# Myalgic Encephalomyelitis / Chronic Fatigue Syndrome (ME/CFS)

Concise overview for clinicians, patients, and families.

#### What is ME/CFS?

ME/CFS is a serious, chronic, multisystem disease that disrupts energy production, autonomic regulation, and immune function. Core features include post-exertional malaise (PEM) (symptom worsening after even minor effort), unrefreshing sleep, cognitive dysfunction ("brain fog"), and often orthostatic intolerance (OI). It is recognized by the U.S. National Academy of Medicine (IOM/NAM) as a biological illness.

# IOM/NAM 2015 Diagnostic Criteria

- Substantial reduction/impairment in activity for > 6 months due to fatigue not alleviated by rest.
- Post-exertional malaise (PEM).
- Unrefreshing sleep.
- At least one: cognitive impairment or orthostatic intolerance (OI).

### **Common Symptoms**

- Worsening after exertion (PEM), often delayed 24-48 h
- Brain fog, slowed processing, memory issues
- Lightheadedness, palpitations when upright (OI)
- Unrefreshing or fragmented sleep
- · Widespread pain, sensory overload
- Headaches, sore throat, tender lymph nodes, GI issues

## **Diagnosis (Clinical)**

No single lab test. Diagnose clinically using IOM criteria and by excluding alternative explanations. Key steps:

- History focused on PEM, sleep, cognition, and upright tolerance.
- Physical exam with orthostatic vitals (lying/standing or 10-min stand).
- Review medications, comorbidities (POTS, MCAS, hEDS, migraine, etc.).

#### Testing (Rule-Outs & Baseline)

Targeted testing helps exclude common mimics/contributors and establish baselines (adapt to context):

- CBC, CMP, TSH/Free T4
- Ferritin/iron studies, B12, folate, vitamin D
- CRP/ESR; ANA if autoimmune features
- Morning cortisol if adrenal concern
- · HbA1c, lipids as indicated
- Sleep evaluation if symptoms suggest OSA/PLMD
- Orthostatic testing; consider tilt when appropriate
- Additional tests driven by history/exam

## **Management (Symptom-Directed)**

- Pacing & energy management: stay within the "energy envelope" to reduce PEM; avoid crashes.
- Sleep: hygiene, melatonin or low-dose agents for restorative sleep.
- OI: fluids/salt, compression, and medications (e.g., fludrocortisone, midodrine, beta-blockers) as appropriate.
- Pain & symptom control: multimodal approach (neuropathic agents, headache care, migraine prevention).
- Adjuncts: treat deficiencies (D, B12, ferritin); consider low dose naltrexone (LDN) in shared decision-making.