

EARLY vs. MODERN HUMANS

THE IMPORTANCE OF
EXERCISE AND FITNESS



SURVIVAL



... AND



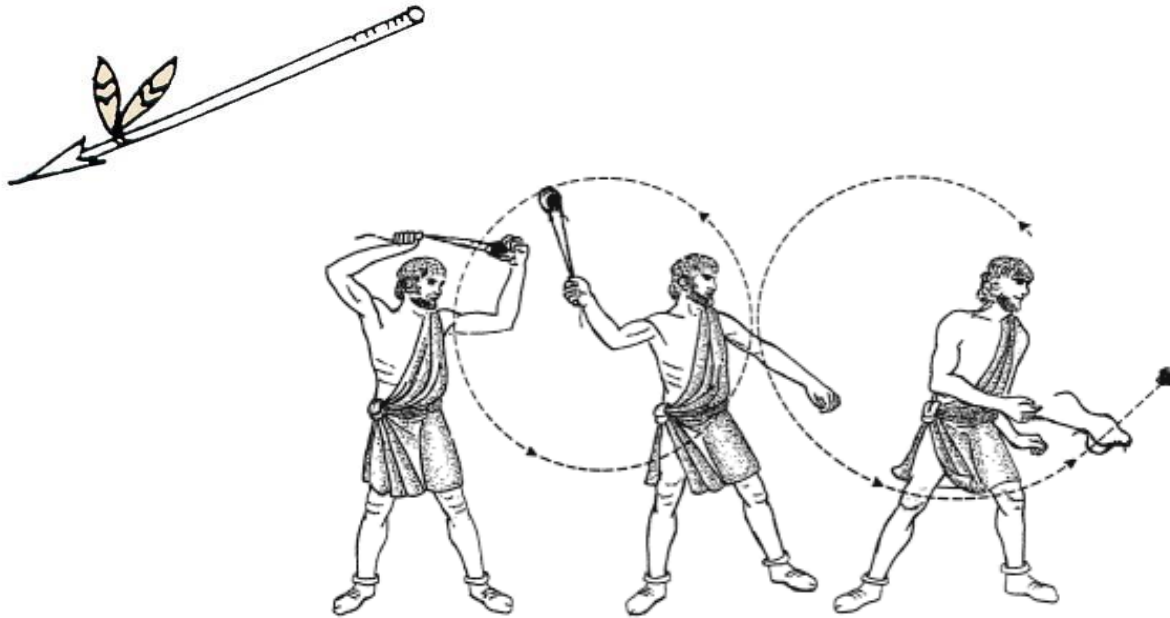
THE ELEMENTS

EARLY HUMANS HAD TO HUNT AND GATHER FOR FOOD



Milog quickly progressed past the hunting and gathering stage, thanks to Verizon SuperPages.

Better Pages for Better Decisions.



"Great invention,
but is it ozone friendly?"

Archery

Rock throwing

Slings

Spears

Hand to hand combat

Running

Jumping

Swimming



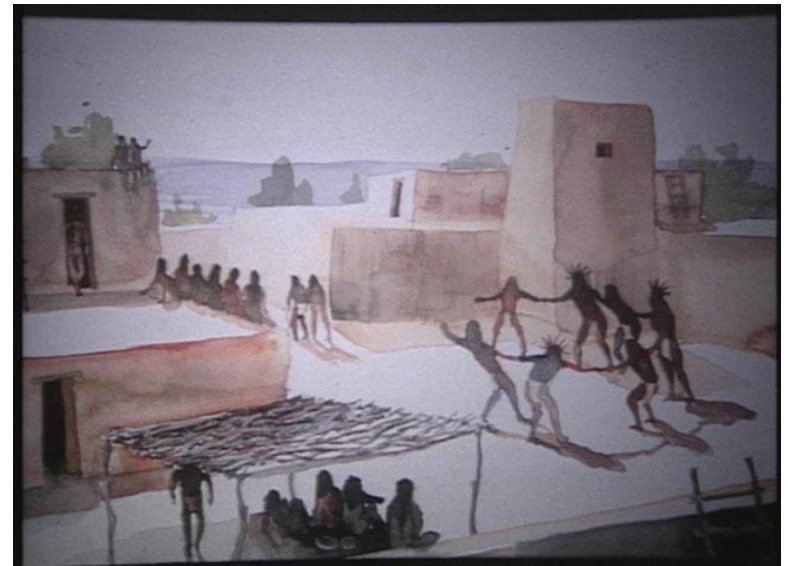
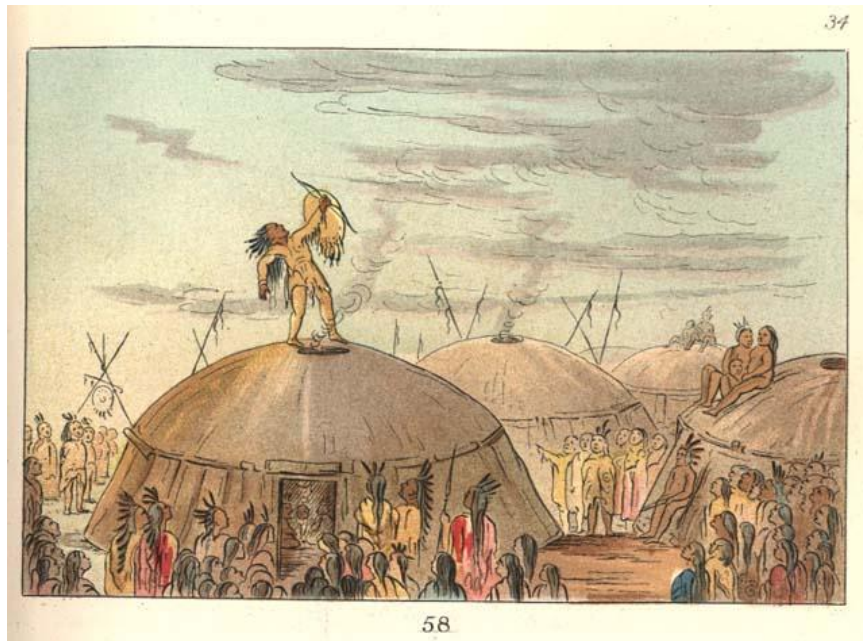
Ancient human



MILITARY & WAR



Religious Dance





ATHLETIC COMPETITION

IN HONOR OF GODS



MODERN HUMANS



WHY DO WE CARE ABOUT EXERCISE AND FITNESS TODAY?

- HEALTH
- APPEARANCE
- LEISURE ACTIVITY
- SOCIALIZING
- ENTERTAINMENT



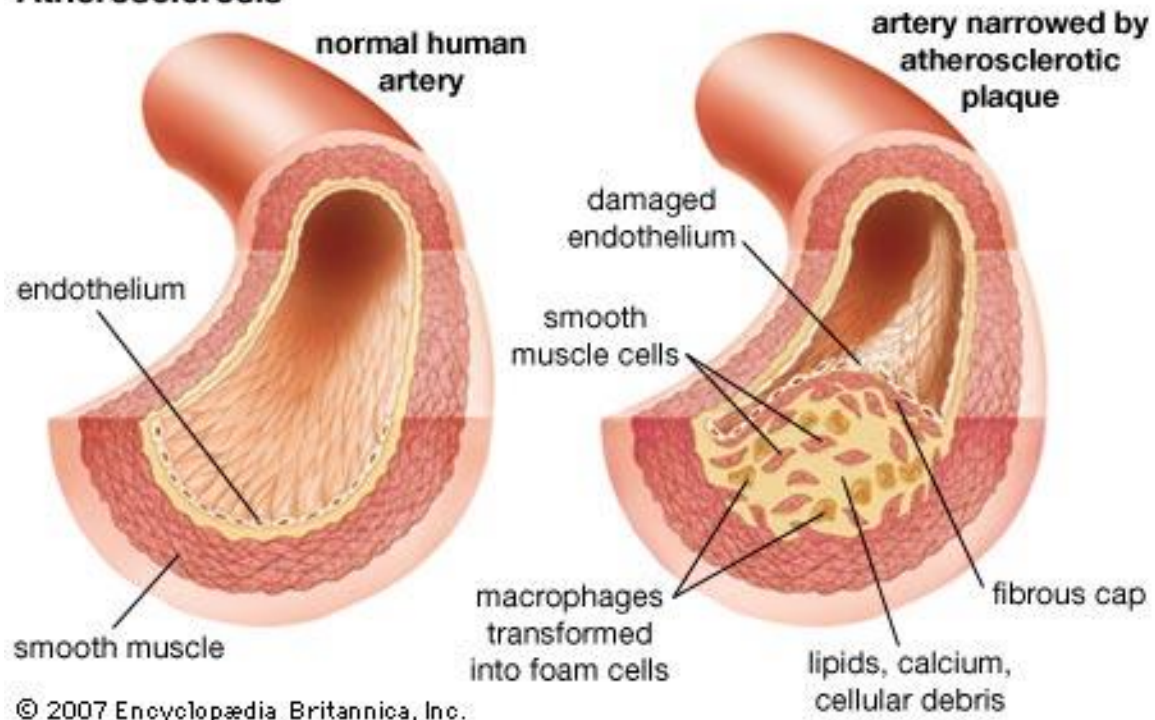
"What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?"

HEALTH

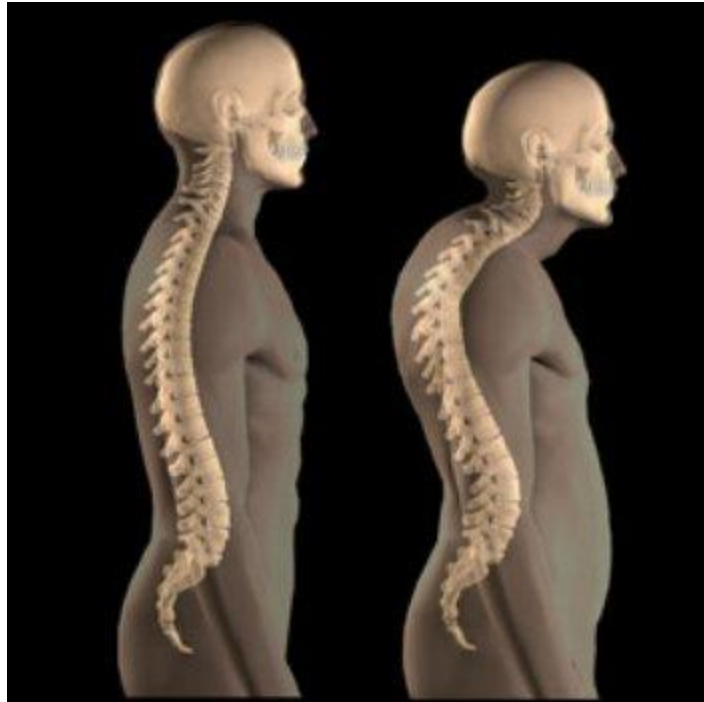
BENEFITS

- Reduces the risk of dying from heart disease
- Improves cardiovascular function
- Lowers your chance of developing high blood pressure, colon cancer, and diabetes
- Helps maintain healthy bones, muscles, and joints
 - Osteoporosis
 - Posture
- Reduces symptoms of anxiety and depression
- Fosters improvement in mood and feelings of well-being
- Helps control blood sugar and weight, develop lean muscle, and reduce body fat
- Exercise can be FUN!

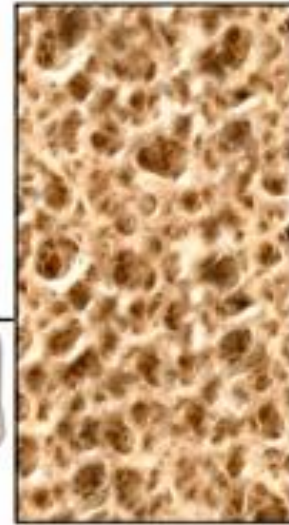
Atherosclerosis



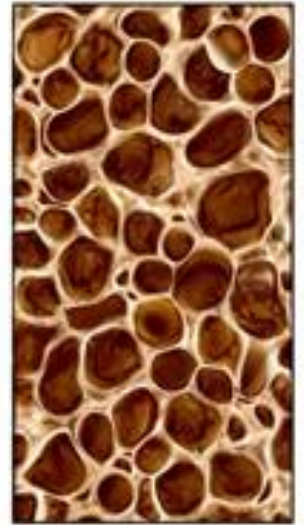
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Normal bone matrix



Osteoporosis



Osteoporosis



Eat high-calcium foods, exercise regularly
and do not smoke at young age to prevent ...

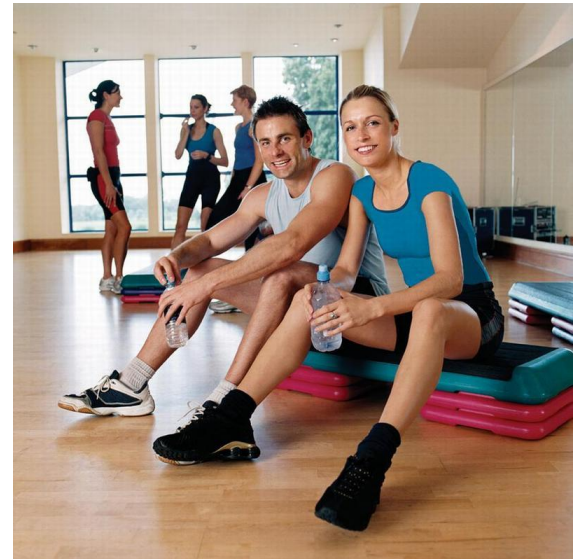
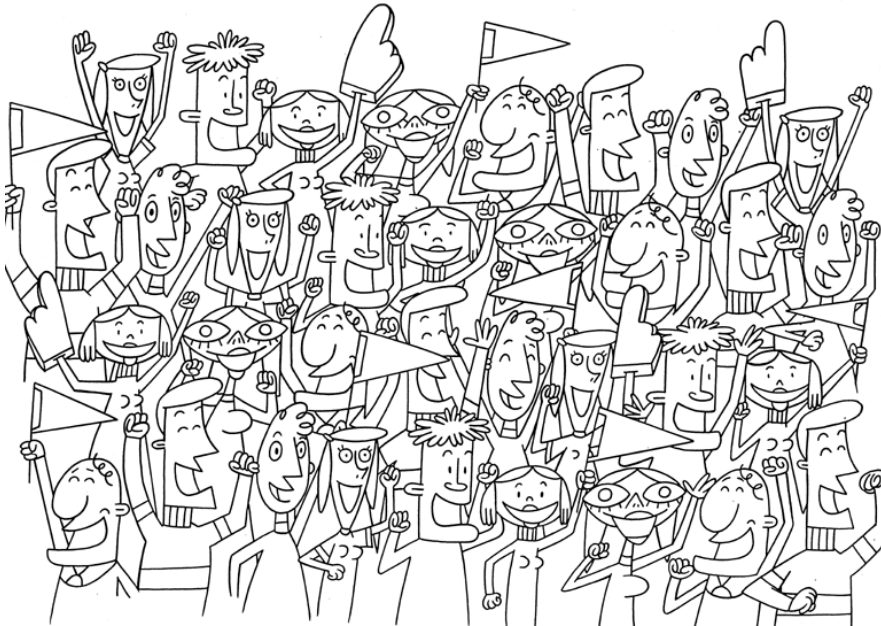
<http://nutriweb.org.my>

LEISURE ACTIVITY



ENTERTAINMENT/SOCIAL

- Provides viewing entertainment for the masses.



Opportunity for social interaction.

COMPONENTS OF FITNESS

- **Cardiovascular Fitness**
 - The ability of the heart, lungs, and blood vessels to function efficiently.
 - **Strength**
 - Amount of force a muscle can produce
 - **Muscular Endurance**
 - The ability to contract the muscles many times without tiring or to hold one contraction for a long time.
 - **Flexibility**
 - The ability to move the joints through a full range of motion; a part of fitness that requires long muscles.
-
- People who are physically fit feel better, look better, and have more energy.
 - Regular physical activity can improve anyone's health related physical fitness.

FIT FORMULA

- F – FREQUENCY
 - HOW OFTEN YOU DO PHYSICAL ACTIVITY
- I – INTENSITY
 - HOW HARD YOU PERFORM PHYSICAL ACTIVITY
- T – TIME
 - HOW LONG YOU DO PHYSICAL ACTIVITY

- **Wolff's Law:** law according to which biologic systems such as hard and soft tissues become distorted in direct correlation to the amount of stress imposed upon them.

FORM FOLLOWS FUNCTION!



INTERESTING INFO



- Adults 18 and older need 30 minutes of physical activity on five or more days a week to be healthy; children and teens need 60 minutes of activity a day for their health.
- Heart disease is the leading cause of death among men and women in the United States. Physically inactive people are twice as likely to develop coronary heart disease as regularly active people.
- 37% of adults report they are not physically active. Only 3 in 10 adults get the recommended amount of physical activity.
- Poor diet and inactivity can lead to overweight/obesity. Persons who are overweight or obese are at increased risk for high blood pressure, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems and some types of cancer.

What is physical activity?

Movement that uses the large muscles of the body, including sports, lifestyle activities, active aerobics and recreation, dance, and fitness exercises.

What is physical fitness?

The ability to carry out daily tasks with vigor and alertness, without undue fatigue and with ample energy to enjoy leisure-time pursuits and to meet unforeseen emergencies.

Skill Related

Agility: the ability to change body positions quickly and keep your body under control when it is moving.

Balance: the ability to keep your body in a steady position while standing or moving.

Coordination: the ability of body parts to work together when you perform an activity.

Power: the ability to combine strength with speed while moving.

Reaction time: the ability to move quickly when you get a signal to start moving.

Speed: The ability to get from one place to another in the shortest possible time.

Aerobic vs. Anaerobic

Aerobic

“With Oxygen”; activity is aerobic when the body can supply enough oxygen to keep it going for a long periods of time.

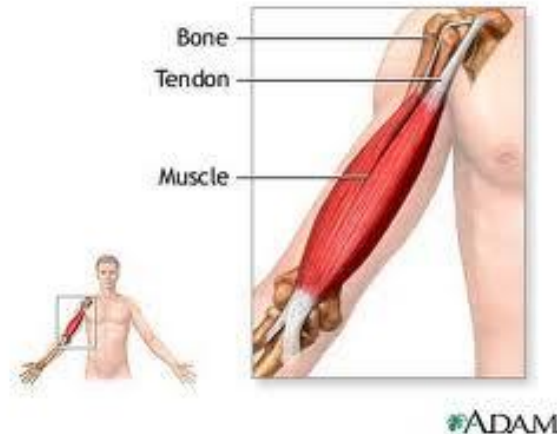
Anaerobic

“Without Oxygen”; activities for which the body can't supply enough oxygen to keep it going for long periods of time.

What's the difference between a tendon and a ligament?

A ligament is a body tissue that connects bones to bones.

A tendon is a body tissue that connects muscles to bones!



Relaxation

Reduced muscle tension

Improved range of motion

Improve movement
function

Prevention of back pain

Improved Posture

Stress reduction

Improved coordination

Improved circulation



More health benefits

- Lowers resting heart rate
- Lowers blood pressure
- Reduces bad cholesterol
- Reduces need for insulin
- Helps with premature aging
- Decreases mood swings and anxiety
- Increases self esteem and self confidence
- Improved mental alertness
- Stress Management
- Lung capacity
- Improved cardiac output





COOL DOWN!

Transitional period between vigorous workouts.

- Blood can pool in the extremities – not returning to the heart quickly enough.
- Moderate movements for the upper and lower body will help muscles pump blood back to the heart and brain.
- Otherwise result could be lightheadedness and/or fainting.

Cool Down

Prevents a rapid drop in blood pressure that can result in:

- Lightheadedness
- Dizziness
- Fainting

All due to the lack of blood flow to the brain.

Standing still or sitting after exercise causes blood to pool in the legs and does not help return blood flow to the heart.

WARM UP

Prepares body for exercise

Prevents damage:

- skeletal muscle
- connective tissue
- Heart

Increases:

- blood flow & body temp
- oxygen delivery to muscles
- blood flow to the heart



"Mr. Osborne, may I be excused? My brain is full."