

Dietary Intervention In Chronic Fatigue Syndrome

R.A. Hobday, S. Thomas, A. O'Donovan, M. Murphy, A.J. Pinching

Infection and Immunity Speciality Group, St Bartholomew's Hospital, West Smithfield, London, EC1A 7BE.

Barts and The London 
NHS Trust

Introduction

Chronic Fatigue Syndrome (CFS) is an illness characterised by disabling physical and mental fatigue exacerbated by minimal exertion for which no definitive biomedical cause has been identified (Sharpe et al, 1997). A number of contentious causes have been suggested, including asymptomatic colonisation with *Candida* (Truss 1978). Whilst these claims have been refuted by the general medical community as speculative and unproven (AAA&I 1986) they have become increasingly popular within the CFS population due to the publication of numerous articles and books and the utilization of alternative health and nutrition sites on the internet.

This study aimed to determine whether a Low Sugar Low Yeast diet (LSLY) would be superior to following a healthy eating (HE) advice (COMA, 1991), in respect to self reported levels of fatigue and QoL in individuals with a diagnosis of CFS.

Methods

A 24-week randomised intervention study was conducted with 52 individuals diagnosed with CFS. Eligible subjects were randomly allocated to one of two dietary interventions, LSLY or HE. Primary outcome measures were fatigue as measured by the Chalder Fatigue Score and Quality of Life (QoL) measured by Medical Outcomes Survey Short Form (MOS SF-36).

Results

A high drop out rate occurred with 13 participants not completing the final evaluation (7HE/6LSLY). Of the 25 participants initially assessed and randomised to the LSLY diet only 6 (24%) were fully compliant with dietary recommendations for 24 weeks. By comparison, of the 27 allocated the HE diet 9 did not fully adhere to the recommendations, eighteen participants (67%) were fully compliant with the HE guidelines for the 24 weeks.

At 24 weeks, no statistically significant differences were found on primary or secondary outcomes when changes between the LSLY and HE groups were compared. Table 1 shows the effect of the two dietary interventions in relation to fatigue, QoL, anxiety and depression scores with 95% confidence intervals.

Table 1: Mean (SD) outcome scores for primary and secondary outcome measures at 24 weeks, comparing LSLY and HE diet groups.

Variable	LSLY n= 19	HE n=20	t-test 95% CI; Sig
Chalder Fatigue Scale	16.0 (8.2)	17.7 (10.0)	-7.5, 4.1; p=0.6
MOS SF-36			
General Health	34.5 (20.3)	40.6 (19.4)	-19.0, 6.6; p=0.34
Physical Function	42.3 (29.2)	52.2 (24.1)	-27.2, 7.2; p=0.25
Role Physical	26.3 (35.8)	23.8 (34.9)	-20.1, 25.1; p=0.82
Role Emotion	63.3 (44.5)	61.7 (46.3)	-27.4, 30.7; p=0.91
Social Function	42.0 (29.3)	50.6 (29.4)	-27.5, 10.0; p=0.35
Body Pain	39.6 (31.2)	54.7 (28.7)	-35.0, 4.7; p=0.13
Vitality	29.8 (20.7)	36.2 (26.4)	-21.7, 8.7; p= 0.39
Mental Health	70.7 (21.8)	67.8 (18.1)	-10.0, 16.0; p=0.65
HADS			
Anxiety	8.5 (5.2)	7.3 (4.1)	-1.8, 4.2; p=0.43
Depression	6.5 (3.6)	5.4 (3.7)	-1.2, 3.5; p=0.33

Conclusion & recommendations

The overall effect of a LSLY diet in comparison with HE on level of fatigue, mood state and quality of life demonstrates no discernable benefits in this small study. Whilst it cannot be considered definitive in terms of the therapeutic role of diet and CFS, it does highlight the difficulties of following a complex dietary regimen. Given many of the practical difficulties faced by patients with CFS, simple healthy eating guidance appears to be more pragmatic in terms of adherence than advocating a complicated dietary regime.

References

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