

# **Pre-Operatory Diet**

# • Pre-Op Diet Guidelines

Purpose	Page 1
How long?	Page 3
Main principles	Page 4
Macros	Page 6
Recommended foods	Page 7
Portion size	Page 10
Meal plan – solid food (sample)	Page 12
3 days before (liquid diet)	Page 13
Meal plan – liquid diet (sample)	Page 14

### **Pre-Op Diet Guidelines**

#### **Purpose**

Understanding the reasoning behind the rules makes it easier to follow them. There are several main reasons why you are required to follow a pre-operatory diet before having weight loss surgery.

#### **Balance hormonal system**

Pre-op diet helps to control complicated hormone systems responsible for causing obesity (hormones are more important than calories, one of such hormones is insulin). When we eat sugar, our pancreas produces one of the most important metabolism hormones — insulin that converts sugar into energy (or fat, when do not use all the produced energy). When we eat too much sugar <u>regularly</u>, insulin levels become elevated, which leads to <u>insulin resistance</u>. That in turn works just like a drug addiction: our body becomes less sensitive to the same amount of insulin; thus, pancreas produces more and more of it to achieve the needed effect; however, when we have more insulin in our blood than sugar, our body tells us to eat some sugar to even out the balance (this is what causes sugar cravings, hunger attacks). And as soon as we eat sugar, our body produces even more insulin increasing this addiction. The cycle goes on.

A similar process takes place in our brain: sugar triggers the release of dopamine hormone into the same area of the brain that responds to heroin and cocaine. Eating sugar regularly changes your brain so that it becomes tolerant to the sugar, causing you to require more to get the same effect. Sugar has also been shown to cause the release of endogenous opioids in the brain, which leads to a rush like that experienced when a person injects heroin. All of this leads to a vicious cycle of cravings and needing more sugar to feel good.

In the meantime, all the excess sugar is being stored as fat, slowing down your metabolism, and promoting comorbidities such as heart disease, dementia, and cancer to name a few. This is a condition known as pre-diabetes. It is also called metabolic syndrome, insulin resistance, and syndrome X.

The key to weight loss, then, becomes focusing on foods that normalize blood sugar and lower insulin levels. If you eat the same number of calories from broccoli rather than cookies, you will lose weight. If you eat food that spikes your insulin level, you will gain weight. If you eat food that reduces your insulin level, you will lose weight. This is true even if the food contains the same number of calories or grams of protein, fat, carbohydrates, and fiber.

#### For more information go to:

The insulin – Weight Gain Connection

https://crossroadstohealth.com/insulin-weight-gain-connection/

- Sugar Addiction Explained By Dr. Robert H Lustig https://www.youtube.com/watch?v=bDWN5FLgbdI
- Insulin or Calories: What's Behind Weight Loss? https://www.youtube.com/watch?v=XY1jtPqvoCk
- Time to Act on Obesity https://www.youtube.com/watch?v=tC3pACyRApg
- ❖ Is a Calorie a Calorie? Processed Food, Experiment Gone Wrong https://www.youtube.com/watch?v=nxyxcTZccsE
- Why is a Calorie Not a Calorie (with Spanish Subtitles) https://www.facebook.com/watch/?v=334863366637788

#### Shrink enlarged fatty liver.

Enlarged liver is a consequence of being overweight (also known as fatty liver disease). Following this diet causes the liver 'shrink' in size and softens it, making it easier to move during surgery. During laparoscopic bariatric surgery, the liver must be lifted out of the way to access the stomach lying beneath it. If the liver is heavy, fatty, and immobile, it is harder for the surgeon to see and gain access to the stomach underneath. This could be a reason for the surgeon to make additional incisions or even cancel a surgery and allow a patient more time to follow the diet to shrink the liver or change to open surgery. Open surgery means a larger abdominal scar, which results in longer recovery and increased risks, and of course additional surgery costs. To reduce the size of the liver, it is necessary to follow a diet that is low in carbohydrate, low in fat and moderate in protein.

#### Mental, emotional, and physical preparation for the post-operatory stage

Consider the pre-op diet to be a training that helps your body and mind adjust to the new lifestyle that will follow the surgery. As part of this preparation, you may be going through unpleasant <u>sugar detox symptoms</u> and <u>caffeine withdrawal</u>. Sugar and caffeine withdrawal happen when we change our diet not gradually but abruptly, thus consuming less stimulants (such as carbs and caffeinated beverages), which causes headache, general weakness, tiredness, mood changes, etc. You may choose to make diet changes gradually, slowly reducing amount of sugar and caffeine in your diet to avoid unpleasant withdrawal symptoms (if you choose this option, allow an extra week or two for your pre-op diet), or you may choose a cold turkey method (making all the changes abruptly). Regardless of which option you choose, you want to allow your body and mind enough time to get prepared for the surgery to reduce post-operatory tiredness and fatigue.

#### For more information go to:

How to Beat Sugar Detox Symptoms and Feel Better Than Ever <a href="https://www.healthline.com/health/sugar-detox-symptoms#the-addiction-cycle">https://www.healthline.com/health/sugar-detox-symptoms#the-addiction-cycle</a>

#### **❖** 8 Symptoms of Caffeine Withdrawal

https://www.healthline.com/nutrition/caffeine-withdrawal-symptoms#section9

#### Losing weight

Dr. Zavalza and Dr. Hernandez may have certain weight loss requirements for patients with BMI over 50 that will need to be met before surgery. For low and medium BMI patients (with BMI between 30 and 50) there is no specific number of pounds you need to lose during the pre-op diet, rather concentrate on acquiring healthy eating habits and completing the goals mentioned above.

For RNY or Mini Gastric Bypass patients with <a href="https://high.google.com/

#### **Special note for patients with diabetes**

If you have diabetes and are treated with medication, you will need to adjust your insulin or medication while following this diet. Please contact your Diabetes Specialist Nurse/Practice Nurse/GP before starting the diet.

# How long?

Ideally everyone should start making diet changes described in these instructions the moment they decide to have surgery. You will learn precisely how long you should strictly follow the diet during your consultation with Dr. Zavalza or Dr. Hernandez. However, our minimum recommendations are:

```
BMI 29 to 30 (very low BMI for bariatric patients) – 3-day liquid diet only
```

BMI 31 to 33 - 1-week solid diet + 3-day liquid diet

BMI 34 to 36 - 2-week solid diet + 3-day liquid diet

BMI 37 to 39 – 3-week solid diet + 3-day liquid diet

BMI 40 to 44 - 4-week solid diet + 3-day liquid diet

BMI 45 to 49 – 5-week solid diet + 3-day liquid diet

BMI 50 to 53 – 6-week solid diet + 3 to 5-day liquid diet

BMI 54 to 57 – 7 to 8-week solid diet + 3 to 5-day liquid diet

BMI 58 to 60 – 8 to 9-week solid diet + 5 to 7-day liquid diet

**BMI 61 to 64 –** 10-week solid diet + 7 to 14-day liquid diet

**BMI 65 and over** – requires at least 10 to 12 weeks on a pre-op diet (solid food) + 7 to 14 days of liquids only, and monthly follow up consultations with Dr. Zavalza or Dr. Hernandez. For BMI over 65, after the second or third consultation the doctor will determine if you are ready to schedule surgery and whether the liquid diet stage needs to be increased. Please do not ignore follow-up consultations, and do not feel as if we were checking on you. We sincerely want you to succeed and would like to guide you through this process, motivate you, help you adhere to the diet and benefit from it to be ready for surgery rather sooner than later.

# **Important Rules, Main Principles**

- ➤ Understand satiety. Eat frequently (5-6 times a day) but do not overeat: stop once you feel full! Do not always try to finish everything on your plate. Our stomach and guts send a signal (through the satiety hormones) to our brain that we are full about 15-20 minutes after we start eating once our body starts responding to glucose from food with elevated insulin levels in our blood. If you eat slowly, your brain will receive those signals before you finish your meal, thus allowing you to not overeat.
- ➤ **Hunger vs. Thirst.** Have a glass of water when you think you feel hungry. The feelings of thirst and hunger are very similar (the same part of your brain is responsible for interpreting hunger and thirst signals, which can result in mixed signals). If you have a glass of water and still feel hungry, then you are truly hungry. Otherwise, the feeling will go away.
- ➤ **Practice thorough chewing.** Do not "inhale" food. Put your fork down between the bites. Enjoy chewing and tasting food in your mouth, pay attention to what you are eating and do not get distracted by TV or cell phone. Focus on your meal. These habits will be essential during the post-op stage.
- ➤ **Do not skip meals.** Skipping a meal means you will be so hungry at the next meal that you are likely to overeat. Besides skipping meals can lead to a slowdown of your metabolism, meaning you'll burn fewer calories.
- When you blow your diet, do not give up. Do not wait until the next day, or Monday or next month to go back to the right course. Resume your healthy diet with the very next meal. Every meal matter, if you had a piece of cake at a family gathering for lunch, get back on track at dinner.
- ➤ All calories are not the same. Do not be obsessed with counting calories, because 100 calories coming from soda or chips are not the same as 100 calories coming from broccoli or almonds. Focus on healthy food choices and portion control (as will be explained further). What we eat is more important than how much we eat.
- No drinking while eating. Stop drinking 30 minutes before you eat and do not drink again until 30 minutes after you eat. This will be a requirement following your surgical procedure and needs to become a lifetime habit. Think about your stomach as a colander (strainer), or a

funnel. If you only put liquid in the colander/funnel it's going to go straight through, but if you only put solid/soft food in that colander, it will drain through slowly. If you end up mixing water with the food, it thins it, allowing the food to go through the colander/funnel faster (or your stomach faster). By doing this, you won't feel as full, allowing you to eat more during your meals and you'll become hungry sooner, which all equates to consuming more food and more calories throughout the day. And after surgery you will want to fill up your limited stomach space with protein and nutritious food first, and drink later, thus, developing this habit now will become very useful in the future.

- ➤ Drink at least 2 L (or 64 oz.) of water a day. If you drink a lot of water, you might lack potassium, which might cause leg or toes cramps (especially after work outs). To maintain proper levels of potassium, take Potassium Chloride 500 mg a day in pills (if needed), or add foods rich in potassium to your diet (example: spinach, tomatoes, broccoli, Brussel sprouts, champignon mushrooms, pickles or pickle juice, avocadoes, and apricots. Also, certain proteins like salmon, turkey, beef, and yogurt are rich in potassium).
- Avoid artificial sweeteners. It goes without saying that added sugar is to be avoided, however artificial sweeteners should also be avoided as much as possible. Extreme and unnatural sweetness encourages sugar cravings and sugar dependence. Non-nutritive sweeteners are far more potent than table sugar and high-fructose corn syrup. A miniscule amount produces a sweet taste comparable to that of sugar, without comparable calories. Overstimulation of sugar receptors from frequent use of these hyper-intense sweeteners may limit tolerance for more complex tastes. That means people who routinely use artificial sweeteners may start to find less intensely sweet foods, such as fruit, less appealing and unsweet foods, such as vegetables, downright unpalatable. Also keep in mind that artificial sweeteners (especially when used after surgery) often cause stomachache, diarrhea, and gas.
- ➤ Cook your own food. Avoid all types of fast food, even if seems to be a healthy salad or other type of healthy food, they often contain added sugar (especially premade salad dressings), taste enhancing chemicals and trans fats. Clean up your refrigerator and pantry, remove all bad foods to avoid unnecessary temptation. Think ahead what you are going to have for breakfast, lunch, dinner, and shop and cook accordingly. If possible, always bring your own lunch box to work with healthy foods. Use your own thermos with hot coffee or tea to avoid temptation to buy a beverage loaded with sugar and cream.

# For more information go to:

- We Found Out if It Really Takes 20 Minutes to Feel Full https://www.huffingtonpost.com.au/2016/11/09/we-found-out-if-it-really-takes-20-minutes-to-feel-full a 21602736/
- Hunger vs thirst: know the difference https://www.diabetessa.org.za/hunger-vs-thirst-know-the-difference/

- Can "Diet" Make You Fat? The Truth About Artificial Sweeteners https://www.healthline.com/nutrition/artificial-sweeteners-and-weight-gain#metabolic-health
- Artificial sweeteners: sugar-free, but at what cost? <a href="https://www.health.harvard.edu/blog/artificial-sweeteners-sugar-free-but-at-what-cost-201207165030">https://www.health.harvard.edu/blog/artificial-sweeteners-sugar-free-but-at-what-cost-201207165030</a>
- WLS No Drinking with Meals!
  <a href="https://www.youtube.com/watch?v=xR0VM3mnsgM&fbclid=IwAR2nS3w73QLIhq2P8aew">https://www.youtube.com/watch?v=xR0VM3mnsgM&fbclid=IwAR2nS3w73QLIhq2P8aew</a>
  <a href="mailto:ZCEBoIICHcY0I8kJIc61Zh91KoJkhwiOxaa1pnI&app=desktop">ZCEBoIICHcY0I8kJIc61Zh91KoJkhwiOxaa1pnI&app=desktop</a>

#### **Macros & Recommended Foods**

#### Your diet should include:

- 3 main meals per day (reduced size, images below show how to easily measure your meals using the rule of palm)
- 2 or 3 small snacks (depending on when you go to sleep, you may add a third snack in the evening if you go to bed late, otherwise limit yourself to 2 small snacks a day)

#### **Important:**

Every meal or snack should include protein (it will help you feel full longer as it takes longer to digest and does not cause insulin level spikes).

- You may combine several types of protein or vegetables/greens in one meal, or several types of fruit or protein in one snack if you follow the recommended portion size.
- Give preference to cooking with healthy oils and little salt (only extra virgin olive oil, organic coconut oil, walnut oil, and avocado oil).

# **MACROS**:

- 1,000 1,200 calories per day (stay on the lower end if you are not physically active).
- **70 80 grams of protein** per day. The formula to calculate your ideal amount of protein per day is to multiply your weight in pounds by 0.36, for example, a person who weighs 200 pounds needs 72 gr of protein per day, that is 200\*0.36 = 72.
- 100 125 grams of carbs per day (decrease if you are not physically active).
- 35 grams of fat per day.

We believe that one of the main keys to success more than counting calories or other macros, is to get used to a well-balanced diet, cooking healthy meals at home instead of purchasing fast foods and not abusing foods with low nutritional value (generally any type of processed foods). If you follow the Main Principles explained above, you will not need to worry about calculating your macros.

	ALLOWED	AVOID
PROTEIN (Choose an option and combine with veggies or greens)  *Foods with higher glycemic index (cause insulin level spikes) — eat in moderation	<ul> <li>Egg (1 yolk and 2 egg whites per meal)</li> <li>Fish (tuna, salmon, swordfish, tilapia, sardines)</li> <li>Crab</li> <li>Lobster</li> <li>Shrimp</li> <li>Chicken without the skin</li> <li>Turkey without the skin</li> <li>Lean pork</li> <li>Lean Beef (ground, steak)</li> <li>Low-fat cheese (cottage, ricotta, mozzarella, cream cheese, feta)</li> <li>Low-fat yogurt, preferably Greek type</li> <li>Tofu</li> <li>Beans*</li> <li>Lentils*</li> <li>Chickpeas*</li> </ul>	<ul> <li>Bacon</li> <li>Sausages</li> <li>Chicken, turkey, or pork skin</li> <li>Deep fried foods</li> <li>Yogurt with added sugar</li> <li>Whole milk</li> </ul>
*Foods with higher glycemic index (cause insulin level spikes) – eat in moderation	<ul> <li>Dark leafy greens (all types such as spinach, kale, lettuce, arugula, purslane, Bok choy, etc.)</li> <li>Onions</li> <li>Peas</li> <li>Mushrooms</li> <li>Asparagus</li> <li>Artichokes</li> <li>Peppers (all types)</li> <li>Cauliflower</li> <li>Broccoli</li> <li>Jicama</li> <li>Celery</li> <li>Eggplant</li> <li>Cabbage</li> <li>Brussel sprouts</li> <li>Green beans</li> <li>Garlic</li> <li>Fennel</li> <li>Radish</li> <li>Cucumber</li> </ul>	<ul> <li>Potatoes (including chips, French fries)</li> <li>Corn (including corn chips, popcorn)</li> </ul>

	<ul> <li>Pickles</li> <li>Zucchini</li> <li>Summer squash</li> <li>Pumpkin</li> <li>Sweet potato*</li> <li>Root vegetables such as carrots, beets, yucca, and parsnips*</li> <li>Winter squash such as acorn*</li> <li>Tomatoes</li> </ul>	
*Foods with higher glycemic index (cause insulin level spikes) – eat in moderation	<ul> <li>Berries fresh (blueberries, acai, strawberries, blackberries) (1 cup)</li> <li>Apple</li> <li>Pear</li> <li>Cherries (1 cup)</li> <li>Peach</li> <li>Apricot</li> <li>Plums</li> <li>Pineapple (1 cup)</li> <li>Papaya* (1 cup)</li> <li>Orange*</li> <li>Lemon</li> <li>Limes</li> <li>Kiwi*</li> <li>Melon* (1 cup)</li> <li>Watermelon* (1 cup)</li> <li>Avocado (1/4 piece per day)</li> </ul>	<ul> <li>Dried fruits such as raisins and prunes</li> <li>Fruit juice</li> <li>Mango</li> <li>Grapes</li> <li>Banana</li> <li>Bread (all types, crackers, pretzels)</li> <li>Rice (all types, rice cakes)</li> <li>Pasta</li> <li>Tortillas (also nachos)</li> <li>Pizza</li> <li>Foods cooked with flour/breadcrumbs (white or whole grain)</li> <li>Oats of any kind</li> </ul>
NUTS/SEEDS (protein + fat) Choose one option plus a portion of fruit for a snack	<ul> <li>Almonds (15 pieces)</li> <li>Walnuts (10)</li> <li>Pecans (10)</li> <li>Brazil nuts (3)</li> <li>Pine nuts (75)</li> <li>Hazelnuts (10)</li> <li>Peanuts (17)</li> <li>Chia seeds (2 tablespoons)</li> <li>Sesame seeds (2 tablespoons)</li> <li>Macadamia nuts (5)</li> <li>Flaxseed (2 tablespoons)</li> <li>Pumpkin seeds (2 tablespoons)</li> <li>Edamame (1/2 cup)</li> <li>Unsweetened nut butter (2 tablespoons)</li> </ul>	<ul> <li>Corn nuts</li> <li>Honey roasted nuts.</li> <li>Nuts with a sweet or candy coating.</li> <li>Sweetened nut butter</li> <li>Granola</li> </ul>
	<ul> <li>1 oz reduced-fat cheese and ½ cup, or a handful, of fruit.</li> <li>2 oz light fruit yogurt mixed with ¼ cup cottage cheese.</li> </ul>	<ul><li>Potato chips</li><li>Pretzels</li><li>Corn chips</li></ul>

OPTIONS FOR PROTEIN- RICH SNACKS	<ul> <li>2 tablespoons of hummus with raw vegetables (handful)</li> <li>1/3 cup cottage cheese and ½ cup fruit</li> <li>1/3 cup cottage cheese mixed with sugar free Jell-O.</li> <li>1 oz reduced-fat cheese and 1 oz lean deli meat wrapped in lettuce leaf.</li> <li>1 oz reduced-fat cheese and 7 olives.</li> <li>2 oz of Greek yogurt and a cup of strawberries</li> </ul>	<ul> <li>Popcorn</li> <li>Candy</li> <li>Chocolate</li> <li>Cookies</li> <li>Rice cakes</li> <li>Crackers</li> <li>Granola bars</li> <li>Ice cream</li> </ul>
CONDIMENTS	<ul> <li>Spices (Mrs. Dash, hot sauce, cinnamon, garlic)</li> <li>Herbs (dill, cilantro, rosemary, parsley)</li> <li>Extracts (vanilla, lemon, almond, hazelnut)</li> <li>Reduced sodium Worcestershire sauce</li> <li>Low-sodium soy sauce</li> <li>Vinegars (all varieties)</li> <li>Capers, horseradish, salsa</li> <li>Olive or avocado oil (extra virgin) in moderation</li> <li>Mustard (except sweet mustards)</li> <li>No sugar added pickles and relish.</li> <li>Low-fat mayonnaise (1 tablespoon)</li> </ul>	<ul> <li>Honey mustard</li> <li>Ketchup</li> <li>Salad dressings (premade, contain sugar)</li> </ul>
SWEETENERS	Stevia (100% organic and without added artificial sweeteners such as sucralose, aspartame, or acesulfame)	<ul> <li>Refined sugar         (white and brown)</li> <li>Corn syrup</li> <li>Honey</li> <li>Maple syrup</li> <li>Agave nectar</li> <li>Artificial         sweeteners such as         aspartame,         acesulfame and         sucralose (avoid as         much as possible)</li> <li>Sugar alcohol (such         as erythritol, xylitol,         sorbitol, etc.)</li> </ul>
FLUIDS	<ul> <li>Water</li> <li>Tea (preferably herbal or fruit tea)</li> <li>Coffee regular or decaf (must be stopped at least 2 to 4 weeks before surgery)</li> <li>Almond milk unsweetened (not more than 60 calories per serving)</li> <li>Fruit infused water</li> <li>Other sugar-free drinks (ideally without artificial sweeteners)</li> </ul>	<ul> <li>Juices (all types, fruit, and vegetable)</li> <li>Regular milk</li> <li>Drinks with artificial sweeteners or caffeine (energy drinks)</li> <li>Soda</li> <li>Alcohol</li> <li>Smoothies</li> </ul>

#### **Portion Size**

### **Rule of Palm**

Use the rule of palm to measure your food portions easily without any scales, cups, grams, ounces, etc. No need to count calories either, simply follow this rule.

Your **palm** determines your **protein** portions.

Your **fist** determines your **veggie** portions.

Your **cupped hand** determines your **carb/fruit** portions.

Your thumb determines your fat (nuts/seeds/cheese) portions.



For protein-dense foods like meat, fish, eggs, dairy, or beans, use a palm sized serving.

Note: a palm-sized portion is the same thickness and diameter as your palm. 1 palm-sized portion is recommended with each main meal.



For veggies like broccoli, spinach, salad, carrots, etc. use a fist-sized serving. Again, a fist-sized portion is the same thickness and diameter as your fist. 1 palm-sized portion is recommended with each main meal.



For carbohydrate-dense foods – fruits – use a cupped hand to determine your serving size. 1 cupped-hand sized portion of carbohydrates with most snacks.



For fat-dense foods – like cheese, nut butters, nuts/seeds – use your entire thumb to determine your serving size. We recommend 1 thumb-sized portion of fats or protein foods high in fat with most snacks.

# Meal Plan – Solid Food Diet (Sample)

#### Breakfast (7:30-8:00 a.m.)

Option 1: Omelet (1 whole egg + 1 egg white, handful of spinach, tablespoon of chopped onions, olive oil, salt, and pepper in moderation)

Option 2: Scrambled eggs (1 whole egg + 1 egg white, any fresh mushrooms 4-6 pieces, tablespoon of chopped onions, olive oil, salt, and pepper in moderation)

#### Snack (10:00 - 10:30 a.m.)

Option 1: Small Greek yogurt (sugar-free) with 1 handful of fresh blueberries

Option 2: Lettuce wrap with two thin slices of turkey breast.

#### Lunch (12:30-1:00 p.m.)

Option 1: Mixed greens salad (olive oil, salt, pepper, lemon juice for dressing), grilled chicken breast (1/2 of breast or equal to palm size)

Option 2: Tomato and cucumber salad with shrimps, chickpeas, or green peas

# Snack (3:30 – 4:00 p.m.)

Option 1: 10-15 almonds, ½ large apple (or 1 small apple)

Option 2: Two small pieces of cheese, any fruit/fresh berries (1 handful)

# Dinner (6:30 - 7:00 p.m.)

Option 1: Sautéed broccoli (use onions and garlic, lemon juice, salt and pepper, other spices to add flavor), fried/baked/grilled tilapia (1/2 filet or portion equal to palm size)

Option 2: Grilled beef steak (choose lean meat, palm size portion, no heavy sauce), a handful of drilled asparagus.

# **Snack (if necessary, 8:30 – 9:00 p.m.)**

Option 1: A slice of cheese (finger size portion) with 1 mandarin

Option 2: Two tablespoons of hummus with 1 celery stick and 4-5 baby carrots.

Try to eat always at the same time. Drink lots of water, herbal/fruit tea, fruit infused water between meals (but not with meals).

# Stage "3 days before" Full Liquid Stage

During the last 3 days before surgery (not including the day of surgery, if surgery is on Monday, the 3 days before include Fri, Sat, Sun) it is required that you follow a full-liquid diet. This "liquid stage" can be increased to 5, 7 or more days by the surgeon depending on your BMI and duration of the solid food diet stage. The surgeon will let you know if you are required to increase the "liquid stage" during your pre-op consultation.

### Your liquid meals can include the following options:

- Plain Greek yogurt (or regular sugar-free yogurt), you may use natural liquid Stevia sweetener.
- Protein shakes with low (3 g) or "0" carbs and low or "0" fat (good protein shake should include no more than 3 g of sugar and no less than 20 g of protein); limit protein shakes to 3 or 4 per day as they are considered meal substitutes.
- Almond milk (regular or low-fat cow milk is not recommended due to high sugar levels lactose).
- Broth (chicken/beef/fish/vegetable broth, or liquid part of any other type of soup), feel free to add a scoop of unflavored protein powder to your broth to feel full.
- Egg-drop soup (strained).
- Carrot, zucchini, or squash cream soups (well-blended and strained, so there are no solid pieces, add enough water to make it thin, NO cream to be added, a little bit of milk for better taste is acceptable); you may add unflavored protein powder.
- Sugar-free pudding/Jell-O/popsicles.
- Fruit-infused water, especially with electrolytes, and plenty of water or herbal/fruit tea without sugar, coconut water and other sugar-free fluids are recommended.
- Green juices (kale, spinach, celery, etc.) are allowed, fruit juices are not allowed as they contain too much fructose (another form of sugar).

<u>The nutritionists do not recommend chewing gum</u> before or after sugrery as it stimultaes stomach acid production and could cause worse acid relfux after surgery as well as make us feel more hungry.

The purpose of the full liquid diet stage is to cleanse your stomach pouch and bowel from any kinds of solids; to reduce the amount of stomach acid produced, thus decreasing chances of having heart burn issue after surgery; giving your stomach a rest which helps to decrease stomach pouch swelling during the first days of recovery; shrink your liver.

Visit us at <a href="https://golightbariatrics.com/Full-Liquid-Diet-Recipes/">https://golightbariatrics.com/Full-Liquid-Diet-Recipes/</a> for Full Liquid Diet recipe ideas.

# **Meal Plan – Full Liquid Diet (Sample)**

#### Breakfast (7:30-8:00 a.m.)

Option1: 1 premier protein shake or 1 cup of unsweetened almond milk + 1 scoop of Isopure protein powder (ideally zero fat/zero carbs option) + ice (blended)

Option 2: 1 cup of Greek yogurt (you can have flavored yogurt, just make sure its sugar-free)

Snack (10:00 – 10:30 a.m.)

Option1: 1 cup of sugar-free Jello

Option 2: ½ cup of sugar-free pudding made with fat-free milk.

Lunch (12:30-1:00 p.m.)

Option1: 1 cup of spinach/zucchini soup + ¼ cup of Greek yogurt for extra creaminess

Option 2: 1 cup of carrot/squash soup + 1 scoop of unflavored protein powder

Snack (3:30 – 4:00 p.m.)

Option1: 1 cup of miso soup

Option 2: 1 cup of chicken broth

Dinner (6:30 – 7:00 p.m.)

<u>Option1:</u> Vegetable Garden soup (zucchini+ carrots + squash) + 1 scoop flavorless protein powder + ¼ cup of Greek yogurt for extra creaminess

Option 2: Caramel macchiato protein shake: 1 cup of sugar-free almond milk + 2 scoops of GENEPRO plant protein powder + ½ cup of ice + 2 drops of Sweet Leaf Caramel Macchiato

**Snack (if necessary, 8:30 – 9:00 p.m.)** 

<u>Option1:</u> Greek yogurt popsicle (use a popsicle mold and fill it with vanilla or any flavored sugar-free Greek yogurt)

Option 2: ½ cup of sugar-free pudding made with fat-free milk.

Drink plenty of water! Try to reach 64 oz of clear liquids per day. Clear liquids include water, clear protein shakes, broth, Jell-O, popsicles, fruit infused water, and any other sugar-free clear liquids.

Be sure to carefully review pre-op instructions at <a href="https://golightbariatrics.com/pre-op-instructions/">https://golightbariatrics.com/pre-op-instructions/</a>