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CURRENT NUTRITION MANAGEMENT OF PATIENTS UNDERGOING BARIATRIC SURGERY

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Obesity is emerging as the most challenging chronic health problem facing our society, surpassing smoking-related illnesses, with a prevalence rate in Australian adults of 20%. Medical treatments have poor results with a 1–2% long term success rate. Weight loss surgery is the most effective treatment for morbid obesity (1), as it resolves the consequences of obesity (2,3) as well as decreasing the mortality rate in this population (3).

There are no evidence-based guidelines for nutrition management of patients pre and post bariatric surgery (4). An interest group was developed for the dietitians working in this area and a survey was subsequently undertaken to determine the current nutrition management in this growing field and identify the shortfalls.

The survey results indicate that most bariatric surgery centers use a weight loss program pre operatively. The duration and intensity of this depends on the severity of the patient's obesity as well as their tolerance for the intervention. Post operatively nutrition counselling is provided at the hospital level and the diet is progressed according to patients' tolerance and the clinicians' experience. Recommendations for energy, protein and multivitamin supplementations are inconsistent and not evidence based. Micronutrients such as Calcium, Vitamin D, and Iron are not routinely supplemented. Long-term food intolerances were identified as these may contribute to nutritional inadequacy in this population. Ongoing counselling and education is essential to change eating habits, reinforce a healthy balanced diet and ensure compliance with micronutrient supplementation. Further research is warranted in this growing field.

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CAN ORAL GLUTAMINE AMELIORATE CHRONIC FATIGUE SYNDROME? A PILOT STUDY

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Introduction: Chronic fatigue syndrome (CFS) or myalgic

encephalomyelitis (ME) is a severe disabling illness for which no adequate medical explanation exists. It lasts for at least six months, and can affect one person in every thousand in the UK. The symptoms include muscle cramps, sleeplessness, weakness and headaches which are rendered worse by mild physical or mental exertion. Both overactivity and underactivity of the immune system may be involved and control of the immune response may prevent the onset of CFS. The importance of L-Glutamine (Gln) in nutritional support of immuno compromised patients is well documented and provided the basis for this pilot study.

Aim: To evaluate the potential of oral glutamine supplementation to relieve fatigue symptoms of CFS/ME.

Method: Twelve ME volunteers, 3 male 9 female (78% post-menopausal) aged 45 to 58y, mean weight 73kg, were randomised into 2 groups to receive either placebo (Group A) or 10g/d of an oral Gln supplement (GlutaminOx 5, Oxford Nutrition www.nutrinox.com) (Group B) for one month. Each subject recorded their own assessment of health every 7d with an overall assessment at 28d. Common CFS/ME symptoms that were noted and assigned a score by participants included; sore throat, dizziness, muscle pain, depression and/or anxiety. Plasma Gln levels were measured by the standard enzymatic method on day 1, day 14 and day 28 of the study.

Results: The duration of ME appeared similar in range for both groups, as did their health profiles at the commencement of the trial. There were no overall differences in mean plasma Gln levels between the groups but Group A exhibited a transient 13% Gln increase ($p < 0.001$) after a period of exertion, with a marked increase in their plasma Tryptophan : BCAA ratio. In the Gln Group B, 83% (4F, 1M) reported improvements in mood and appetite, decreased muscle pain and an increase in physical activity. No overall improvement in any symptoms was perceived by the placebo Group A.

Conclusion: These preliminary results, whilst somewhat subjective, are clearly encouraging and require more extensive follow up. Many participants expressed the view that the study period should have been extended and there is a clear need for additional objective assessments to more precisely determine the potential clinical improvements to chronic fatigue syndrome from oral Glutamine supplementation.

SERUM SELENIUM AND GLUTATHIONE PEROXIDASE ACTIVITY IN CRITICALLY ILL PATIENTS WITH SYSTEMIC INFLAMMATORY RESPONSE AND MULTIPLE ORGAN DYSFUNCTION SYNDROMES

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