



# Very Low-Calorie Diets: Medical Applications, Possible Drawbacks, and Sustainability Over Time

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## DESCRIPTION

Very low-calorie diets (VLCDs) are structured eating plans that significantly restrict daily energy intake, usually to 800 calories or fewer. These diets are often used under medical supervision for individuals who are experiencing severe weight-related conditions. Despite the appeal of rapid results, this method requires careful application, regular oversight, and a clear understanding of its benefits and downsides.

VLCDs typically involve meal replacements such as shakes, soups, or bars that are specially formulated to include essential nutrients. This ensures that, while calories are restricted, the individual still receives necessary vitamins, minerals, and protein. These diets are often considered for people with a body mass index above a certain threshold, especially when weight-related issues affect physical function, mobility, or metabolic balance.

One of the most common reasons for choosing a VLCD is the need to reduce fat mass quickly to support other medical procedures, such as joint replacement or bariatric surgery. In such cases, a short period of rapid reduction in body weight can improve the outcome of the procedure or reduce complication risks during surgery. Additionally, individuals with insulin resistance or uncontrolled blood sugar may experience improvements in metabolic markers within weeks of starting a VLCD, which can support better management of type 2 diabetes.

However, these benefits are often accompanied by physical and mental challenges. People starting a VLCD may feel fatigued, dizzy, or cold during the first several days as the body adjusts to the new intake level. Some may also notice reduced concentration or mood fluctuations. For this reason, medical supervision is strongly recommended, especially for those with underlying health conditions or those taking medication that affects blood pressure or glucose regulation.

Another concern is the impact on muscle mass. When the body receives very limited calories, it may not only draw on fat stores but also begin to break down muscle tissue. This is why high-protein formulations are included in most medical VLCDs to help protect lean tissue while encouraging fat loss. Still, if physical activity is not maintained, especially resistance training, the loss of strength can become noticeable over time. There is also the issue of gallstones, which can occur in individuals who lose weight rapidly. When fat breakdown is accelerated, the liver releases more cholesterol into bile, increasing the risk of solid deposits forming in the gallbladder. This makes close follow-up and appropriate hydration especially important throughout the process.

Beyond the physical effects, the sustainability of VLCDs raises important questions. While they can produce quick results, long-term success often depends on what happens after the initial phase. If a person returns to previous eating habits without a structured transition, the weight lost can return within months. Many programs include a gradual reintroduction of conventional foods, paired with education on portion sizes, meal timing, and nutritional quality. Without this support, individuals may struggle to maintain their new weight, which can lead to discouragement and emotional distress.

There is also a psychological component to consider. Eating very small amounts for weeks or months can alter one's relationship with food. While some individuals report feeling more in control during a structured program, others may find it difficult to reintroduce regular meals without anxiety or guilt. Professionals often recommend counseling or behavioral support alongside VLCDs to help manage these effects.

From a practical perspective, VLCDs can be expensive. The cost of meal replacements, medical supervision, and regular assessments adds up over time. While some insurance plans may cover part of these expenses in medically necessary situations, many people pay out of pocket, which limits access for some individuals.

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**Received:** 27-Aug-2025, Manuscript No. JNWL-25-30131; **Editor assigned:** 29-Aug-2025, Pre QC No. JNWL-25-30131 (PQ); **Reviewed:** 12-Sep-2025, QC No. JNWL-25-30131; **Revised:** 19-Sep-2025, Manuscript No. JNWL-25-30131 (R); **Published:** 26-Sep-2025, DOI: 10.35248/2593-9793.25.10.246

**Citation:** Ghosh N (2025). Very Low-Calorie Diets: Medical Applications, Possible Drawbacks, and Sustainability Over Time. J Nutr Weight Loss. 10:246.

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Despite these concerns, VLCDs remain a valid option in specific contexts. For example, they can offer a structured starting point for individuals who feel overwhelmed by the thought of gradual change. By seeing measurable results early on, some people feel more motivated to commit to longer-term changes in lifestyle, especially if they have struggled with weight for years.

In summary, very low-calorie diets can support meaningful changes in body weight and related health conditions when used

with appropriate oversight. They are not intended for casual use or short-term appearance goals. Instead, they are most effective when applied as part of a larger health plan that includes professional input, follow-up care, and a transition phase designed to build long-term stability. While they are not suitable for everyone, with the right guidance, VLCDs can contribute to improved well-being for certain individuals facing significant weight-related challenges.