



The Facts on Very Low Calorie Diets

Very low calorie diets (VLCD's) are commercially prepared formulas, usually in liquid form, that completely replace all usual food intake. VLCD's provide 800 calories or less. They contain protein and the recommended daily allowance for vitamins, minerals, electrolytes and essential fatty acids. Due to the severe calorie restriction and potential side effects, they should not be followed for more than 12 to 16 weeks

Who are VLCD's suitable for?

VLCDs should only be used under medical supervision for people with a BMI greater than 30kg/m². Use of VLCD's in patients with a BMI of 27-30kg/m² should be reserved for those who have medical conditions that would be immediately improved with rapid weight loss such as severe obstructive sleep apnoea or who have been unsuccessful with conventional low-calorie diets. Patients need to be well motivated

How do VLCD's work?

Since the body isn't getting enough food, it starts to break down its own fat and protein stores or lean body mass to get energy. It is important to preserve lean body mass as it increases your basal metabolic rate. On a VLCD about half the weight lost is fat and the other half is lean tissue (muscle). On a low calorie diet, the loss is about 75% fat and 25% lean body mass

How much weight can be lost on a VLCD's?

Severe to moderately obese clients who strictly follow a VLCD may lose about 1.0-2.5kg a week. VLCD's give rapid initial, short-term weight loss but are no more effective in the long-term than a low calorie diet. Also, more weight is usually regained following a VLCD compared to a low calorie diet

Are VLCD's safe?

They are generally safe when used under proper medical supervision in people with a BMI of greater than 30kg/m²

Who should not go on a VLCD?

VLCD's are not suitable for anyone with the following medical conditions:

- Systemic infections eg. influenza
- Diseases causing protein wasting eg. Muscular Dystrophy, Motor Neurone Disease



- Heart Disease
- Cerebrovascular disease (stroke)
- Kidney disease
- Liver disease
- Psychiatric disorders
- Insulin Dependent Diabetes Mellitus
- Hyperuricaemia
- Porphyria

Also, VLCD's are not appropriate for any of the following people:

- Pregnant/Breastfeeding women
- Children/Adolescents
- People over 50 years

Side effects of VLCD's

- Fatigue/weakness
- Dizziness
- Constipation/Diarrhoea
- Hair loss
- Dry skin
- Brittle nails
- Nausea
- Menstrual changes



- Oedema
- Cold intolerance

More severe or significant side effects of VLCDs are:

- Gout
- Gallstones
- Cardiac disturbances-most commonly during the period of refeeding when the patient is gradually reintroduced to solid foods

Conclusion

VLCD's are not a magic bullet for weight loss.

Warning! VLCD's may be used as a 'kick start' under medical supervision where quick weight loss can be beneficial with regards to health, morale and mobilization. However the main problems with VLCD's is the rapid weight regained after discontinuing the VLCD as they don't teach people about changing their eating or lifestyle behaviours, which are the essential behavioural changes needed for longterm weight loss/maintenance.

There is little published data on the safety of the sole use of VLCDs for longer than 12-16 weeks

In the longterm, weight loss on VLCD's is no different from the less restrictive, traditional low calorie diets

For most people who are overweight/obese, it is important to remember that obesity is a longterm condition that needs a lifetime of attention even after a formal weight loss programme ends. The only way to manage weight in the longterm is to commit to permanent changes of healthier eating, regular physical activity and develop a positive and respectful relationship with food

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