Pattern#1

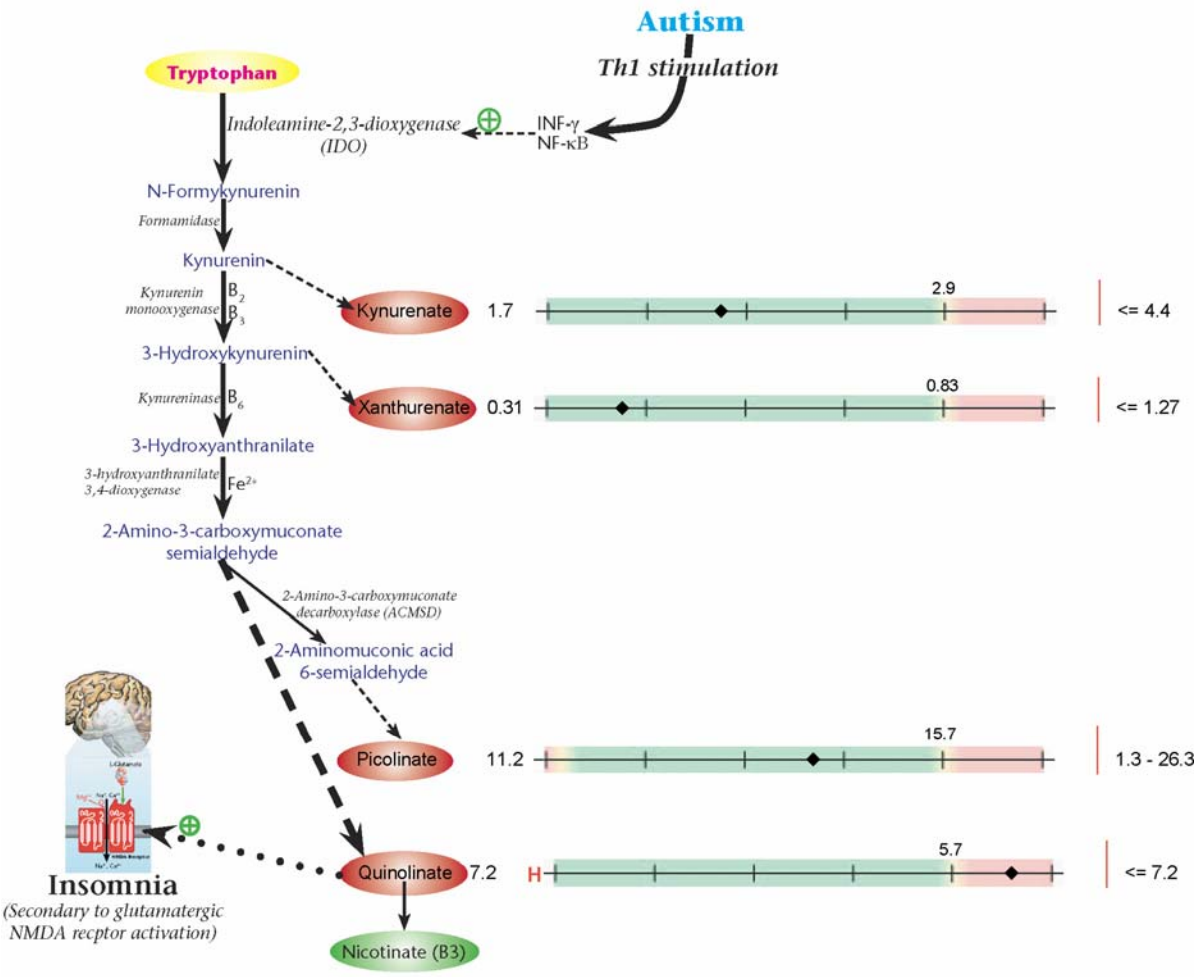
Single Quinolinate Elevation

Patient: CB – 8 y/o M

Condition: Autism

Symptoms

- 'Chronic Fatigue' type reaction to immunization
- Poor attention
- Severe insomnia



Contrary to a recent ruling in the American federal "vaccine court" which rejected claims that either the measles/mumps/rubella (MMR) vaccine or thimerosal in vaccines caused children's autism (http://www.medscape.com/viewarticle/588202), the above case is an all too familiar scenario for a number of autistic children that present to integrative clinicians.

Concomitant with this patient's condition, activation of the Th1 immune response leading to raised quinolinate would provide a sound rationale to explain the patient's response to immunization and poor sleep. Quinolinate acts as an endogenous agonist of glutamatergic NMDA receptors, which can lead to poor sleep amongst other things. The excitatory stimulation of quinolinate is even more pronounced when there is no accompanying elevation of kynurenate which antagonizes the action of quinolinate.

Magnesium effectively competes for NMDA receptors so it would be an ideal supplement to give in this instance. An improvement in sleep quality would be evidence of magnesium's effect. Strategies to reduce immune activation, such as anti-inflammatory botanicals and removal of possible oxidative or toxic stressors would also be recommended.