

Medical Terminology / Lecture (4)

FREQUENTLY USED PREFIXES

Prefix	Meaning	Example word and definition
a-, an-	Absence of , without,	Amastia (ah- MASS- tee- ah): Nondevelopment of breasts
Ab-	Away from	Aboral (ab- OH- ral): away from the mouth
Ad-	To, toward, near, increase	Adduction (ah- DUCK- shum): drawn toward the median plane of the body
Ambi-	Both	Ambidextrous (am- bih- DECK- strus): Ability to use either hand effectively
Ante-	Before	Anteflect (AN- the- fleckt): to bend forward
Anti-	Against	Antimycotic (an- tih- my- KOT- ick): an Agent that prevents the growth of fungi (myc = fungus)
Aut/o	self	Autogeneris (aw- toh- JEN- eh- sis): self generation
Bi-	Two, both, double	Bicuspid (by- KUS- pid): having two cusps (points or leaflets)
Circum-	Around	Circumscribed (SER- kum- skryb`d): Confined within a limited space
Co-, con-	Together, with	Congenital (kon- JEN- ih- tal): refers to condition existing at birth
Contra-	Against	Contraception (kon- trah- SEP- shun): Prevention of pregnancy (conception)
De-	From, down, not	Deceleration (dee- sell- er- AY- shun): Decrease in rate of speed
di-	Double, two	Dimorphous (die- MOR- fus): Occurring in two forms (morph = form)
Dia-	Across, apart, through	Diathermy (DIE- ah- ther- mee): Heating of body tissues by means of high-frequency electromagnetic radiation

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Dis-	Separate from, apart	dissect (die- SECKT: to cut apart or separate tissues
Dys-	Painful, difficult, improper	Dysphasia (dis- FAY- zee- ah): speech impairment
e-, ec-	Out, away	Eccentric (eck- SEN- trick): located or moving away from a center
Ecto-	On the outer edge	ectocytic (eck- toh- SIGH- tick): outside of the cell
Em-	In, within	Empyema (em- pie- EE- mah): pus inside a space
En-	In	Encapsulated (en- KAP- sue- lay- ted): Situated within a capsule
Endo-	Within	Endocardial (en- doh- KAR- dee- al): Situated or occurring within the heart
Epi-	Upon, at, in addition to	Epiotic (ep- ee- OT- ick): located upon or above the ear
Eu-	Good, normal	Eucrasia (you- KRAY- see- ah0; state of normal or good health
Ex-	Out, away from, over	Extremity (ecks- TREM- ih- tee): a Distal or end portion; an arm or a leg
Exo-	Outside	Exogenous (ecks- AHJ- eh- nus): caused by factors outside the body or part
Extra-	Outside	Extrabuccal (ecks- trah- BUCK- al): Outside the cheek (bucca = cheek)
Hemi-	Half	Hemifacial (hem- ee- FAY- shul): Referring to one side of the face
Hyper-	Above, beyond, excessive	Hypertension (high- per- TEN- SHUN): Condition of blood pressure being consistently above normal

Hypo-	Below, beneath, deficient	Hypodipsia (high- poh- DIP- see- ah): Below normal sense of thirst
Inter-	Between	Intercostal (in- ter- KOS- tal): situated between the ribs
Intra-	Within, inside	Intralobar (in- trah0 LOH- bar): within a lobe
Intro-	Into, within	Introflexion (in- troh- FLECK- shun) a bending inward
Para-	Beside, around, abnormal	Paramedian (par- ah- MEE- dee- an): Situated near the midline Paraplasia (PAR- ah- plazm): Abnormal new growth; Malformation
Peri-	Around, about, in the vicinity of	Perisplenic (per- ih- SPLEN- ick): occurring around the spleen
Post-	After, behind in time or place	Postprandial (post- PRAN- dee- al): Related to after a meal
Pre-	Before, in front of	Precostal (pree- KOS- tal): in front of the ribs
Pro-	Before, forward, in front of	Protrusion (proh- TREW- zhun): the state of pushing forward
Re-	Again, back	Reflected (ree- FLECK- ted): folded or bent back

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Retro-	Backward, behind	Retrocecal (ret- roh- SEE- kal): behind the cecum
Semi-	Half	Semilunar (sem- ee- LEW- nar): Half-moon shaped
Sub-	Under, below	Subjacent (sub- JAY- sent): lying Underneath. Note: sub- changes to suf- before words beginning with f or p (examples: suffix, suppuration)
Super-, supra-	Above, beyond, extreme	Superflexion (sue- prah- OCK- you- lar): Above the eye
Syn-, sym-	With, together, beside	Syndactyly (siso BACK- tih- lee): Congenital webbing together of two or more fingers or toes Note: syn- drops the n before s, Changes to I before I and changes to m before b, m, p, and ph
Trans-	Across, over, beyond, through	Transection (tran- SECK- shun): a cut made across a long axis
Tri-	Three	Tripod (TRY- pod): any object having three feet or supports
Ultra-	Excessive, beyond	Ultraviolet (uhl- trah- VIE- oh- let): Beyond the visible spectrum at its violet end

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CHAPTER 3

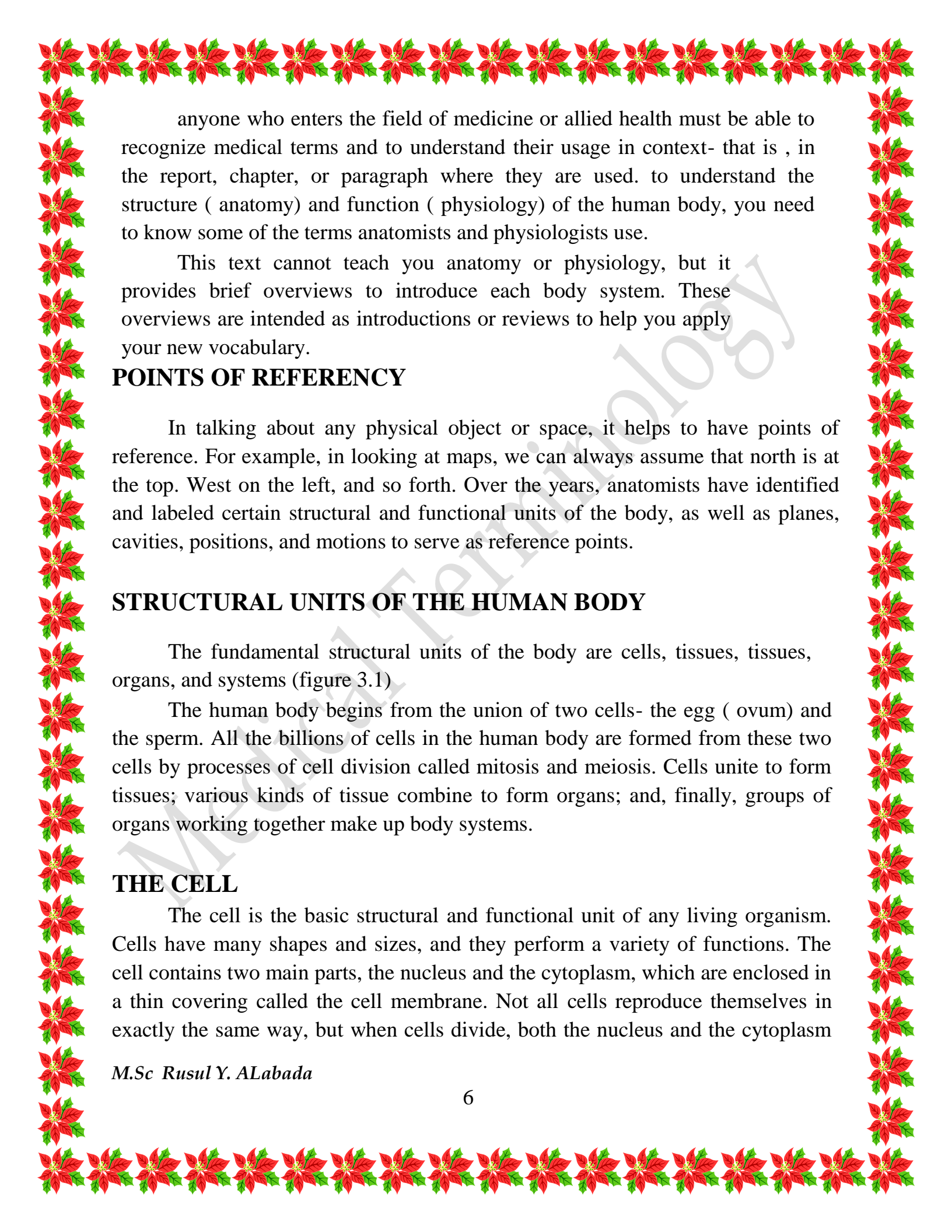
General and structural terms

KEY TERMS

Allied health	A term used to describe a wide range of health-related disciplines whose practitioners assist, facilitate, and complement the work of physicians, nurses, and other health professionals
anatomist	A person skilled in the art of dissecting (artificially separating) and identifying the different parts of any animal or plant
anatomy	the science that concerns itself with the structure of animals or plants
clinical	pertaining to the actual investigation and treatment of disease in living subjects, rather than of theoretical science
Cytoplasm	The living portion (protoplasm) of a cell that is within the cell membrane but outside the nucleus
Function	The normal, unique activity of any organ or part of a living organism
identification	Establishing the name, features; and characteristics of something. For example, a body part
membrane	A thin, soft, pliable sheet or layer of tissue
Pericardial	Pertaining to the membrane that encloses the heart (the pericardium)
Physiology	The study of the functions of a living organism and each of its parts or structures
Plane	A flat or level surface; in anatomy, one of several imaginary views of the body used to locate structures
Pleural	Pertaining to the pleura, the membrane that lines the chest cavity
Region	In anatomy, a part or division of the body
Structure	Arrangement of part; of organs; or of constituent tissues, cells, or particles in a substance or body

USING YOUR NEW VOCABULARY

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anyone who enters the field of medicine or allied health must be able to recognize medical terms and to understand their usage in context- that is , in the report, chapter, or paragraph where they are used. to understand the structure (anatomy) and function (physiology) of the human body, you need to know some of the terms anatomists and physiologists use.

This text cannot teach you anatomy or physiology, but it provides brief overviews to introduce each body system. These overviews are intended as introductions or reviews to help you apply your new vocabulary.

POINTS OF REFERENCY

In talking about any physical object or space, it helps to have points of reference. For example, in looking at maps, we can always assume that north is at the top. West on the left, and so forth. Over the years, anatomists have identified and labeled certain structural and functional units of the body, as well as planes, cavities, positions, and motions to serve as reference points.

STRUCTURAL UNITS OF THE HUMAN BODY

The fundamental structural units of the body are cells, tissues, tissues, organs, and systems (figure 3.1)

The human body begins from the union of two cells- the egg (ovum) and the sperm. All the billions of cells in the human body are formed from these two cells by processes of cell division called mitosis and meiosis. Cells unite to form tissues; various kinds of tissue combine to form organs; and, finally, groups of organs working together make up body systems.

THE CELL

The cell is the basic structural and functional unit of any living organism. Cells have many shapes and sizes, and they perform a variety of functions. The cell contains two main parts, the nucleus and the cytoplasm, which are enclosed in a thin covering called the cell membrane. Not all cells reproduce themselves in exactly the same way, but when cells divide, both the nucleus and the cytoplasm

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undergo and exact division so that two more identical offspring are formed. Different groups of cells develop different character- is tics; for example, nerve cells (neurons) are quite different in shape from skin cells or bone cells.

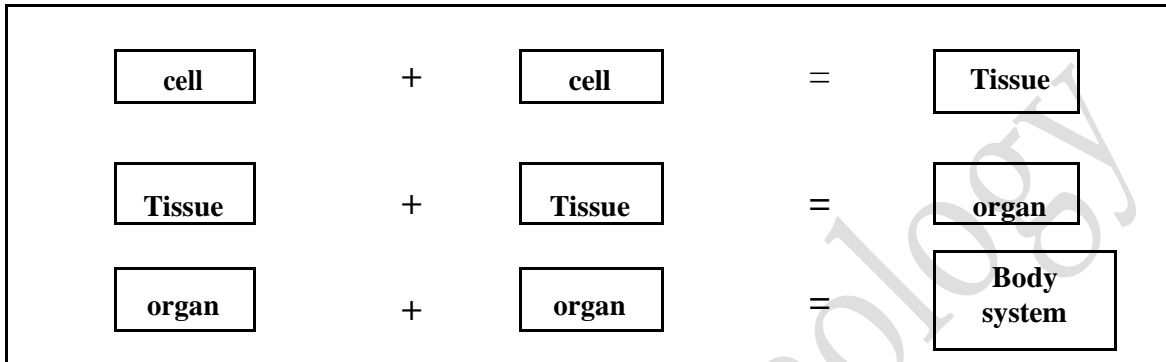


Figure 3.1 structural units of the human body

The tissues

The human body has four basic types of tissues, each of which is composed of a group of similar cells and the material that holds them together. The four basic types of tissue are:

- Epithelial tissue
- Connective tissue
- Muscle tissue
- Nerve tissue

In brief, epithelial tissue is a protective covering of the skin. It also lines hollow organs such as the stomach, the intestines and the air passages. Connective tissue supports and connects other tissues, and includes adipose or fat tissue, cartilage, and bone. There are several kinds of muscle tissue, which will be described in chapter 6. The cells of nerve tissue are quite different from other cells. They form threadlike outgrowths called processes. These nerve fibers, known as axons and dendrites, may be as much as 4 feet long, extending to many parts of the body.



The organs

When several kinds of tissue combine in performing some special function, they form a structure called an organ. For instance, the kidneys, the stomach, the lungs, and the liver are all organs.

The systems

A body system is a group of closely allied organs that are involved in the same functions. Part II of this text is arranged by body systems, which are the:

- Integumentary (in- teg- you- MEN- tah- ree) system
- Skeletal (SKEL- eh- tel) system
- Muscular (MUS- kyou- lar) system
- Cardiovascular (kar- dee- oh- VAS- kyou- lar) system
- Blood and lymphatic (lim- FAT- ick) system
- Respiratory (REH- spih- rah- toh- ree) system
- Digestive (die- JES- tiv) system
- Reproductive (ree- pro- DUCK- tiv) system
- Urinary (YOU- rih- nar- ee) system
- Endocrine (EN- doh- krin) system
- Nervous (NER- vus) system
- Special senses