



**Faculty of Applied Science
Medical Technical Radiology
Radiographic and Medical
Terminology I
(MTR109)**

Lecture 2

COMMON PREFIXES AND SUFFIXES

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Outline

What are Prefixes?

Types of Prefixes in Medical Terminology

Class activity

What are suffixes?

Types of suffixes in medical terminology

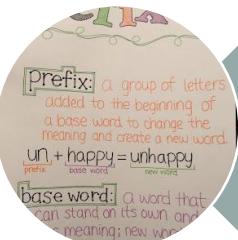
Class activity?

Learning outcome

By the end of this session you will be able to:



Define common medical **prefixes** and **suffixes** and explain their meanings.



Identify different **types of prefixes** (number, location, degree, condition) and **suffixes** (disease, procedure, condition).



apply prefixes and suffixes with their correct meanings using structured exercises.

What are Prefixes?

- A prefix is a word element located at the beginning of a word root. Substituting one prefix for another alters the meaning of the word.
- For example, in the term macro/cyte, macro- is a prefix meaning large; -cyte is a word root meaning cell. A macrocyte is a large cell. By changing the prefix macro- to micro- (small), the meaning of the word changes. A microcyte is a small cell.



Normal
RBC



Microcyte



Macrocyte



Types of Prefixes in Medical Terminology

- Prefixes of Quantity / Number
- Prefixes of Time & Speed
- Prefixes of Location / Position
- Prefixes of Size
- Prefixes of Condition / State
- Prefixes of Origin / Cause
- Prefixes of Direction

Prefixes of Quantity / Number

| Prefix | Meaning | Example | Meaning |
|--------|---------|---------------|---------------------|
| mono- | one | monocyte | one nucleus cell |
| bi- | two | bilateral | Two sides |
| Tri- | three | tricuspid | Three point |
| poly | Many | polyuria | Excessive urination |
| multi | Many | multicellular | Many cells |
| oligo | few | oliguria | Low |

Prefixes of Time & Speed

| Prefix | Meaning | Example | Meaning |
|----------|-----------------|-----------------|------------------|
| brady- | Slow | bradycardia | slow heart rate |
| tachy- | Fast | tachypnea | rapid breathing |
| chronic- | Long time | chronic disease | long duration |
| acute- | Sudden / severe | acute pain | rapid onset |
| Hyper- | High | Hyperglycemia | High blood sugar |
| Hypo- | low | Hypoglycemia | Low blood sugar |

Prefixes of Location / Position

| Prefix | Meaning | Example | Meaning |
|--------|---------|--------------|----------------|
| Epi- | Above | Epidermis | Above skin |
| Sub- | Below | Subcutaneous | Under skin |
| Inter- | Between | Intercostal | Between ribs |
| Intra- | within | Intravenous | Within vein |
| endo | inside | Endoscopy | Inside viewing |
| peri | Around | Pericardium | Around heart |

Prefixes of Size

| prefix | Meaning | Example | Meaning |
|--------|----------|-----------|-------------|
| Micro | Small | Microcyte | Small cell |
| Macro | Large | Macrocyte | Large cell |
| Mega | Enlarged | Megacolon | Large colon |

Prefixes of Condition / State

| prefix | meaning | example | meaning |
|---------|---------------|--------------|---------------------|
| A- /an- | Without | Anemia | Lack of blood |
| Dys- | Abnormal | Dispnea | Difficult breathing |
| Eu | Normal / good | Euthyroid | Normal thyroid |
| Mal | Bad | Malnutrition | Bad nutrition |

Prefixes of Origin / Cause

| prefix | meaning | example | meaning |
|---------|---------|------------|-----------------|
| auto- | Self | Autoimmune | Against self |
| idio- | Unknown | Idiopathic | Unknown case |
| toxico- | Poison | Toxicology | Study of poison |

Prefixes of Direction

| prefix | meaning | Example | meaning |
|--------|-----------|--------------|--------------|
| ab- | Away from | Abduction | Move away |
| ad- | Toward | Adduction | Move toward |
| retro- | Backward | Retrocardiac | Behind heart |
| trans- | across | Transdermal | Across skin |



Class activity 1

Match each prefix (Column A) with its correct meaning (Column B).

Column A

- 1.epi-
- 2.endo-
- 3.auto-
- 4.dys-
- 5.inter-
- 6.Tri-
- 7.Macro

Column B

- A. large
- B. abnormal / difficult
- C. above
- D. self
- E. inside
- F. three
- G. between

1-C, 2-E, 3-D, 4-B, 5-G 6-F, 7-A



Class activity 2

Match each prefix (Column A) with its correct meaning (Column B).

Column A (Prefixes)

- 1.hypo-
- 2.hyper-
- 3.brady-
- 4.tachy-
- 5.peri-
- 6.intra-
- 7.sub-
- 8.poly-

Column B (meaning)

- A. excessive / high
- B. around
- C. slow
- D. below
- E. low / deficient
- F. many
- G. within
- H. fast

1-E, 2-A, 3-C, 4-H, 5-B, 6-G, 7-D, 8-F

What are Suffixes?

- Suffixes are word parts that are located at the end of words. Suffixes can alter the meaning of medical terms. It is important to spell and pronounce suffixes correctly.

Suffixes Related to Diseases & Conditions

| Suffix | Meaning | Example | Meaning of Example |
|---------------|--------------------|--------------|-----------------------------|
| -itis | Inflammation | Arthritis | Inflammation of joints |
| -osis | Abnormal condition | Leukocytosis | Increased white blood cells |
| -oma | Tumor, mass | Lymphoma | Tumor of lymph tissue |
| -pathy | Disease | Neuropathy | Nerve disease |
| -emia | Blood condition | Anemia | Low hemoglobin |
| -algia | Pain | Neuralgia | Nerve pain |

Suffixes Related to Procedures

| Suffix | Meaning | Example | Meaning |
|----------------|---------------------|-------------|------------------------|
| -ectomy | Surgical removal | Splenectomy | Removal of spleen |
| -otomy | Cutting into | Tracheotomy | Incision into trachea |
| -ostomy | Creating an opening | Colostomy | Opening into colon |
| -scopy | Visual examination | Endoscopy | Viewing inside body |
| -plasty | Surgical repair | Angioplasty | Repair of blood vessel |

Suffixes Related to Diagnostic Tests

| Suffix | Meaning | Example | Meaning |
|----------------|--------------------------|-------------------|-------------------------|
| -gram | Record or image | Electrocardiogram | Heart record |
| -graphy | Process of recording | Radiography | X-ray imaging |
| -graph | Instrument for recording | Mammograph | Breast imaging device |
| -metry | Measurement | Spirometry | Lung volume measurement |

Suffixes Related to Cells & Tissues

| Suffix | Meaning | Example | Meaning |
|----------------|---------------|-------------|-------------------------|
| -cyte | Cell | Erythrocyte | Red blood cell |
| -blast | Immature cell | Myeloblast | Early bone marrow cell |
| -plasia | Formation | Hyperplasia | Increased tissue growth |

Suffixes Related to Size, Number & Speed

| Suffix | Meaning | Example | Meaning |
|----------------|-----------------|------------------|--------------------------|
| -megaly | Enlargement | Splenomegaly | Enlarged spleen |
| -penia | Deficiency | Thrombocytopenia | Low platelets |
| -trophy | Development | Atrophy | Decreased size |
| -rrhea | Flow, discharge | Diarrhea | Excessive bowel movement |

Class activity 1

Match each suffix in Column A with the correct meaning in Column B.

Column A (Suffix)

1. -itis
2. -ectomy
3. -emia
4. -oma
5. -scopy
6. -megaly
7. -algia
8. -osis
9. -gram
10. -penia

Column B (Meaning)

- A. Pain
- B. Surgical removal
- C. Record or image
- D. Inflammation
- E. Tumor or mass
- F. Visual examination
- G. Blood condition
- H. Enlargement
- I. Deficiency or decrease
- J. Abnormal condition

1-D, 2-B, 3-G, 4-E, 5-F, 6-H, 7-A, 8-J, 9-C, 10-I

Class activity 2

Match each suffix in Column A with the correct meaning in Column B.

Column A

1. Gastritis
2. Anemia
3. Radiography
4. Hepatomegaly
5. Biopsy
6. Arthralgia
7. Leukopenia

Column B

- A. Imaging using X-rays
- B. Low white blood cell count
- C. Inflammation of the stomach
- D. Liver enlargement
- E. Removal of tissue for examination
- F. Low hemoglobin level
- G. Joint pain

1-C, 2-F, 3-A, 4-D, 5-E, 6-G, 7-B



Class activity 3

Match each suffix in Column A with the correct meaning in Column B.

Column A (Suffix)

- 1.-plasty
- 2.-otomy
- 3.-rrhea
- 4.-cyte
- 5.-pathy

Column B (Example)

- A. Erythrocyte
- B. Neuropathy
- C. Tracheotomy
- D. Diarrhea
- E. Angioplasty

1-E, 2-C, 3-D, 4-A, 5-B



Next lecture

- Root words in medical terminology

References

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