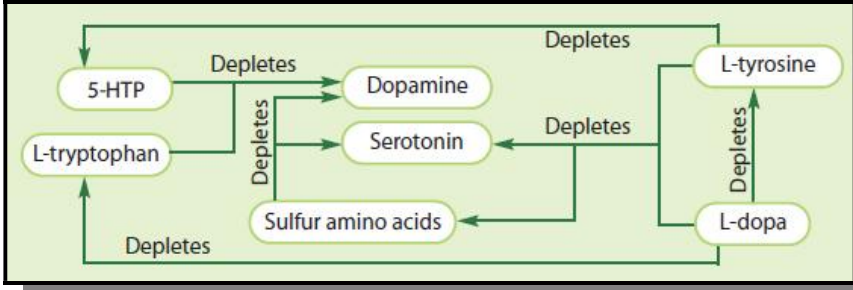




## Laboratory specimen collection protocols for Centrally Acting Monoamine Nutrient Management

Providing the laboratory technology required to balance the centrally acting monoamines and precursors in the competitive inhibition state.



### Serotonin and dopamine related nutrient management

Administering only 5-HTP or improperly balanced 5-HTP depletes dopamine.

Administering only L-dopa or improperly balanced L-dopa

depletes serotonin, sulfur amino acids, L-tryptophan, and tyrosine.

Administration of any of the sulfur amino acids may deplete serotonin and dopamine.

**Endogenous state**, taking no supplemental amino acids

**Competitive inhibition state**, taking amino acid precursors of serotonin and dopamine

The urinary monoamine testing that this technology is based on in the endogenous state has been available for decades. It uses test results in the competitive inhibition state, to determine organic cation transporter (OCT) function that was only discovered in 2003.

Intercellular, extracellular, and synaptic levels of serotonin, catecholamines (dopamine, norepinephrine, and epinephrine) and their amino acid precursors are primarily controlled by the organic cation transporters. Transporter assays may be used to address and optimize the monoamine and their associated nutrient management.

**STRATEGY, place in the system in the competitive inhibition state then test.**

**CENTRALLY ACTION MONOAMINE RELATIVE NUTRITIONAL DEFICIENCY PROTOCOLS, the system needs to be properly placed in the competitive inhibition state prior to testing**

- Baseline testing prior to starting monoamine precursors is of no value.
- The system needs to be placed into the competitive inhibition state prior to testing. Once properly in the competitive inhibition state testing can be preformed.

Serotonin precursors need to be in proper balance with dopamine precursors and cofactors. The following CHK Nutrition products are recommended based on their ability to properly placing the system into the balanced competitive inhibition state and obtain optimal testing results. One week after the following balanced amino acid formulas are started a urine sample can be submitted to the laboratory.

**GENERAL NUTRIENT PROTOCOL**, 4 NeuroReplete in the AM and 4 PM with CysReplete 2 pills 3 times a day then test in one week.

**PEDIATRIC NUTRIENT PROTOCOL**, 2 NeuroReplete in the AM and 4 PM with 1 CysReplete 3 times a day then test in one week.

**DOPAMINE DRIVEN NUTRIENT PROTOCOL – WEEK 1**, 4 D5 in the AM and 4 PM with 2 CysReplete 3 times a day.

**WEEK 2**, Continue week 1 dosing values then start D5 Mucuna 40% 2 pills 3 times a day then test in one week.

**OBESE NUTRIENT PROTOCOL** (Modified August 2011)

- The patient needs to take **CysReplete** 2 pills 3 times a day with all dosing values.
- **WEEK 1**, 4 D5 in the AM and 4 PM.
- **WEEK 2**, 4 D5 in the AM and noon with 4 RepleteExtra at 4 PM
- **WEEK 3**, 4 **D5** in the AM and noon with 4 **RepleteExtra** at 4 PM and 7 PM
- After one week of “week 3” dosing values are started obtain test.