
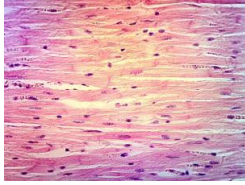
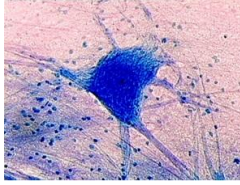
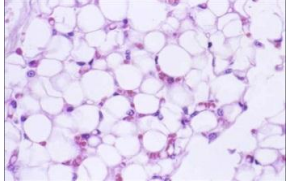


## 1.2 Identity: Tissues Study Guide by Hisrich

1.2.a. What are the main types of **tissue** in the human body?

1.2.b. How does the structure of a type of human **tissue** relate to its function in the body?

**Tissues** are collections of similar cells that help perform a common function. A group of **tissues** is called an organ.

<b>Epithelial</b> ( <i>"to cover the top"</i> )	<b>Muscle</b>	<b>Nervous</b> ( <i>"full of nerves"</i> )	<b>Connective</b>
Covers	Moves	Signals	Joins
			
lines organs & body cavities	makes up all muscles, including the heart	includes neurons & neuroglia	adipose ( <i>"fat"</i> ), blood, bone, cartilage, etc.
layers (one kind of cells inside & a different kind outside)	long and narrow so they can contract to allow movement	long axons to allow signals to travel distances, branches for connections	fairly consistent matrix to allow it to fill spaces of various shapes/sizes

1.2.c. How does the distribution and structure of different types of tissue in the body contribute to personal identity?

Some people have more **muscle** & some have less. Differences in nerves & **nerve** connections affect the way our minds work and they ways we make decisions. Some people have more **connective** tissue. For instance, an obese person has much more **adipose** than a thin person. Most cells contain a central nucleus that contains DNA and every person's DNA is completely unique (except identical twins).

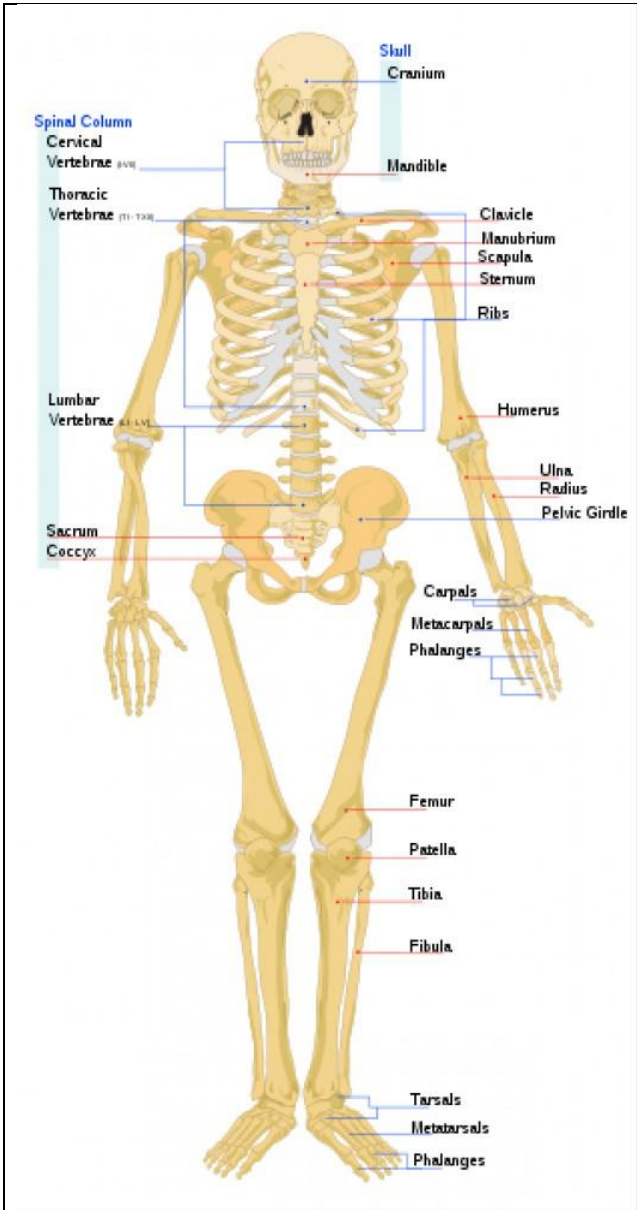
1.2.d. What are the functions of the human skeletal system?

The **axial skeleton** (skull and trunk) protect soft organs such as the brain, heart, lungs, etc). The **appendicular skeleton** (arms and legs) provides attachment points for muscles that allow movement.

1.2.f. What is **forensic anthropology** and how does this field relate to human body systems?

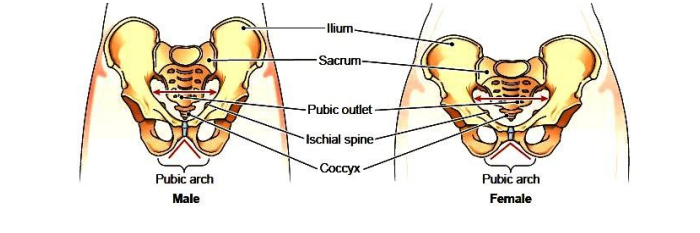
**Forensic** (*"to seek truth"*) **anthropology** (*"study of mankind"*) is the study of human bones to determine information about the deceased and decide cause of death & whether a crime was committed. One aspect of the job is testifying in court. **Forensic anthropologists** are not generally medical doctors, but instead usually have a PhD. They tend to be college professors and have 12+ years of education. When a deceased person still had flesh, the job usually goes to a Medical Examiner, but when only bones are located, the job is done by a **Forensic Anthropologist**. Dr. Brennan on "Bones" is an example. They have played roles in cases such as Waco, TX and the twin towers victims from 9/11.





**1.2.g. How can features of bone be used to determine information about a person's gender, ethnicity, age or stature?**

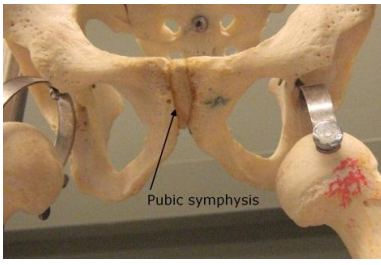
Male	Female	Gender can best be determined from <b>skull</b> or <b>pelvis</b>	
		Males	Females
		square eye sockets	round eye sockets
		u-shaped mandible	v-shaped mandible
		brow ridges & sharper	smoother bones
		heart-shaped pelvis	rounded pelvis
		angled-in coccyx	wider pubic arch



**skulls** (esp. nasal index) are best determinant of race

**1.2.e. What are the main bones of the human skeletal system?**

Meta = between	Cervic = neck
Tars = instep, ankle	Crani = skull
Carpal = wrist	Vert = to turn
Pel = push	Thorac = chest
Clav = collarbone	Fibul = outer bone of leg
Pariet = wall	
Zyg = join	
Occ = eye	



bone fusion (especially) in **pelvis** is best predictor of age (older = more fused)

**humerus** and **femur** length are best predictors of height

