

5 COMPONENTS OF HEALTH-RELATED FITNESS

1. Muscle strength
2. Muscle endurance
3. Cardiovascular endurance
4. Flexibility
5. Body composition



MUSCLE STRENGTH

- The ability of a muscle or muscle group to exert a maximum force against a resistance ONE TIME through the full range of motion. Range of motion (ROM) is the degrees through which a joint can move.



MUSCLE ENDURANCE

- The ability of a muscle or muscle group to exert a sub-maximal force REPEATEDLY over a period of time.





CARDIOVASCULAR ENDURANCE



- The ability to perform large muscle moderate to high intensity exercise for **PROLONGED PERIODS** keeping your heart rate in the heart rate target zone:

220

- age

x 70% to 85%

The target heart rate zone for a 17 year old is
142-173 beats per minute.

FLEXIBILITY

- Is the ability to move a joint through its complete range of motion (ROM).



BODY COMPOSITION

- Is the amount of lean body mass (bone, muscle, organs and body fluids) compared with the amount of body fat.

ADULT MALE

15%-18%

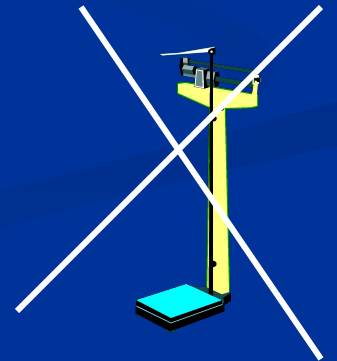
ADULT FEMALE

22%-25%



BMI = Body Mass Index

It is an indirect measure of body composition based on height and weight.



BENEFITS OF EXERCISE:

LOWERS CHOLESTEROL

STRENGTHENS HEART AND LUNGS

IMPROVES SLEEP

IMPROVES CONFIDENCE

PREVENTS
INJURY

ENHANCES FEELING OF WELL-BEING

IMPROVES
APPEARANCE

STRENGTHENS MUSCLES
AND BONES

DECREASES BLOOD PRESSURE

IMPROVES COORDINATION

INCREASES ENERGY

HELPS WEIGHT CONTROL AND BODY
COMPOSITION

REDUCES RISK OF HEART DISEASE

REDUCES STRESS AND TENSION

IMPROVES RANGE OF MOTION

FITT Principle

“To gain health benefits in all 5 components of fitness.....

F = Frequency

....how often should I work out?”

I = Intensity

....how much effort should I put in?”

T = Time

....how long should my workout be?”

T = Type

...what type of exercises should I do?”

	muscle strength and endurance	cardiovascular endurance	flexibility
FREQUENCY	2 – 3 days per week	5 – 6 days per week	3 or more times/week
INTENSITY	moderate weight	heart rate in target zone	to the point of mild discomfort
TIME	3-4 sets, 6-15 reps.	20 – 60 minutes	10 – 30 seconds
TYPE	major muscle groups	major muscles groups	major muscle groups

How does the FITT principle apply to body composition?

Body composition results largely from physical activity levels in the other components:

- Cardiovascular exercise expends calories.
- Muscle strength and endurance activities expend calories and build muscle (MUSCLE BURNS CALORIES FASTER THAN FAT!)
- Flexibility exercises allow the body to better tolerate the other exercises.

DON'T FORGET ABOUT PROPER NUTRITION!!!!



Conclusion.....

Health related fitness is a lifetime pursuit. It is impossible to store fitness once it is developed. To develop fitness you should work on ALL 5 COMPONENTS:

muscle strength

muscle endurance

cardiovascular endurance

flexibility

body composition

