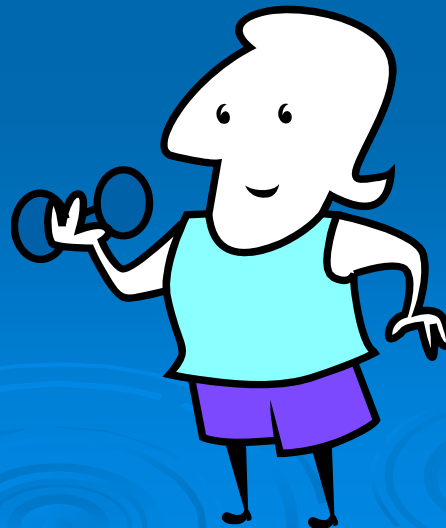
Are exercises in which you contract, or tighten, your muscles but do not change their length.



To perform an isometric exercise you push against a stationary object or against another part of your body that prevents movement.




Isotonic exercises



**Are those in which
you lengthen and
shorten the muscle
through a full range of
movement while
lowering and raising a
resistance.**

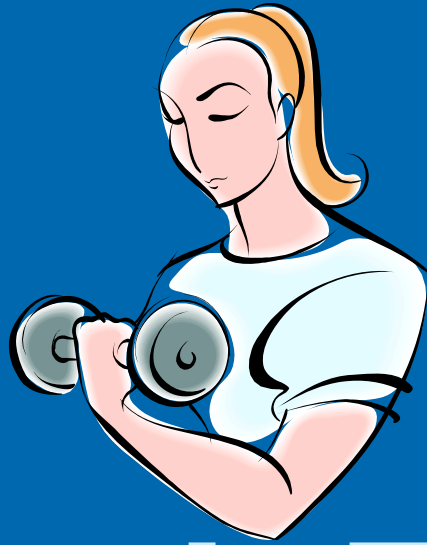


A repetition is the completion of a single, full range movement of the body part being exercised.



A set is a group of repetitions performed one after the other.





Strength Training Guidelines




You should train with a partner who can serve as a spotter.


The spotter ensures the lifter's safety, watches and corrects form.



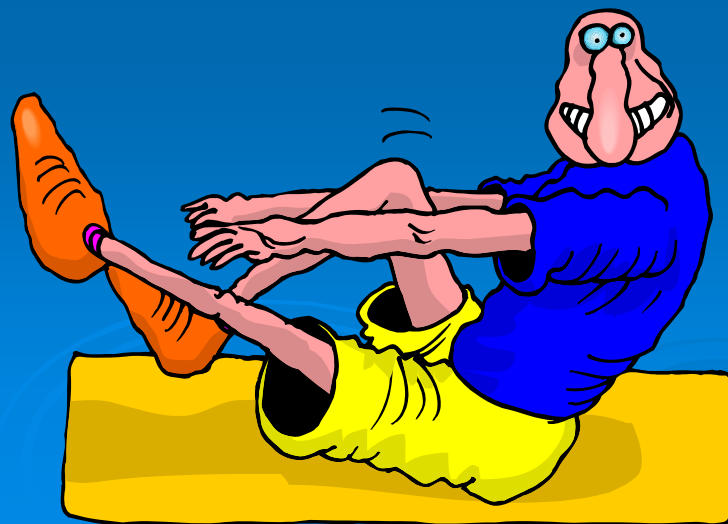
**Warm-up properly
before you begin
your strength
training program.**

The background of the slide is a solid blue color. In the lower right quadrant, there are several faint, concentric circular ripples, resembling water droplets hitting a surface, which add a subtle decorative element to the design.

**Exhale when pushing
against the
resistance and inhale
while lowering the
weight.**



**Go through the full
range of motion to
increase flexibility.**



**Exercise muscles on
both sides of the joint
to ensure muscle
balance.**



Lift the weight on a
count of 2.



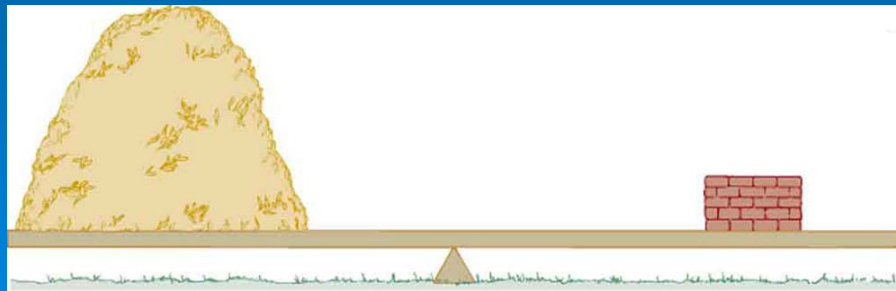
Lower it more slowly
on a count of 4.



**Why is it important to have
good muscular fitness?**



The person with more muscle looks healthier because muscle is denser than fat.



It will help you have good posture.

Stronger muscles help you perform physical activity better.

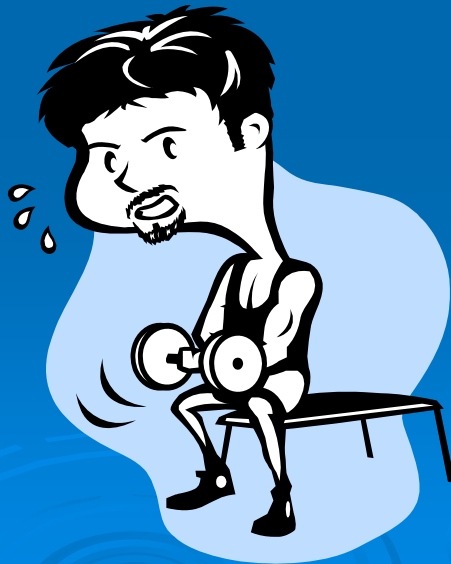


Strong muscles also help:


- To reduce fatigue.
- To avoid back pain.
- To prevent muscle injuries and muscle soreness.



Principle of Overload



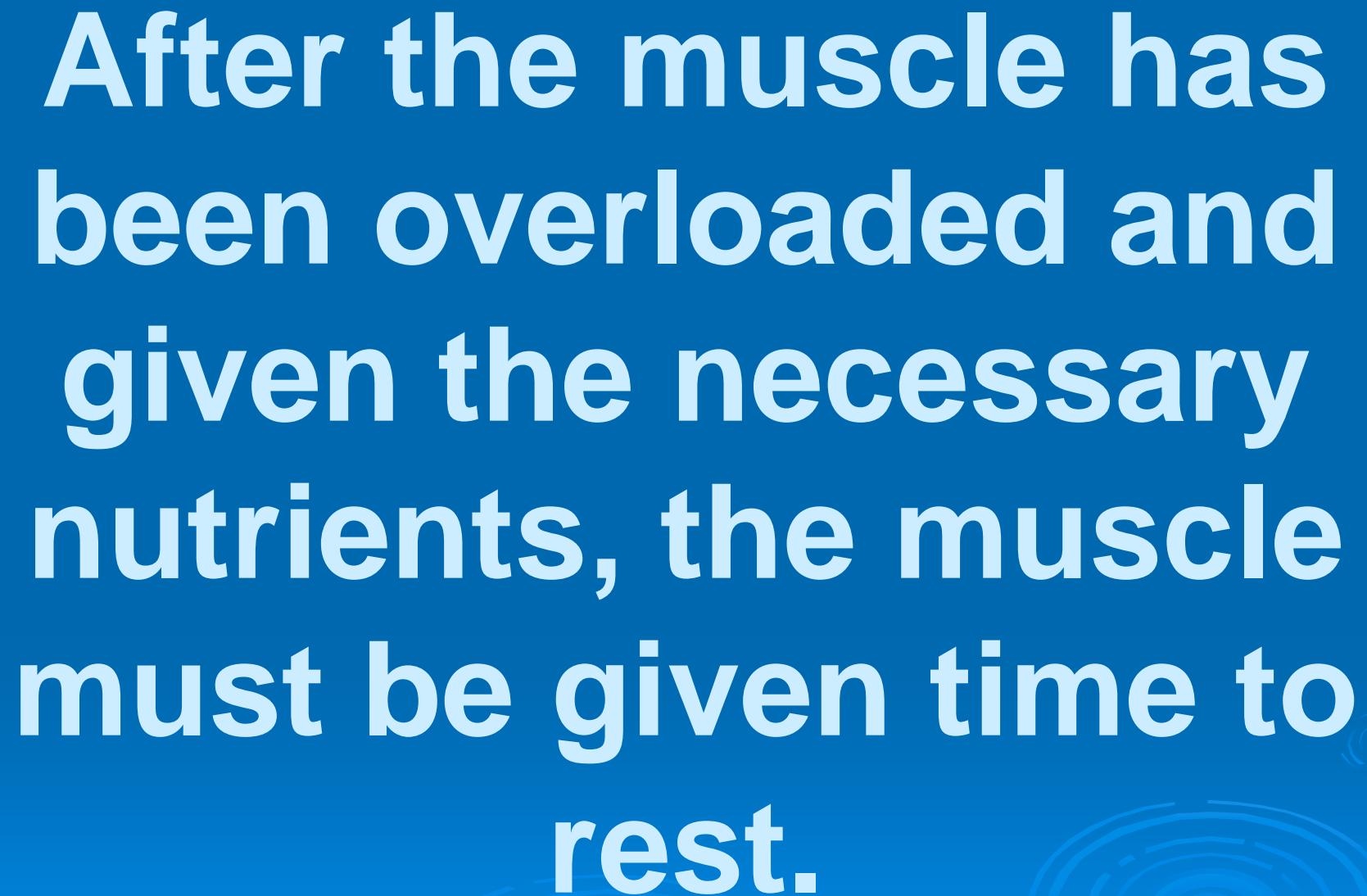
**You must stimulate
the muscle - making
it work harder than
normal.**



In order for a muscle to grow, it must receive adequate nutrients.



After the muscle has been overloaded and given the necessary nutrients, the muscle must be given time to rest.



Frequency

How **often** will you strength train?



- **Strength Training should be done a minimum of Two times a week.**




Intensity

How **hard** will you strength train?



**This also refers to:
The amount of weight lifted**

**Strength is 60%-90%
Endurance is 30%-50%**

The bottom right corner of the slide features a decorative graphic of several concentric, light blue circles that resemble ripples on water, set against the solid blue background.

Time

How **long** will you strength train?



**Is the length of the total
strength training routine.**

Total of Exercises + Sets



Principle of Progression



How will I make my strength
training workout **harder**?



Our bodies adapt to the stress we put on it. We can/should increase that stress by:

Adding weight
Adding Reps or Sets
Adding Exercises



Reps:

Strength = 3-5 reps per set

Endurance = 12-15 reps per set

Our Goal = 8-12 reps per set

The bottom of the slide features a decorative graphic of several concentric circles, resembling ripples in water, rendered in a lighter shade of blue against the main blue background.

Principle of Specificity



You must overload the specific muscle you want to improve.

Example:

A decorative graphic consisting of several sets of concentric circles, resembling ripples in water, located in the bottom right corner of the slide. The circles are light blue and vary in size and opacity, creating a subtle background pattern.

Principle of Rest



There should be at least
48 hours of rest between
workouts of the same
muscle group.
(every other day)

