

## **Aggressive, Non-Surgical, Medical Weight Loss Using Very Low Calorie Diets: What Does The Research Show? by Rick Tague, MD, MPH & TM**

At the Center for Nutrition and Preventive Medicine, we use a “multi-dimensional” approach to weight loss. In other words, we don’t rely on just one single treatment strategy. I believe that weight loss and maintenance is too difficult to “put all your eggs in one basket”. So, for initial weight loss we use structured, aggressive diets, along with appetite and craving control methods, metabolism optimization, activity enhancement, and optimal nutrient intake in the context of individualized patient support. After more than 14 years of patient experience, I’m convinced this comprehensive approach is the most effective and sensible treatment plan to manage weight problems.

Most research studies, however, look at only one single treatment for a limited period of time. Since one of the weight loss diets we often utilize is the medical treatment known as the Very Low Calorie Diet (VLCD), let’s review some of the research data and commentary on this particular strategy both from our office and from the literature.

The Very Low Calorie Diet is defined by certain characteristics:

- 1) Typically not over 800 calories per day (although in our office we often intentionally exceed this calorie limit, especially in men), with a diet relatively rich in protein.
- 2) Includes the full compliment of recommended nutrients in adequate amounts.
- 3) Supplied in a form that completely replaces usual food intake.
- 4) Usually given for 12-16 weeks or longer if needed.

Let’s first look at what the **National Institutes of Health** has to say about this “doctor-supervised diet” known as the VLCD. The following excerpts (emphasis mine) are taken from the U.S. Department of Health and Human Services sponsored “Weight-control Information Network” website at [http://win.niddk.nih.gov/publications/low\\_calorie.htm](http://win.niddk.nih.gov/publications/low_calorie.htm).

“A VLCD is a doctor-supervised diet that typically uses commercially prepared formulas to promote rapid weight loss in patients who are obese.” “VLCD formulas are NOT the same as the meal replacements you can find at grocery stores or pharmacies, which are meant to substitute for one to two meals a day.”

“...all candidate for VLCD’s undergo a thorough examination by their health care provider...” “...doctors must monitor all VLCD patients regularly...”

“A VLCD may allow a patient who is moderately to extremely obese to lose about 3 to 5 pounds per week, for an average total weight loss of 44 pounds over 12 weeks. Such a weight loss can rapidly improve obesity-related conditions, including diabetes, high blood pressure, and high cholesterol. The rapid weight loss experienced by most people on a VLCD can be very motivating.”

Next, let's review some comments published in JAMA, August 25, 1993, Vol 270, p. 967 by the **National Task Force on the Prevention and Treatment of Obesity** in their "conclusions" regarding safety and effectiveness of VLCD's. "Current VLCD's are generally safe when used under proper medical supervision in moderately and severely obese patients and are usually effective in promoting significant short-term weight loss, with concomitant improvement in obesity-related conditions." They explain that the VLCD is not an acceptable long term maintenance strategy. Other approaches, like behavioral therapy and physical activity are more appropriate for maintenance (I agree!). You may recall that Oprah Winfrey lost 67 pounds in 1990 on a VLCD, only to regain her weight later on an ineffective maintenance strategy. The VLCD is a tool for initial, rapid weight loss. Other methods (like our CARING Diet plus appetite and metabolism management) are recommended for weight maintenance.

Next, let's review what I've simply called "The Topeka OWL I Study". This study was done at our Topeka office on my **Optimum Weight Loss Phase I diet plan**, which includes a physician supervised VLCD type diet. In this study, I evaluated 10 consecutive men and 10 consecutive women (moderately to severely obese) who followed the OWL Phase I diet for 12 weeks.

Women	LOCATION	START wt.	12 WEEKS wt.	TOTAL loss (lbs) in 12 wks
W1	T	174.6	138.4	36.2
W2	T	260	227.6	32.4
W3	T	240	201	39
W4	T	309	261	48
W5	T	274	233.4	40.6
W6	T	270.5	217	53.5
W7	T	247	206.25	40.75
W8	T	280	240	40
W9	T	239.6	210	29.6
W10	T	236	203	33
<b>Average Women</b>		<b>253.07</b>	<b>213.65</b>	<b>39.3</b>
Men	LOCATION	START wt.	12WEEK wt.	TOTAL loss in 12 weeks
M1	T	371.3	313	58.3
M2	T	254.6	231	23.6
M3	T	244.3	191	53.3
M4	T	428	367.2	60.8
M5	T	262	228.7	33.3
M6	T	229	182.6	46.4
M7	T	247	206	41
M8	T	260.4	233	27.4
M9	T	340.2	291	49.2
M10	T	391.3	314	77.3
<b>Average Men</b>		<b>302.81</b>	<b>255.75</b>	<b>47.06</b>

As you can see, average weight loss for men was over 47 lbs and for women was over 39 lbs in 12 weeks. This average of over 43 lbs lost in only 12 weeks is rather remarkable when compared to “typical” weight loss for dieters.

In the International Journal of Obesity, Sept 2000, Vol 24, No 9, p. 1107, an article entitled “Can anyone successfully control their weight?” they report on page 5 of 8 regarding dieters given instructions on diet and weight loss in a non-medical setting that “At 1 year of follow-up, subjects had gained on average 0.7% of their baseline BMI”. This was a group of dieters who were trying to lose weight, but they actually gained weight! In fact, 38% of the dieters had gained at least 5% of their initial weight (that is a gain of at least 10 lbs for a 200 lb dieter). Only 4.6% were able to lose at least 5% of their weight and maintain the loss for at least 2 years! Weight loss is far more difficult than most people realize!

In JAMA, Vol 293, No 1, 1/5/2005, researchers looked at multiple popular diets to see what typical weight loss results were at 1 year. For the Atkin’s diet, 4.6 lbs were lost in one year on average, the Zone diet 7.0 lbs, and for Weight Watcher’s, weight loss in one year averaged 6.6 lbs. And these were research study results at an academic center in Boston. Most of the patients had far more than 7 lbs to lose.

Weight loss is difficult! To get to your goal, you must first identify a method for initial, effective weight loss. The method you select should be influenced by approximately how much weight you need to lose and if there are health concerns. If your weight loss needs are in the 4-7 lbs range, there are many effective options. If you need to lose 15, 25, 50 lbs or more, very few approaches will consistently give necessary weight loss results. For those with the higher weight loss needs, I recommend you consider one of the medically supervised approaches, such as the VLCD diet.

I recommend that you work with a health care provider familiar with nutrition and weight loss and the associated challenges in losing and maintaining long term weight loss. Use proven techniques and strategies whenever possible. Ask for office-based weight loss statistics, if available, from your health care provider. Be selective on your approach to set yourself up for an optimal result.

Best wishes for optimum health,

Rick Tague MD, MPH

