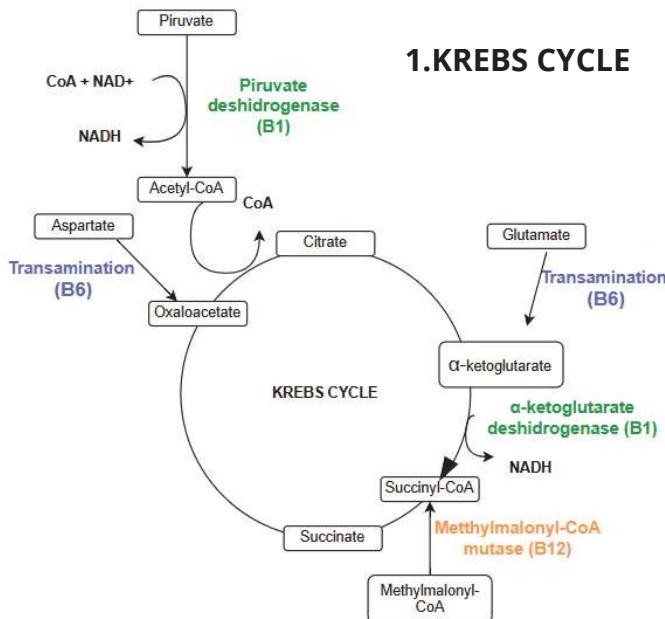


# METABOLIC BASES OF VITAMIN REQUIREMENTS: Interaction of vitamins B1, B6, B9 and B12 in neurological health

## 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

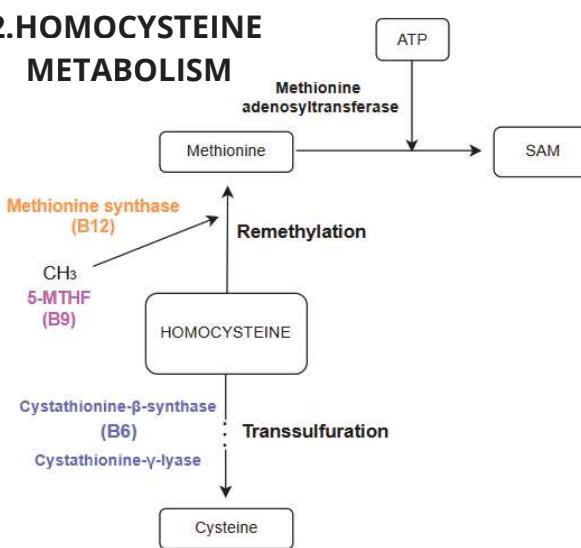


## 1. KREBS CYCLE

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

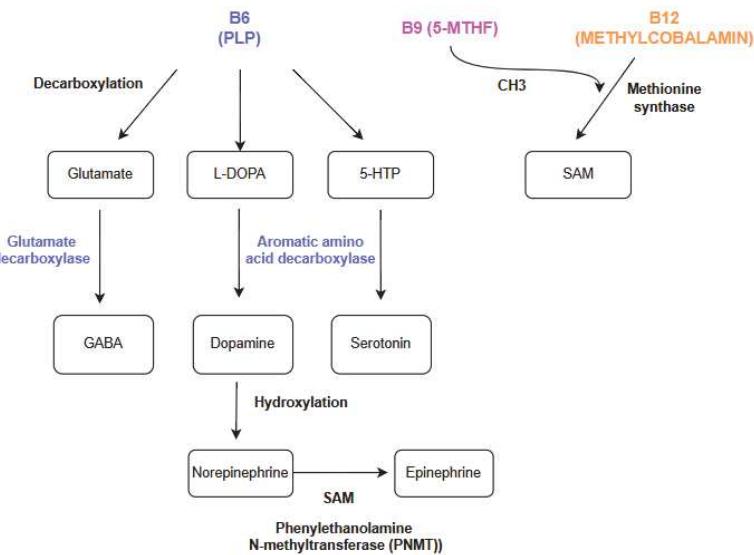
## INTERACTION OF VITAMINS IN METABOLIC PATHWAYS

## 2. HOMOCYSTEINE METABOLISM



Marina Agramunt Galan  
Final Degree Project - February 2025

## 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