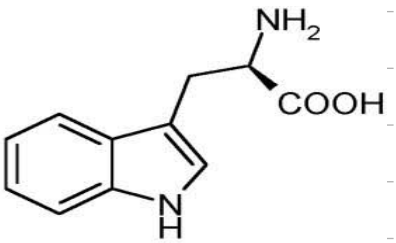
Chapter 5
Tryptophan

Properties of Tryptophan



🤔 Essential / Non-essential
Aromatic / Non aromatic
Water soluble / water insoluble

Special products of tryptophan

Tryptophan → [ ]
Tryptophan → [ ]
Tryptophan → [ ]

A) Niacine synthesis

Niacine a/c/a
Niacine synthesis pathway -

Tyrptophan —(Enz., Coenz.)→ [ ]

Clincical co-relation

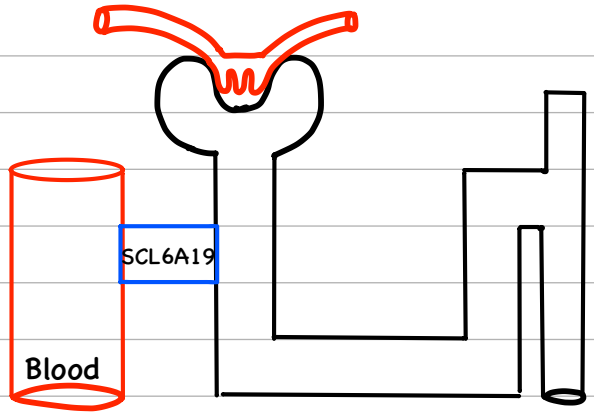
☆ Maize eater → Tryptophan → Niacine

Rx



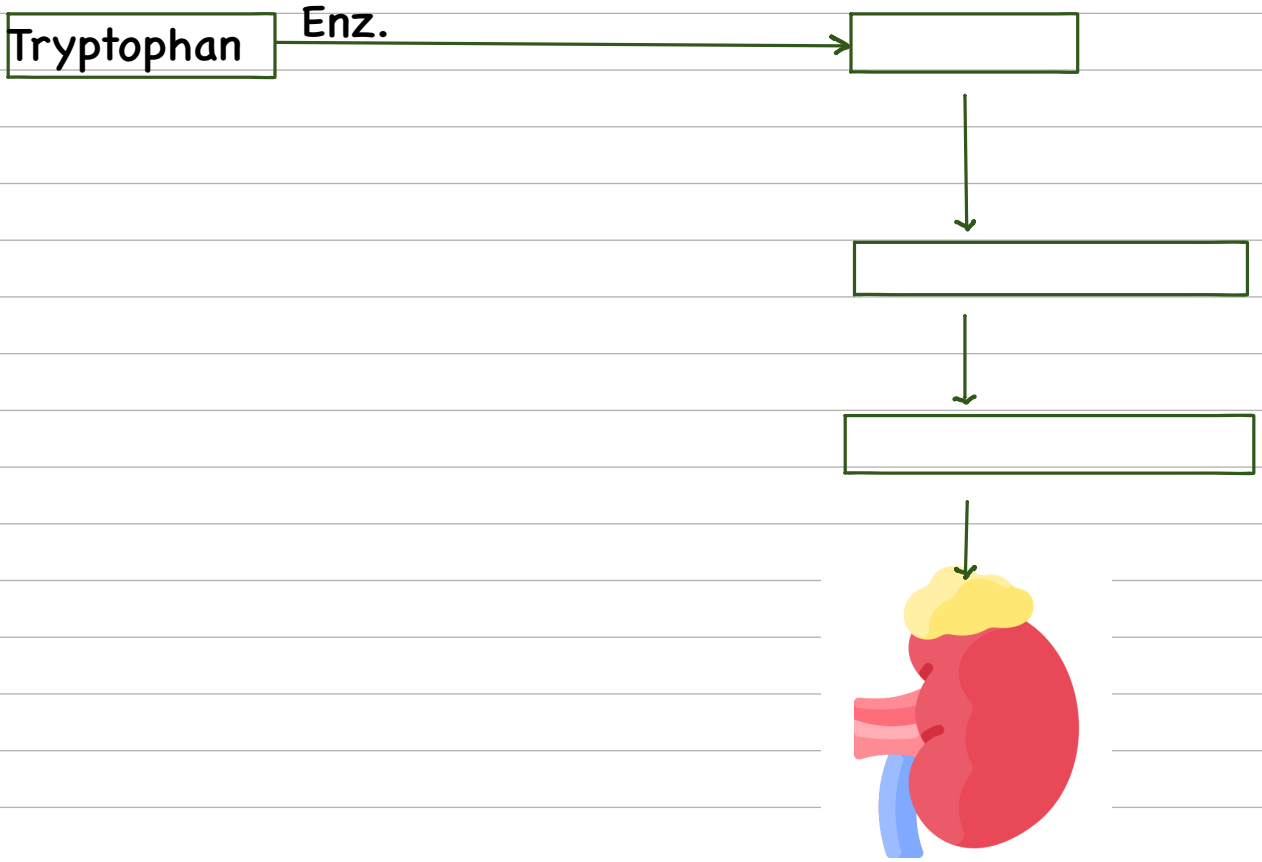






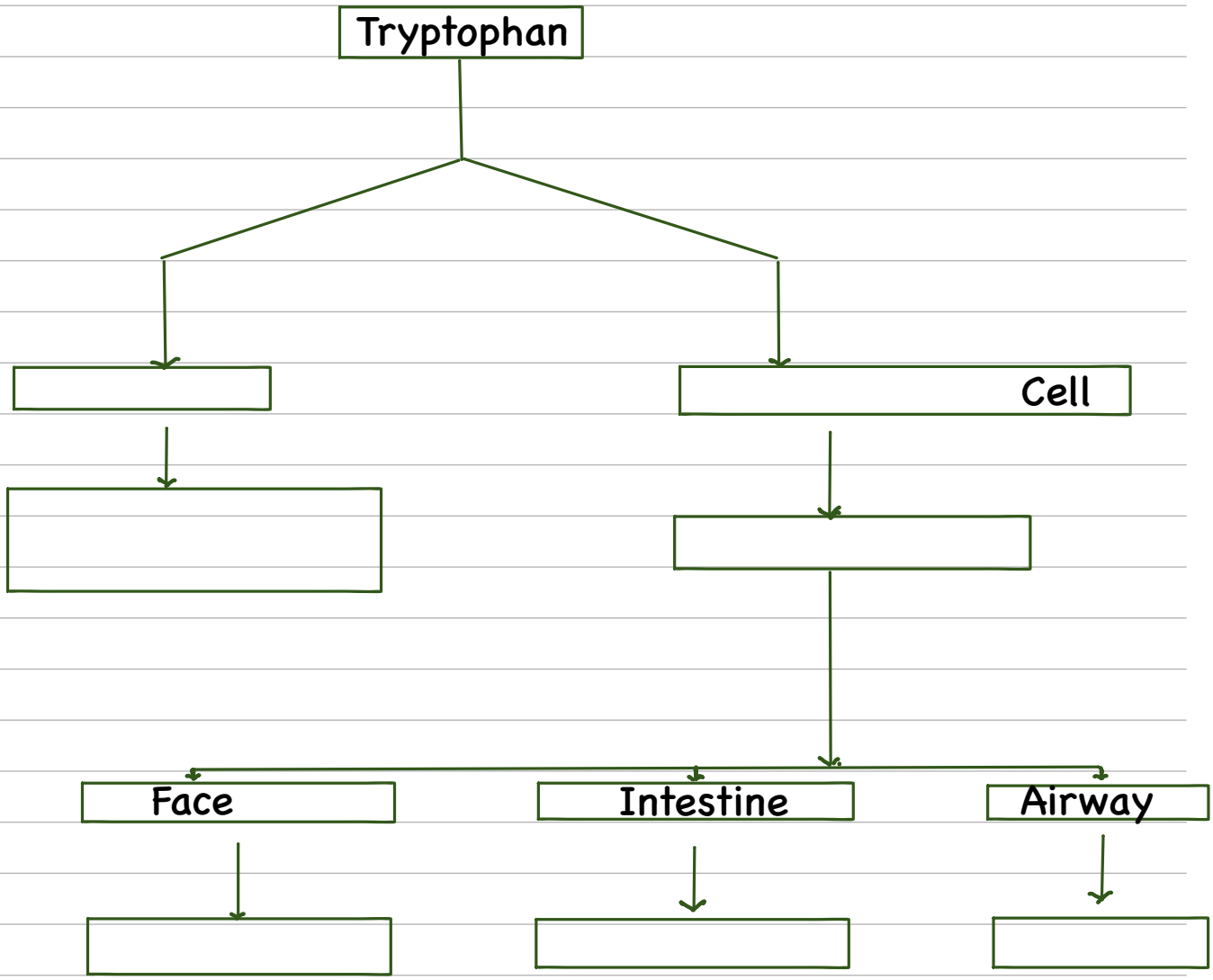
Tryptophan is lost in …… so tryptophan …… in blood --> so ultimately will lead to deficiency of vit …… --> which will manifest as ……

B) Serotonin synthesis



5-HIAA= 5- hydroxy indole acetic acid

Clinical co-relation



Investigation

Excess serotonin → ☐ → ☐

Rx

C) Melatonin synthesis

Tryptophan ⟶

Function of melatonin

Pharma connection

Summary

☆ Match the following (select multiple matches)

Amino acid

A) Tryptophan	1) pyrolidine ring
B) proline	2) indole ring
C) tyrosine	3) imino acid
	4) catecholamine sythesis
	5) melanine synthesis
	6) melatonin synthesis
	7) serotonin synthesis

☆ Pallegra is due to deficiency of vitamin …… . First symptom of pallerga is D…….

☆ Hartnup disease is due defect of

A) SCN4A B) SCN5A C) SCN6A D) SCN7A

☆ Sleep regulation molecule is ……

☆ Skin pigmentation is due to……

☆ Serotonin excess is seen in …… syndrome