

Traits found with Walsh Biotypes

Undermethylation: OCD tendencies, seasonal allergies, strong willed, competitive in games and sports ritualistic behaviors, high libido, poor pain tolerance, addictive tendencies, sparse arm/leg/chest hair, hx of perfectionism, chronic depression, high fluidity (tears, saliva), phobias.

Overmethylation; High anxiety, dry eyes and mouth, hirsutism, noncompetitive, low libido, talkative, low motivation in early school years, obsessions without compulsive actions, sleep disorder, food and chemical sensitivities, estrogen intolerance, absence of seasonal allergies, pp depression, antihistamine intolerance, adverse rxn to SSRI, methionine and SAMe

Pyrrrole Disorder; poor stress control, poor short-term memory, reading disorder, sensitivity to noise and bright lights, little or no dream recall, spleen area pain, poor growth, many fears, dry skin, underachievement, tendency to skip breakfast, frequent infections, extreme mood swings, severe inner tension, abnl fat distribution, affinity for spicy or salty foods, high anxiety, delayed puberty, abnl EEG

Zinc deficiency: Poor Growth thru puberty w significant growth after 16, white spots on fingernails, frequent infections, tendency for sunburn, preference for spicy foods, irritability, poor stress control, anger, poor wound healing, poor muscle development, premature graying of hair, abnormal or absent menstrual periods, stretch marks on skin

Copper Overload: Hyperactivity, academic underachievement, skin sensitivity to metals and rough fabrics, estrogen intolerance, emotional meltdowns, ringing in ears, sensitivity to food dyes, high anxiety, sleep problems, adverse reaction to nutritional supplements with copper, abnl menstrual periods.

Toxic metal overload; Abdominal discomfort, poor appetite, increased irritability and temper, decline in academics, metallic taste in mouth, bad breath, change in personality.

Helpful Lab tests to sort out your Biotypes

Optimal lab values:

- Whole Blood Histamine 40-70 normal, If no meds that affect histamine-low is overmethylated, high is undermethylated
- Copper (80-110), calculate free copper from ceruloplasmin(<25%). If high you need more antioxidants (vit E, C and selenium).
- Zinc (90-120)
- Thyroid-TSH under 2, Total/Reverse T3 10-15
- Vitamin B12 >500
- Vitamin D (25 OH vitamin D) 50-80
- Homocystine <10
- Urine pyrroles <10
- Also check chemistry panel and consider heavy metal testing, gluten antibodies

Starting Nutrient Doses for Biotypes--Adults of Average Size

Symptomatic Undermethylation

- Methyl B12 1000 mcg under tongue daily
- Vitamin B6-100 mg in the am P5P (pyridoxal 5 phosphate) 50 mg in the am (too much B6 causes wild dreams, too little no dreams)
- Avoid folate supplementation! It increases the reuptake of serotonin-a more strong effect than helping methylation cycle
- Calcium 500 mg/Magnesium 250 mg 2x/d
 - Vitamin A (retinol) 5000 IU/day (1500 mcg RAE)—Many don't convert beta carotene well-Also increases ceruloplasmin

- NAC (N-acetylcysteine) 600 mg 2x/day-espec with addictive or OCD behaviors
- If homocysteine is high-B6 and B12 will often correct.
- If not enough, add L-serine at 500 mg 2x/day
- If not enough, add Tri methyl glycine (TMG) also called betaine at 500 mg 2x/day
- When other nutrients in place and Homocystine <10
- Add SAME 200 mg in the am (methyl donor). In a month can increase to 400 mg in am, A month later, can increase 2-3x/day
- Don't use SAME with bipolar changes or if taking an SSRI medication (like Prozac, Paxil, Lexapro, Celexa, Cymbalta)
- If SAME causes a person to be wired (10-15%), substitute methionine 1000 mg 2-3x/day
- For sleep support-inositol 500-2000 mg before bed (30 min before if trouble falling asleep)

Symptomatic Overmethylation

- Support epigenetic shifts (acetylation of DNA and histones) with
- *Folic acid (folinic acid 1.6-2.4 mcg 2x/day)
- *Niacinamide 500 mg 2x/day (powerful deacetylase inhibitors).
- *DMAE 100 mg in the am
- *Chromium picolinate 200 mcg/day
- *Vit B6 100 mg/Pyridoxal 5 Phosphate 50 mg in the am
- *HydroxoB12 1000 mcg under tongue daily.
- Vitamin D3 5000 IU with K2-MK7 150 mcg/day
- *Vitamin C 1000 mg twice/day
- *Vitamin E with mixed tocopherols 400 IU/day
- *Selenium 100 mcg/day (or 2 Brazil nuts/day)
- *Zinc picolinate 20-75 mg/day with evening meal-start low and increase gradually
- Manganese 10 mg/d (adults only)
- Choline 500 mg twice/day
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Symptomatic High Copper/Free Copper

- Vitamin C 1000 mg twice/day
- Vitamin E with mixed tocopherol 400 IU/d (800 if free copper still high)
- Selenium 100 mcg/d (or 2 Brazil nuts/day)
- Zinc 25-75 mg/d with evening meal-start low and build up
- Molybdenum=gradually build up dose-drops or pills at 25 mcg/day and each week add another until taking 150 mcg/day to start (not in pregnancy)
- Manganese 10 mg (avoid with Tourette's, children, stuttering, head trauma, movement disorders)
- Avoid estrogen containing birth control
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Pyrrole Disorder

- Vitamin B6 100-500 mg
- Pyridoxal 5 Phosphate (P5P) 25-200 mg
- Watch dream life-too much bad dream too much B6/P5P, not enough no dreaming, need more.
- Zinc picolinate 20-200 mg with largest meal
- Biotin-5000 mcg/day (hold 3 days before thyroid blood tests)
- Evening primrose oil 500 mg twice/day
- Antioxidants-Vit E with mixed tocopherols 4-800 IU, C 1000 mg 2x/d, Selenium 100 mcg/d

VERY important to do follow up lab monitoring 3 months later. The whole blood histamine will not change so not useful to repeat but great for diagnosis. Best to work with a knowledgeable practitioner.