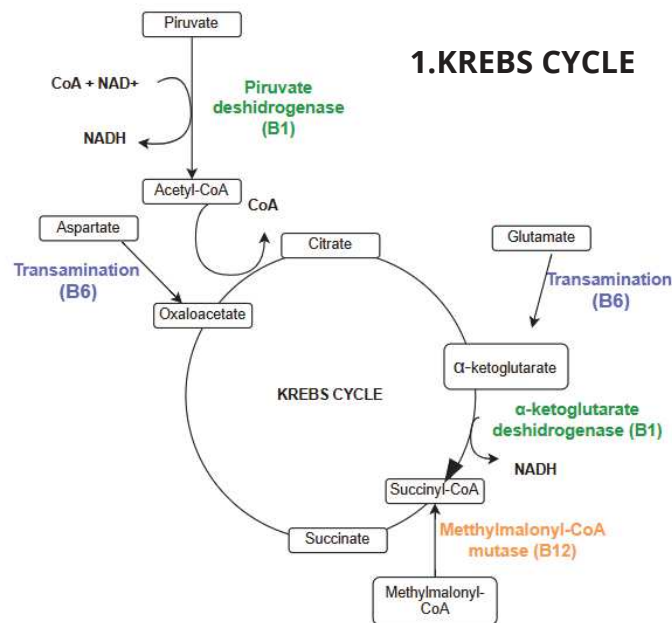


METABOLIC BASES OF VITAMIN REQUIREMENTS: Interaction of vitamins B1, B6, B9 and B12 in neurological health

OBJECTIVES

- Analyze the biochemical mechanisms of B vitamins in the nervous system
- Describe key metabolic pathways using B1, B6, B9, and B12
- Identify physiological factors influencing vitamin requirements

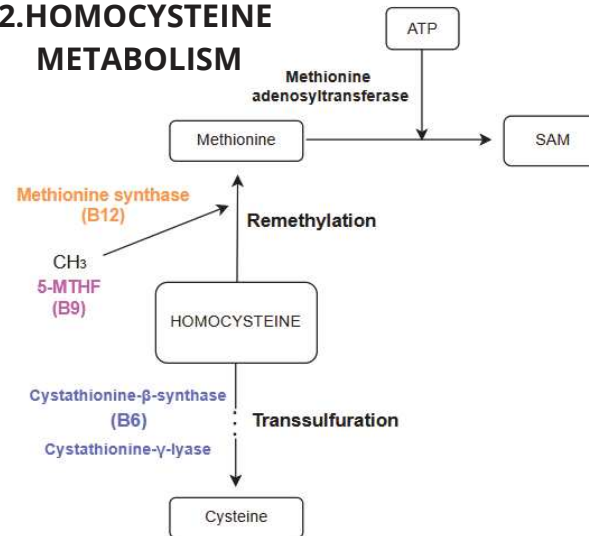
1. KREBS CYCLE



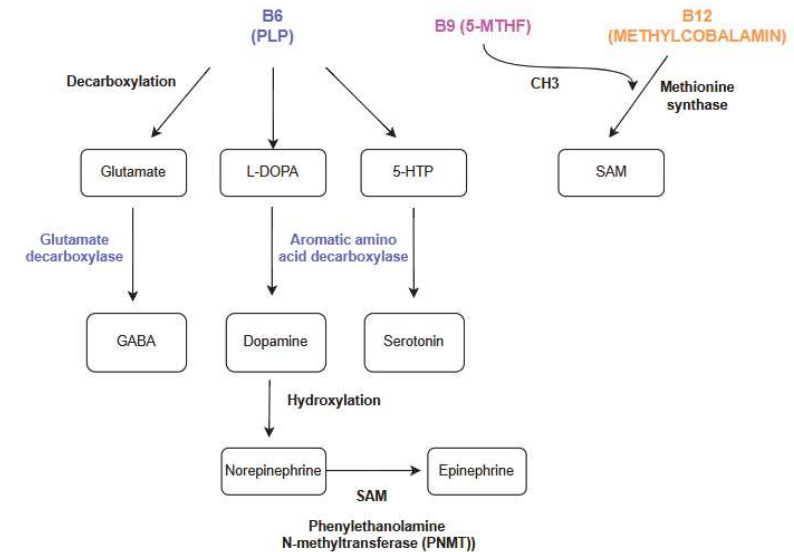
B vitamins are **essential** for **energy metabolism** and **neuronal function**. Their deficiency is associated with neurological disorders.

INTERACTION OF VITAMINS IN METABOLIC PATHWAYS

2. HOMOCYSTEINE METABOLISM



3. NEUROTRANSMITTER SYNTHESIS



CONCLUSIONS

- B vitamins are essential for ATP production and neurotransmitter synthesis
- Their deficiency is linked to neurological dysfunction and neurodegenerative diseases
- Physiological conditions influence vitamin needs
- Ensuring adequate intake may help prevent metabolic and cognitive disorders