

The effects of exercise in myalgic encephalomyelitis (me) and Chronic Fatigue Syndrome (CFS)

Frank N.M. Twisk

ME-de-patiënten Foundation, Netherlands

Exercise can have various well-known beneficial health effects, e.g. immunological effects, anaerobic threshold and oxygen uptake [1,2]. ME is mainly characterized by specific cognitive deficits, pain, a flu-like feeling, and inflammation and immune activation, but above all post-exertional malaise: an increase or onset of symptoms after a minor exertion [3]. Approximately 30-55% of the patients fulfilling the fatigue-based criteria for CFS [4] comply with the diagnostic criteria for ME [3], which implicate they meet the hallmark feature of ME [5]: an increase of pain, cognitive symptoms, muscle weakness etc. The negative effect of exercise on ME patients, a large subgroup of the CFS patient population [6,7] can be explained by the observation that exertion and stress intensify pre-existing biological abnormalities [8,9]. If chronic inflammation, immune activation, immune dysfunction and increased oxidative/nitrosative stress is already present, exercise has a (strong) negative impact on the health status [10]. An accurate diagnosis (ME, CFS, or another condition) based upon symptoms [4,5] and objective tests [7] are essential to employ rehabilitative therapies effectively and to avoid iatrogenic harm [11].

Biography

Frank Twisk MBA BEd BEC is an independent researcher has published various articles on ME, CFS, immunology, oxidative/nitrosative stress and exercise.

frank.twisk@hetnet.nl