THIS APPROACH: When low serotonin or dopamine concentrations exist on an optimal diet, a relative nutritional deficiency of the naturally occurring aromatic amino acids or cofactors is always present. ™

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DEFINITIONS

DEFINTION: A relative nutritional deficiency occurs when an optimal diet does not meet the needs of the system. ™ [1-11]

The serotonin, dopamine (catecholamines), and the thiol systems are intertwined. Affect change on one system and the other two systems can become depleted. Depletion on an optimal diet represents a relative nutritional deficiency. [1-14]

Classifications of L-dopa include naturally occuring aromatic amino acid, a drug, and the active ingredient in Mucuna Pruriens.

THE CENTRALLY ACTING MONOAMINES [5]

Serotonin
Dopamine
Norepinephrine
Epinephrine

L-tyrosine, L-tryptophan, 5-HTP, and L-dopa are naturally occurring aromatic amino acids.

Tyrosine → L-DOPA → (Dopamine)
Tryptophan → 5-hydroxytryptophan → (Serotonin)

Low serotonin, low dopamine, or low glutathione on an optimal diet always represents a relative nutritional deficiency of their precursors or cofactors. [1-14]

When serotonin or dopamine concentrations are low and increased synthesis is required, non-amino acid drugs cannot increase synthesis, only nutrients can ™. [1-14]

The endogenous state occurs when there is the administration of no nutrients or one nutrient precursor of the serotonin or dopamine. [1-14]

The competitive inhibition state occurs when serotonin and dopamine precursors are administered simultaneously in significant amounts. [1-14]

Observations made in the endogenous state, while administering one precursor do not correlate with competitive inhibition observations ™. [8,12]

THE THIOLS [5]
(SULFUR CONTAINING AMINO ACIDS)

L-Methionine
S-adenosyl-L-methionine
S-adenosyl-homocysteine
Homocysteine
Cystathione
L-cysteine
Glutathione

When low serotonin, dopamine, or glutathione concentrations exist on an optimal diet, insufficient synthesis is always present. [1-14]

Increasing serotonin, dopamine and glutathione concentrations by increasing synthesis require naturally occurring amino acids and cofactors. [1-14]

THE OPTIMAL SEROTONIN DIET: Since the synthesis of serotonin from L-tryptophan is rate-limited by serotonin shutting down the tryptophan hydroxylase enzyme, an optimal diet for serotonin synthesis requires increasing L-tryptophan intake to the point where serotonin concentrations no longer increase. [1-14]

THE OPTIMAL DOPAMINE DIET: Since the synthesis of dopamine from L-tyrosine is rate-limited by dopamine shutting down the tyrosine hydroxylase enzyme, an optimal diet for dopamine synthesis requires increasing L-tyrosine intake to the point where dopamine concentrations no longer increase. [1-14]

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