

Medically Managed Very Low Calorie Diet

The basics

This handout is for patients at the Center for Weight Loss and Metabolic Surgery at UWMC - Roosevelt in Seattle. Please carefully read this handout before you start your very low calorie diet.

What is a very low calorie diet?

A very low calorie diet (VLCD) is a nutrition plan for patients who:

- Are very overweight or obese, with a *body mass index* (BMI) higher than 30
- Have a BMI higher than 27 with health conditions such as diabetes, high blood pressure, or high cholesterol

Being on a VLCD means eating high amounts of protein, very few carbohydrates, and some limited healthy fats. While you are on this diet, you will:

- Eat protein-enriched nutritional meal replacements and some fresh foods
- Have regular lab tests and clinic visits
- Have your medicines adjusted, if needed
- Eat about 800 calories a day

Why is this diet medically managed?

A VLCD is an intensive program. If you choose to follow a VLCD, we must closely monitor your health and progress. **This monitoring is for your health and safety.** You will have regular clinic visits and lab tests as a part of our program. Our providers will help plan your schedule.



Your care providers at the Center for Weight Loss and Metabolic Surgery will monitor you while you are on this diet.

Is there any reason I should not go on this diet?

This diet is not for everyone. People with certain health conditions or receiving certain treatments should not go on a VLCD. We do **not** advise this diet if you:

- Are being treated for cancer
- Have had a heart attack or stroke in the last 3 months
- Have type 1 diabetes, severe liver disease, or stage IV or V kidney disease
- Have heart disease, seizure disorder, uncontrolled psychiatric illness, recent surgery or trauma and need for recovery
- Are receiving lithium or chronic corticosteroid treatment
- Are pregnant, breastfeeding, or plan to become pregnant
- Have an eating disorder or a substance misuse disorder

What can I expect while I am on this diet?

Ketosis

Your body usually burns *carbohydrates* (sugars) for energy. When you eat very few carbohydrates, your body starts burning fat instead. This is called *ketosis*.

During ketosis, your liver creates chemicals called *ketones* and sends them into your bloodstream. Ketones provide as much energy as sugar and also help suppress your appetite.

Once you begin this diet, it will take about 4 days for your body to reach ketosis. During this time, you may have headaches or feel tired. By day 3 or 4, these symptoms should be easing and you will have more energy and less hunger.

While you are on a VLCD, do NOT eat extra carbohydrates. If you do, your body will not stay in ketosis.

Fluids

Ketosis causes your body to lose fluid (*diuresis*), so it is very important that you drink lots of liquids. **You will need to drink at least 64 ounces (8 cups) of fluid every day.** Make sure your 8 cups are 8 ounces each.

Water is the best fluid to drink. But, you may also have other drinks with 0 calories, such as tea, black coffee, or sparkling water. You may use a no-calorie flavoring such as Crystal Light in your water.

If you have a history of swelling or fluid retention (*edema*), your symptoms should improve on this diet. If you take a diuretic medicine, your provider will help you adjust your dose.

Mineral Loss

Ketosis causes your body to lose salt and potassium. You do not need to limit salt intake during this diet. We will watch your lab results to make sure your blood levels of these minerals stay in the safe range.

Weight Loss

Most people lose weight very quickly on a VLCD. Here is the average weight loss over the course of the program:

- For females, about 3 pounds a week
- For males, about 5 pounds a week

Some patients lose a lot of weight the first week. This is often because they were retaining fluid.

Weight loss on VLCD usually follows a pattern. If you have a high weight loss one week, you are likely to lose less weight the next.

This rapid weight loss is safe because you will be eating lots of protein, which will preserve your muscle mass. **But, anyone who follows this diet must be monitored by a healthcare provider to make sure they stay safe and healthy.**

Side Effects

Most patients have few or no side effects while on a VLCD. But, tell your provider if you have any of the side effects listed below. These problems usually go away as your body adapts to the VLCD:

- **Fatigue (feeling very tired):** Your energy will start to be more normal after 1 to 2 weeks.
- **Dizziness:** Try drinking more fluids and adding salt or a bouillon cube. Your provider may need to adjust your blood pressure medicines. Do **not** donate blood while on this diet.
- **Constipation (hard stools):** Try taking a sugar-free fiber supplement such as Just Better Fiber, Citrucel, or Metamucil every day. If constipation does not ease, try taking a magnesium supplement, 400 mg to 500 mg a day. You can also use a laxative such as Miralax as needed.

- **Feeling cold, dry skin, or hair thinning:** Be sure you are eating all the protein and fat included in this diet. Talk with your provider if these side effects do not go away on their own.
- **Menstrual changes:** If your period is late, take a pregnancy test. You should not be on this diet or take most anti-obesity medicines if you are pregnant.
- **Headache:** This side effect is more common in the first few days of being on a VLCD. Drink more water to help ease headaches.
- **Muscle cramps:** Take 99 mg potassium 3 times a day. Magnesium may also help ease cramps (see page 3).

Physical Activity

Physical activity improves your *metabolism* (how your body changes food into energy), muscle mass and function, and bone health. It also reduces stress and is essential for maintaining weight loss.

Start adding activity to your routine during week 2 of your VLCD. Your exercise plans should include both:

- *Aerobic* exercise to burn calories, such as walking or jogging, biking, swimming, or dancing
- *Resistance or weight-bearing* exercise to preserve muscle mass and increase metabolism, such as hand weights or exercise bands

Talk with your provider about your activity plan.

Medicines

Review all your medicines with your provider before you start a VLCD. Your provider may lower your dose or stop some of your medicines while you are on this diet or after you lose weight.

We will talk with you about your medicine doses at each clinic visit, as needed. While you are on our program, be sure to tell us about any changes to your medicines.

If You Have Diabetes

Blood sugars respond very quickly when you are on a VLCD. If you have diabetes, you must check your blood sugar at least once a day. Record your levels in a log.

Talk with your diabetes care provider before you start your VLCD. They may want to adjust your diabetes medicines and monitor you more closely while you are on our program.

Be very aware of how you feel when your blood sugar is low (*hypoglycemia*). Use glucose tablets or gel to raise your blood sugar as needed. You can buy these products at your local drugstore.

If you are sick, check your blood sugars every 4 hours. If you can, sip on protein shakes and drinks with no calories.

Record Keeping

Keep track of your daily food intake, fluid intake, activity, and blood sugars (if needed). You can record these in a journal or use an app such as My Fitness Pal, Fat Secret, Lost It, Spark people, Weight Watchers, or Fitbit.

Please track every morsel of food and sip of beverage so that your intake record is very accurate. Bring your record to your clinic visits for review.

Getting Started

This plan for rapid weight loss may seem challenging at first, but it gets easier. **You can do this!**

We are here to support you during this process and answer your questions. You will visit our clinic often to talk with your provider. You will also work with a Registered Dietitian to help you transition to a long-term nutrition plan.

Let's get started! The sample meal plans we include below give you an idea of what you will be eating on the VLCD.

Sample Meal Plan with 1 Whole Food Meal

Drink water throughout the day, at least 64 ounces every day. You may also have other sugar-free and low-calorie fluids, with less than 10 calories in 8 ounces.

Breakfast	Protein shake 1 potassium citrate supplement Fiber supplement 1 multivitamin
Lunch	Protein shake or high-protein soup 1 potassium citrate supplement Fiber supplement

Dinner	3 ounces protein* 1 cup steamed vegetable** 1 tablespoon olive oil 1 potassium citrate supplement Fiber supplement
Snack	Protein shake Fiber supplement 1 probiotic (optional)
Anytime	Bouillon cube (dissolved in hot water)

* *Examples of protein (meats are 3 ounces after cooking):* lean steak or ground beef, skinless chicken breast, pork tenderloin, ham, white fish (cod, flounder, haddock, halibut, snapper, sole), 6 ounces cottage cheese, or 3 eggs

** *Examples of vegetables:* spinach, kale, Swiss chard, broccoli, green beans, cauliflower, cabbage, Brussels sprouts

What to Buy and Where

Suggested:

- Healthy Transformation Meal Replacement (shake)
- Healthy Transformation High Protein or Ketogenic soup
 - Buy online at:
www.bariatricadvantage.com/category/healthy_transformations/healthy-transformation/1.html
 - 1 box of shakes lasts 1 week; 1 bag of high protein soup lasts 4 weeks; 1 box of ketogenic soup lasts 2 weeks
- Probiotic (optional)

Other Options:

- Premier protein shakes – buy at Costco, Wal-Mart, Amazon
- Equate High Performance – buy at Wal-Mart
- Ensure Max – buy at your local drugstore, Wal-Mart, Amazon

Required:

- 99 mg potassium citrate (3 capsules per day = 10mEq) – buy at your local drugstore or online
- Daily multivitamin such as Centrum, Flintstones Complete with Iron, Chewable Nature Made, Kirkland Daily Multivitamin – buy at your local drugstore or online

- Fiber supplement – take 1 to 3 times a day (see page 3)
- Bouillon cube dissolved in hot water once (or twice) a day
- Olive oil, 1 tablespoon a day

Sample Meal Plan with Shakes and Soup

Drink water throughout the day, at least 64 ounces every day. You may also have other sugar-free and low-calorie fluids, with less than 10 calories in 8 ounces.

Breakfast	Protein shake 1 potassium citrate supplement Fiber supplement 1 multivitamin
Lunch	Protein shake 1 potassium citrate supplement Fiber supplement
Dinner	High protein soup 1 tablespoon olive oil 1 potassium citrate supplement Fiber supplement (Optional: 2nd bouillon cube, dissolved in hot water)
Snack	Protein shake Fiber supplement 1 probiotic (optional)
Anytime	Bouillon cube (dissolved in hot water)

What to Buy and Where

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- Daily multivitamin such as Centrum, Flintstones Complete with Iron, Chewable Nature Made, Kirkland Daily Multivitamin – buy at your local drugstore or online
- Fiber supplement – take 1 to 3 times a day (see page 3)
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- Olive oil, 1 tablespoon a day

Tips and Tricks

Try these tips and tricks to help you succeed with your weight loss goals:

- When eating your whole foods and soups:
 - Use small dishes. When a plate or bowl looks full of food, it tells your brain you are eating more than you really are.
 - Take small bites and chew each bite well.
- Eat or sip slowly. It takes about 20 minutes for your stomach to tell your brain that you are full. Plan to take at least that long to eat a meal or snack.
- Weigh or measure food and fluids as needed. You can buy a food scale at Wal-Mart or online for about \$10.
- Follow your VLCD **exactly** as prescribed. This plan was designed for best results. Resist the urge to add snacks or eat whole foods instead of drinking a meal replacement shake.
- Remind yourself that this diet is short-term. You will not eat this way forever.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Center for Weight Loss and Metabolic Surgery at UWMC - Roosevelt: 206.598.2274