



# FATIGUE

**Lack of energy and stamina, drowsiness, and difficulty getting through the day without relying on stimulants - often persisting despite rest.**



## Possible Contributing Factors

- Hypothyroidism (low thyroid function)
- Estrogen dominance increasing Thyroid Binding Globulin (TBG) which impacts thyroid function
- Adrenal dysfunction (low cortisol) from chronic stress
- Chronic infections affecting adrenals/cortisol: SIBO, parasites, mold, and viruses like EBV and CMV
- Insulin resistance from high refined carb/sugar diet and/or stress
- Environmental & food sensitivities
- Heavy metals & other toxic exposures blocking energy production in the mitochondria
- Certain medications like beta blockers, antihistamines, statins, and antidepressants
- Nutrient insufficiencies or deficiencies: B vitamins, iron, copper leading to anemia, vitamin D, magnesium, electrolyte imbalance (low sodium, potassium or chloride)
- Poor sleep hygiene and/or sleep apnea

## Lifestyle & Dietary Recommendations

- Focus on a whole foods VPF diet with quality proteins, vegetables & healthy fats
- Eliminate all processed & refined carbs, fried foods, vegetable oils, and hydrogenated/trans fats
- If blood sugar is an issue, limit starchy carbs to ½ cup cooked grains and 1 cup root vegetables daily, and 1-2 low fructose whole fruits per day. Avoid all other forms of sugar and sweeteners.
- Avoid overconsumption of caffeine from coffee, chocolate and teas. Limit coffee to 1 cup before noon.
- Consider an elimination diet for 30 days followed by a re-introduction: gluten, dairy, grains, eggs, yeast, soy, corn, peas, nuts
- Consume a variety of fermented foods (sauerkraut, kefir, kimchi) for gut microbiome support
- Consume cruciferous vegetables (broccoli, cauliflower, kale, cabbage, etc) to support liver detox
- Eat mitochondria-supportive foods: grass-fed beef, salmon, eggs, leafy greens
- Choose organic as much as possible to reduce pesticide exposure
- Choose lower tox personal care and home cleaning products. Visit <https://www.ewg.org/skindeep/> for low tox brands
- Stress reduction measures: grounding, daily outdoor sunlight exposure, gratitude journaling, meditation, delegating tasks, saying 'no' more often, etc
- Focus on sleep hygiene
- Focus on gentle movement (walking, yoga, Pilates) instead of intense workouts

## Supplement Considerations

- Digestive support (betaine HCL, pepsin, pancreatic enzymes)
- Mitochondrial & cell support: B complex, CoQ10, carnitine, omega-3, magnesium, alpha lipoic acid
- Stimulating adrenal adaptogens (cordyceps, ginseng, eleuthero, licorice) or glandulars for low cortisol
- Liver/gallbladder support formula
- B Complex