

Psychoeducational Material

Certain nutritional deficiencies, metabolic abnormalities, and medical conditions can produce symptoms that overlap with common psychological presentations such as low mood, anxiety, fatigue, cognitive difficulties, irritability, and sleep disturbance.

Nutrient / Marker	Mental Health Symptoms	Physical Clues
Vitamin D (25-OH Vitamin D)	Low mood, fatigue, loss of interest, low motivation, brain fog, poor concentration, irritability	Bone pain, muscle weakness, diffuse body aches, increased susceptibility to infections
Vitamin B12 (Cobalamin)	Depression, anxiety, brain fog, memory problems, slowed thinking, confusion, irritability, cognitive decline, psychosis (rare)	Tingling/numbness in hands or feet, balance difficulties, glossitis (smooth sore tongue), anemia, weakness
Iron / Ferritin	Fatigue, poor concentration, brain fog, irritability, low motivation, reduced cognitive performance, restless legs (affecting sleep)	Pallor, hair loss, brittle nails, shortness of breath on exertion, pica, heavy menstrual bleeding (history)
Folate (Vitamin B9)	Depression, apathy, cognitive slowing, poor concentration, fatigue	Megaloblastic anemia, mouth ulcers, glossitis, weakness
Magnesium	Anxiety, increased stress sensitivity, irritability, insomnia, fatigue, difficulty relaxing	Muscle cramps, muscle twitching, tremors, palpitations, weakness
Thiamine (Vitamin B1)	Confusion, memory impairment, apathy, irritability, difficulty concentrating; severe deficiency may cause delirium	Unsteady gait, muscle weakness, numbness/tingling, history of alcohol misuse, malnutrition, prolonged vomiting
Vitamin C (Ascorbic Acid)	Fatigue, irritability, low mood, reduced mental energy	Bleeding gums, easy bruising, poor wound healing, corkscrew hairs, petechiae
Calcium(especially low calcium)	Anxiety, panic-like symptoms, irritability, confusion, fatigue; severe abnormalities may alter mental status	Muscle cramps, tingling around the mouth or fingers, muscle spasms, seizures (severe cases), prolonged QT on ECG
Sodium(especially low sodium)	Confusion, reduced attention, personality changes, lethargy, delirium; severe cases may cause seizures or coma	Nausea, headache, muscle cramps, unsteady gait, seizures (if severe)
Thyroid Dysfunction(Hypothyroidism & Hyperthyroidism)	Hypothyroidism: Depression, fatigue, slowed thinking, memory problems, apathy. Hyperthyroidism: Anxiety, panic, irritability, restlessness, insomnia, emotional lability	Hypothyroidism: Weight gain, cold intolerance, constipation, dry skin, hair loss, slow heart rate. Hyperthyroidism: Weight loss, heat intolerance, tremor, palpitations, increased sweating, frequent bowel movements.
Anemia (CBC)	Fatigue, low mood, poor concentration, brain fog, reduced motivation, irritability, decreased cognitive performance	Pallor, weakness, shortness of breath on exertion, dizziness, rapid heartbeat, reduced exercise tolerance
Blood Sugar Abnormalities	Fatigue, irritability, mood swings, poor concentration, brain fog, anxiety-like	Excessive thirst, frequent urination, increased hunger, unexplained

(HbA1c / Fasting Blood Glucose)	symptoms (especially during hypoglycemia), confusion (if severe)	weight changes, blurred vision, sweating or tremors (during hypoglycemia)
Liver Function Tests (LFT)	Liver dysfunction can contribute to fatigue, cognitive slowing and, when severe, confusion, altered behaviour and delirium (hepatic encephalopathy)	Jaundice, itching, nausea, abdominal swelling, easy bruising, dark urine; sometimes no symptoms
Kidney Function Tests (Creatinine/eGFR /Urea)	Significant kidney dysfunction can cause fatigue, poor concentration, cognitive slowing, sleep disturbance, irritability and, in advanced disease, confusion/delirium	Swelling, changes in urination, nausea, itching, weakness, blood-pressure abnormalities; sometimes no symptoms in early disease
C-Reactive Protein (CRP)	Not a psychiatric diagnostic marker. Elevated CRP indicates inflammation; chronic inflammatory states are associated with fatigue and depressive symptoms	Fever, pain, malaise or other signs of inflammation depending on the underlying condition; may also be completely asymptomatic
ESR (Erythrocyte Sedimentation Rate)	Not a psychiatric diagnostic marker. An elevated ESR may accompany inflammatory/medical conditions that produce fatigue, low mood or cognitive complaints	Symptoms depend on the underlying condition—fever, pain, joint symptoms, weight loss, fatigue, etc.; ESR itself produces no symptoms