Do Very Low Calorie Diets Have A Place in the Treatment of Obesity?

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Very Low Calorie Diets (VLCDs) are soluble powders, taken in a liquid form, which have a daily calorific value of less than 600 Kilo Calories.

VLCDs have recently been introduced on the Bahrain Market, eg., Cambridge Diet.

The use of VLCDs has received extensive coverage in International Medical Journals for sometime. The Journal of the American Medical Association (JAMA) published a review paper in November 1983¹. The authors, well known for their work in the area of metabolism and weight control, remind us of the hazards of VLCDs. A high incidence of cardiac arrythmias and sudden death has been recorded in users, some of whom were under medical supervision².

Of grave concern is the method in which VLCDs are made available to the general public. It is important to note that the numerous studies which have shown certain VLCDs to be effective and safe were all carried out under close medical supervision and on people who were grossly overweight. Both the Cambridge Diet and Univite 330 are sold through a system of personal counsellors and advisors (who are not required to have any medical or nutritional qualifications).

Product labels do advise users to consult with a medical physician before commencing the diet, but there is no way to guarantee that this is undertaken.

The promoters say that VLCDs can be used as a sole source of nutrition for 3-4 weeks. There seems to be nothing to prevent a dieter returning to its use for several 3-4 weeks periods in close proximity — this could be hazardous except under close medical supervision².

The minimum acceptable level of medical supervision should include¹:-

- *Dietitian
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- ***Dietitian

 Bahrain Defence Force Hospital

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- **** Dietitian

- Careful selection of patients on the basis of medical history, physical findings and laboratory tests.
- Weekly or every other week monitoring of variables such as blood pressure, electrolytes and uric acid levels.
- Periodic assessment of cardiac performance by E.C.G. or 24 hour ambulatory E.C.G. monitoring (this should be weekly if the diet is used for more than 6 weeks.)
- Symptomatic treatment of postural hypotension, constipation, diarrhoea, headache, dizziness, hair loss and other problems arising from the use of VLCDs.

Guidelines have been suggested to the medical community for the safer use of VLC diets which are available to the general public¹. These need to be implemented in this country:-

- Strongly discourage the use of VLCDs by mildly overweight people (40% or less overweight). Inform them of the unacceptable risk benefit ratio and the availability of safe probably more effective alternatives in the long-term, such as dietary counselling, exercise programmes and behaviour modification⁴.
- Become familiar with current medical literature on the nature, benefits and hazards of VLCDs³.
- Since diet-induced weight loss is frequently followed by relapse, encourage patients to find a programme which includes behaviour modification, nutritional counselling and exercise instruction⁴.

There is a limited area in the treatment of the grossly obese [having body mass index in excess of 30 – weight (Kg) ÷ height $(M)^2$] where VLCDs may be used. However, careful selection of patients is crucial, not only because of risk of cardiac dysfunction, but also due to the controversy over the protein-calorie ratio and the potassium levels of diets.

In order that VLCDs may be used safely in the treatment of gross obesity and its complications, it is necessary that its availability is strictly controlled. The best way of achieving this is to have VLCDs available on prescription only³.

REFERENCES:

- 1. Wadden TA, Stundard AJ, Brownell KD, Van Itallie TB. The Cambridge Diet more mayhem? JAMA 1983;250:20:2833-2834.
- 2. Van Itallie TB, Yang MU. Cardiac dysfunction in obese dieters: a potentially lethal complication of rapid massive weight loss. Am J Clin Nutr 1984;39:695-702.
- 3. Road V. Scientific review of very low calorie diets (VLCD). Irish Nutr and Dietetic Assoc Newsletter (Mar) 1985.
- 4. The Cambridge Diet letters from dietitians at University College Hospital, London and community dietitians of East Anglia. Br Dietetic Assoc Newsletter (Jan) 1985.