Livongo for Diabetes
Low-Carb Meal Plan
Welcome to the Livongo for Diabetes Low-Carb Meal Plan

The Livongo for Diabetes Low-Carb Meal Plan emphasizes protein, healthy fats, fruits, and vegetables over starchy carbohydrates. Limiting carbohydrates has been shown to be effective in improving blood glucose [BG], as carb-heavy foods cause the largest rise in BG. A low-carb plan may also help with weight loss and reduce the risk of diabetes complications such as heart disease and stroke by lowering blood pressure and cholesterol.
Nutrition and diabetes management are not the same for everyone. You may want to eat better, lose weight, or improve BG—or work on all of these. Our meal plans take a four-part approach to guide you, step by step, toward achieving your goals. The four steps are:

**Mindful Eating:**
Gain awareness of how different foods taste, smell, and feel while you’re eating, and how they affect your mood, energy level, and hunger after eating.

**Understanding the Three Main Nutrients:**
Carbohydrates, proteins, and fats

**Learning How the Nutrients Affect Your BG:**
Learn to use Paired Checking to keep track of how different foods affect your BG.

**Meal Planning:**
Mix and match from three food lists to create easy, well-balanced meals and snacks. This section includes the following tools to help make planning a cinch:

- Meal Planning Basics: Green, Yellow, and Red Foods .........................16-17
- Color-Coded Food Lists ............................................................................18-20
- Livongo for Diabetes Plate ........................................................................21
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- Sample List of Healthy Snacks .................................................................27
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Before You Begin

We recommend reading through the entire plan before you begin. But, if you need a quicker start, look at Meal Planning Basics: Green, Yellow, and Red Foods (pages 16-17), Color-Coded Food Lists (pages 18-20), and the Livongo for Diabetes Plate (page 21). Then, when you have more time, go back to read the rest of the plan.
Next Steps

After you’ve read the entire plan, if you still need extra help or have questions, reach out to one of our Certified Diabetes Educators (CDEs) to schedule a coaching session at no cost to you, at coach.livongo.com.

Stay Healthy!
Your Coaching Team
In Mindful Eating, unlike in traditional “dieting,” there are no good or bad foods. The idea is to be aware of which foods make you feel well and which make you feel unwell, either physically or emotionally.

Mindful Eating is simply being fully present while eating: you’re smelling the food, feeling the texture while chewing, and focusing all of your senses on enjoying the experience. Where we can get into trouble is when we eat for pleasure without mindfulness. For example, you may sometimes eat more than you need if you are distracted by watching television or reading. This is called mindless eating.

Focusing on the sensation of eating and the feelings you have while eating, can help you control cravings and overeating—two things that can improve weight management, diabetes, blood pressure, and general health.
Tips for Mindful Eating

• Instead of eliminating foods, start by adding healthy foods that make you feel well. When you feel satisfied by nutritious foods, you might find yourself less likely to reach for less healthy foods.

• Listen to your body. Our bodies have ways to let us know that a food is good for us. For example, healthy foods often energize you, while unhealthy foods may make you feel sluggish.

• Use the scale below to help you figure out if you are hungry for a snack or a meal, or if you are eating for a reason other than hunger.
Hunger-Satiety Rating Scale

<table>
<thead>
<tr>
<th>Full</th>
<th>10</th>
<th>stuffed to the point of feeling sick</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>very uncomfortably full, feel the need to loosen your belt</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>uncomfortably full, feel stuffed</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>very full, feel as if you have overeaten</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>comfortably full, satisfied</td>
</tr>
<tr>
<td>Neutral</td>
<td>5</td>
<td>comfortable, neither hungry nor full</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>beginning signs and symptoms of hunger</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>hungry with several hunger symptoms, ready to eat</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>very hungry, unable to concentrate</td>
</tr>
<tr>
<td>Hungry</td>
<td>1</td>
<td>starving, dizzy, irritable</td>
</tr>
</tbody>
</table>
**Questions to Ask Yourself to Avoid Mindless Eating**

- Am I eating because I’m bored/nervous/upset or for some other reason that is not hunger?

- Do I ever get so busy that I don’t know I’m hungry until I’m starving and have a headache—and then I overeat or choose ineffective foods?

- Do I clean my plate even when I get full before my plate is empty? If your answer is “yes,” use a smaller plate. Aim for about nine inches. For reference, a dollar bill is just over six inches long.
Understanding the Three Main Nutrients

Food can be divided into three basic nutrients: carbohydrates, proteins, and fats. Understanding how the body uses each nutrient and how each affects BG will help you plan well-balanced meals. In turn, eating healthy will help you keep your BG stable and as close to goal as possible.
What are they? Carbohydrates are the sugars and starches that your body breaks down into glucose. They are found in grains, fruits, vegetables, milk products, and sweets.

How they affect BG: The more carbohydrates you eat, the higher your BG will be. The higher your BG is, the more insulin is needed in response. Insulin helps to lower glucose in the blood by sending the glucose to your cells to be used for energy. If there is too much glucose in the blood stream, insulin will store the extra glucose as body fat.

The goal: Carbohydrates are your body's main source of energy. But not all carbohydrates are the same. Choosing the right types of carbohydrates (fruits, vegetables, and high-fiber grains) will help give your body the energy it needs while keeping BG as close to goal as possible.
What is it? Found in chicken, beef, eggs, fish, nuts, seeds, and beans, protein helps fill you up, and builds and maintains lean muscle.

How does it affect BG? It stabilizes it. Because protein contains little to no carbohydrate, it has a very small impact on BG.

The goal: When choosing protein for your meals and snacks, you should opt for lean protein sources, as these contain less saturated fat. If selecting a plant-based protein, read the label closely as plant-based proteins often contain carbohydrates, which raise BG. Try to always include a protein when eating a carbohydrate, because protein helps slow the rise of BG following the meal or snack.
What are they? Fats are a source of fuel for the body, and can even store energy. Fats also add great flavor and texture to food.

How do fats affect BG? When eaten alone, fats will not raise your BG. Much like protein, fats can help keep you full and slow the absorption of sugar in your bloodstream.

The goal: In the past, fat has gotten a bad reputation. But healthy fats—**monounsaturated fats** (found in olive oil, avocados, nuts) and **polyunsaturated fats** (found in sunflower oil, seeds, and fatty fish like salmon)—have been shown to decrease the risk of heart disease. When choosing fats, try to avoid **trans fats**, which have been shown to increase the risk of heart disease. These are found in some baked goods, crackers, and margarine. Usually foods that contain trans fats will have “hydrogenated” or “partially hydrogenated” in the ingredient list.
An important part of meal planning with diabetes is understanding which foods and meals help keep BG values as close to normal as possible. How do you figure out which foods and meals are most effective? Paired Checking.
What is Paired Checking?

Paired Checking is checking your BG before and after a meal and/or activity. It shows the cause and effect relationship between BG levels and factors such as food and exercise.

Before you start, think about what you want to learn about your BG? Here are some ideas:

1. How does packing my lunch instead of eating out affect my BG?
2. How does one specific food affect my BG?
3. How does a morning or evening workout affect my BG?
4. I have a big presentation tomorrow. What effect will this have on my BG?
5. What affects my fasting BG?

What’s next? Let’s take numbers 1 and 2 as an example. Check your BG before you eat and then check again two hours after the first bite. (Always checking as close to two hours as possible will help you get the best results.) Take a look and note how your BG varies. The next day, try a different food. Repeat the same pattern of checking. You will be able to see the cause and effect on your numbers. How did your BG change? This process will help you identify how specific foods affect your BG. We suggest repeating for seven days to identify a trend or pattern.

The American Diabetes Association (ADA) recommends the following BG ranges:

Pre-Meal Range: 80-130 mg/dl
Range Two Hours After Beginning of a Meal: 80-180 mg/dl

Talk with your physician to learn more about your individual BG goals.
Meal Planning Basics

Planning well-balanced meals can seem like a chore. To make meal planning faster, easier, and even enjoyable, we provide three food lists from which you can mix and match items to create healthy meals.

To take the guesswork out of what goes into a well-balanced meal, we categorized foods as green, yellow, or red. GREEN foods are always a go. YELLOW FOODS offer important nutrients but should be consumed in small amounts. RED foods should be eaten rarely, as an occasional treat.

Use the list to the right as a guide. If there are foods you don’t like, don’t force yourself to eat them just because they are green foods. Or, try a different preparation—roast broccoli, instead of steaming it. Eat for health and for pleasure.
Green, Yellow, and Red Foods

**GREEN**

Foods in the green category have little to no effect on BG, provide the most vitamins and minerals, and will fill you up and keep you full throughout the day. These are the foods you should choose most often when planning meals. If you find you are still hungry after a meal and want seconds, these are your go-to foods since they will satisfy your hunger without causing an additional rise in BG. These are also the best foods to choose when BG is elevated at meal times.

**YELLOW**

Foods in the yellow category are still good choices but are likely to be higher in carbohydrates which can cause a higher rise in BG. Some of these foods may also be higher in saturated fat. Keep portions from this group small and limit how many servings you include throughout the day. If you are unsure of how much and how often to include these foods, schedule an individual coaching session at coach.livongo.com, at no cost to you.

**RED**

Foods in the red category are high in carbohydrate, high in both saturated and trans fats, or have a low nutritional value. These foods will cause the highest rise in BG after a meal or snack, and can cause weight gain. These foods are best eaten as an occasional treat.
**Green Foods**

**PROTEINS**
- Beef
- Chicken
- Eggs/Egg whites
- Fish
- Pork
- Shellfish
- Turkey

**OILS AND FATS**
- Avocados
- Canola oil
- Olive oil
- Olives

**BEVERAGES**
- Black coffee
- Unsweetened almond milk/coconut milk
- Unsweetened tea
- Water (plain, seltzer, sparkling)

**NON-STARCHY VEGETABLES**
- Asparagus
- Beets
- Broccoli
- Brussels sprouts
- Cabbage
- Carrots
- Cauliflower
- Celery
- Cucumbers
- Eggplant
- Green beans
- Leafy greens (lettuce, kale, collards, spinach, etc.)
- Mushrooms
- Okra
- Onions
- Peppers
- Radishes
- Snap peas
- Tomatoes
- Water chestnuts
- Yellow squash
- Zucchini

**CONDIMENTS**
- Hot sauce (low sodium)
- Mustard
- Salsa
- Sriracha

**SEASONINGS**
- Fresh and dried herbs
- Garlic
- Lemon juice
- Lime juice
Yellow Foods

FRUITS
Apples
Applesauce (unsweetened)
Apricots
Bananas
Berries (strawberries, blueberries, blackberries, etc.)
Cherries
Figs
Grapefruit
Grapes
Kiwi
Mango
Melons (honeydew, cantaloupe, watermelon, etc.)
Nectarines
Oranges
Papaya
Peaches
Pears
Pineapple
Plums

DAIRY
Cheese (cheddar, Swiss, provolone, etc.)
Cream cheese
Cottage cheese
Greek yogurt (plain)
Milk
Sour cream

STARCHY VEGETABLES
Corn
Parsnips
Peas
Potatoes
Sweet potatoes
Squash (acorn, butternut, spaghetti, etc.)
Turnips

BEANS
Black beans
Black-eyed peas
Garbanzo beans
Kidney beans
Lentils
Lima beans
Navy beans
Pinto beans
White beans

GRAINS
Popcorn (air popped)
Quinoa
Rice (brown or wild preferred)
Steel-cut oats

NUTS AND SEEDS
Almonds
Cashews
Peanuts
Pecans
Walnuts
Nut butters
Seeds (flax, pumpkin, sunflower, etc.)

OILS AND FATS
Butter
Coconut oil
Safflower oil
Sunflower oil
Vegetable oil

SWEETS & DESSERTS
Dark chocolate (72% cocoa or higher)
Sugar-free Jell-O
Sugar-free popsicle
FRUITS
Dried fruits (raisins, dates, etc.)
Frozen fruits w/added sugar
Fruits canned in syrup

GRAINS
Barley
Breads (croissants, muffins, bagels, rolls, biscuits, etc.)
Cereal (cold[dry?] and instant)
Flour (white and wheat)
Hot cereal (oatmeal, Cream of Wheat)
Pancakes
Pasta
Popcorn (microwave)
Rice (white)
Tortillas (corn and flour)
Waffles

PACKAGED SNACKS
Chips
Crackers
Pretzels
Snack bars
100-calorie packs

SWEETS AND DESSERTS
Brownies
Cakes
Candy (all)
Cookies
Doughnuts
Frozen yogurt
Ice cream
Pastries
Pie
Sherbet/sorbet

BEANS
Baked beans
Refried beans

OILS AND FATS
Margarine
Shortening

BEVERAGES
Alcohol
Fruit juice/punch
Lemonade
Soda/diet soda
Sports drinks
Sweetened tea
Any drink containing sugar

CONDIMENTS
Agave
BBQ sauce
Honey mustard
Honey
Jams/jellies
Ketchup
Mayonnaise
Sugar
Syrup
Teriyaki sauce
Livongo for Diabetes Plate

NON-STARCHY VEGETABLES

PROTEIN

CARBS

FAT
Quick Tips for Healthy Eating

**Check BG more often.** When you change what and how you eat, even if it’s for the better, it is important to check BG more frequently to see how these changes are affecting your BG.

**Drink plenty of water.** Early signs of dehydration (headache, dizziness, and feeling tired) are often mistaken for hunger, and can lead to unnecessary snacking. Try to drink eight to ten eight-ounce glasses of water per day.

**Still hungry after a meal? Eat more non-starchy vegetables.** If you find you want seconds after finishing a meal, eat more non-starchy vegetables like leafy greens, broccoli, and peppers. These will have a very low effect on your BG, and they contain fiber which will help you feel fuller faster.

**Keep healthy, low-carb snacks on hand.** Stock up on items like nuts, beef jerky, cut raw vegetables, fruit, and nut butters.
Quick Tips for Healthy Eating

Plan and prepare meals in advance. Set aside time each week to wash and chop vegetables, trim and prepare proteins, and cook items like soups and casseroles for the week ahead.

Always include protein. Protein keeps you full and satisfied, builds lean muscle, and has very little impact on BG. Aim for three to four ounces (about the size of your palm) of protein at each meal.

Include healthy fats at each meal. Healthy fats keep you satisfied, help decrease hunger, and slow the absorption of sugar in your bloodstream.

Know your portion sizes. We often don’t realize that we overeat because we don’t know what a portion size looks like. Become familiar with common portion sizes to be sure you are eating carbohydrates, protein, and fats in the right amounts.
3 Day Sample Meal Plan: Day One

**BREAKFAST**
Banana Pancakes: 1 banana, 1 whole egg, tsp of butter. Mash banana and mix with beaten egg. Heat 1 tsp. of butter over medium heat. Form pancakes with batter and cook until lightly browned.

**LUNCH**
½ cup tuna or chicken salad. Carrot and celery sticks, and tomato slices. 1 tablespoon hummus. 6 whole-grain crackers. 1 cup strawberries.

**DINNER**
4-5 ounces grilled chicken, fish, or lean meat. Cooked broccoli. Small sweet potato.

**SNACK**
1 ounce string cheese.
3 Day Sample Meal Plan: Day Two

BREAKFAST
2-egg veggie omelet with tomatoes, onions, and bell peppers. 1 slice Canadian bacon. 1 cup berries.

LUNCH
Caesar salad with romaine lettuce, 3 ounces skinless chicken breast, 1 tablespoon grated Parmesan cheese, and 1 tablespoon dressing. 1 small pear. 1/2 cup cottage cheese.

DINNER
3-4 ounces meatballs and ½ cup marinara sauce over spaghetti squash. Steamed cauliflower and zucchini. 1 small apple.

SNACK
1/4 cup of nuts.
3 Day Sample Meal Plan: Day Three

**BREAKFAST**
Green smoothie: 1 1/2 cups unsweetened almond milk, 1 handful fresh spinach or kale, 1/3 cup frozen blueberries, 1/3 cup frozen blackberries, 1 tablespoon chia seeds, 1-2 scoops protein powder.

**LUNCH**
Cucumber sandwich with 3 turkey slices, vegetables, and 2 tablespoons cream cheese. 1/4 cup nuts. 1 plain brown rice cake.

**DINNER**
Taco salad: lettuce, tomato, onion, salsa, ½ avocado, 1 ounce shredded cheese, 1/2 cup black or pinto beans, 3 ounces chicken or ground turkey. Unsweetened ice tea with lemon.

**SNACK**
Celery sticks with 2 tablespoons of no-added-sugar nut butter.
Sample List of Healthy Snacks

Well-balanced snacks can help limit a rise in BG between meals, and avoid the mindless eating that sometimes happens when we get so hungry that we, say, scarf down a sleeve of cookies, instead of preparing a healthy meal. Be mindful of your portions—it’s easy for a snack to grow into a meal! Below you will find a sample list of zero- and low-carbohydrate snacks.

- 1 ounce string cheese, The Laughing Cow cheese, or other cheese
- 1/4 cup nuts or seeds
- Small piece of fruit (for example, an apple, orange, or pear)
- Hard-boiled egg
- Celery with 1-2 tablespoons no-added-sugar nut butter or cream cheese
- 1/2 cup tuna or chicken salad
- Cottage cheese
- 1 slice of lean lunch meat (turkey, ham) rolled around a 1 string cheese
- Raw vegetables with 1 tablespoon hummus
- Steamed vegetables (except for starch-heavy veggies like peas, corn, beans, potatoes, and sweet potatoes)
- 1/2 avocado with salsa
- 2 tablespoons pumpkin seeds
- 3 ounces leftover chicken breast or salmon
- 5-6 olives (green or black)*
- 1 large dill pickle*
- 1 serving of beef or turkey jerky*
- Cucumber or tomato slices with lemon and hot sauce
- Green salad without croutons or beans
- Sugar-free Jell-O or sugar-free popsicle (check labels to find one with less than 5 grams carbs)

*may have high sodium content
## Healthy Swaps

<table>
<thead>
<tr>
<th>INSTEAD OF THIS...</th>
<th>TRY THIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandwich bread</td>
<td>Hearty leafy greens (chard, kale, lettuce, etc.)</td>
</tr>
<tr>
<td>Mashed potatoes</td>
<td>Mashed cauliflower</td>
</tr>
<tr>
<td>Croutons</td>
<td>Walnuts</td>
</tr>
<tr>
<td>Mayonnaise</td>
<td>Mashed avocado</td>
</tr>
<tr>
<td>Pasta</td>
<td>Spaghetti squash</td>
</tr>
<tr>
<td>Sour cream</td>
<td>Plain Greek yogurt</td>
</tr>
</tbody>
</table>
We’re here to help you 24 hours a day, 365 days a year. For any questions about the Livongo for Diabetes Program, the meter, or supply refills please reach out to Livongo Member Support at 1-800-945-4355 or membersupport@livongo.com. Our team of Certified Diabetes Educators are also available at any time to answer your diabetes questions on nutrition or lifestyle changes. You can communicate with coaches through our mobile app or schedule a coaching session at coach.livongo.com.