

CASE STUDY: SLEEPY HEAD CAN'T GET OUT OF BED

Imagine drifting off to sleep and waking in the morning, feeling as if you hadn't slept a wink? How energetic a person feels depends on how much energy they are able to produce. Consequently, supporting the hard-working mitochondria is crucial for optimal vitality. A 38 year old male presented to the Health World research clinic complaining of similar symptoms of those described above. Constant fatigue, especially in the afternoons. Despite "sleeping like a log" overnight and regular afternoon naps, he had experienced difficulty with morning waking for as long as he could remember. "I cannot get out of bed, no matter how much I sleep." He also complained of mental fatigue; feeling "fuzzy" in the head. A standard work-up including iron studies and assessment of fasting insulin, fasting glucose, morning cortisol, thyroid function and liver function, found all were within 'normal' ranges.



TREATMENT

With any overt pathology ruled out, a 14 week treatment plan was developed by the Practitioner (Table 1) to focus on supporting cellular bioenergetics along with correcting hypothalamic-pituitary-adrenal (HPA) axis dysfunction. Dietary recommendations included increasing nutrient-rich foods, particularly dietary protein, which was previously lacking.

GREATER ENERGY FOR LIFE

Within only three weeks, the patient reported marked improvements in mental and physical energy, finding it easier to get up in the mornings. In addition, he had taken some positive dietary steps with a protein bar for breakfast and avoiding chocolate and chips at lunch. Figure 1 summarises the patient's continual improvements over the treatment period – greater overall energy for life and less afternoon fatigue. "I don't feel like I need an afternoon nap these days."

This case highlights how creating a nutritional foundation for cellular bioenergetics and supporting HPA axis function can lead to rapid symptom relief and very satisfactory clinical outcomes, even in chronic cases. A reminder that Occam's razor* is still valid – the simplest solutions are often the best.

* Occam's razor is a philosophical principle related to problem-solving. When faced with a situation where it seems there may be several explanations – start with the simplest one first.

Table 1: Nutritional Foundation to Support Cellular Bioenergetics and HPA Function.

PRESCRIPTION	RATIONALE
High Potency B Complex	B vitamins play a vital role as cofactors within the Krebs cycle and electron transport chain as well as supporting neurological function.
Mental and Physical Energy Powder	Magnesium is not only pivotal to many reactions involved in cellular bioenergetics, it plays a role in protecting mitochondrial structure. Additionally, magnesium supports many facets of neurological health, including protecting against HPA hyperactivity and glutamate-mediated neurotoxicity; both strongly implicated in fatigue. Acetyl-L-Carnitine adds to these benefits, as well as facilitating the movement of fatty acids into mitochondria to be used as energy substrates.
Enhanced Bioavailability Co-enzyme Q10 150 mg	CoQ10 plays an important role within the electron transport chain, while protecting the oxidation-prone mitochondrial membrane. Levels of CoQ10 are often found to be insufficient in fatigued patients; making it a cornerstone nutrient for all fatigued patients.
Herbal and Nutritional Support for Adrenal Health	Adaptogenic herbs from Chinese, Ayurvedic and Western herbal medicine restore HPA function. Korean and Siberian ginsengs, withania and rhodiola attenuate physical and mental fatigue associated with stress and support healthy HPA function.

Figure 1: Symptom Progress.

