

Nutrition Guide

Fuel your body. Feel your best.



Mission: A healthier me

Setting goals is an important way to stay motivated on your health journey. Whether it's weight loss, improvements in metabolism or blood sugar, or something else, take a minute to write down a few changes you hope to see while taking Pendulum probiotics.

NOTE:

Your A1C level can vary depending on your age and other factors. But generally the goal for most adults with Type 2 diabetes is an A1C of less than 7%.



My goals while taking Pendulum probiotics

- 1 _____
- 2 _____
- 3 _____

Track your progress

Know your numbers

With a goal of improving your health, it's helpful to monitor your progress. Take a minute to assess where you're starting on your health and wellness journey. We suggest checking back in at least monthly to see how you are progressing. We're here to help you meet your goals.



"Nutrition is about adding to your diet, not subtracting. I look forward to helping you create a plan that works for you and your lifestyle."

Kristin Neusel, MS, RDN, LD, CDCES
Pendulum Dietitian

Month 1

Date

Fasting blood glucose

Weight

A1C

Month 2

Date

Fasting blood glucose

Weight

Month 3

Date

Fasting blood glucose

Weight

Month 4

Date

Fasting blood glucose

Weight

A1C

Month 5

Date

Fasting blood glucose

Weight

Month 6

Date

Fasting blood glucose

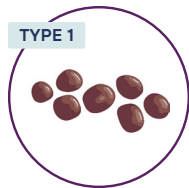
Weight

The scoop on poop

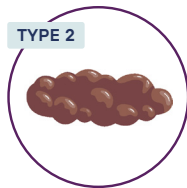
With a goal of improving gut health, you may notice a change in your poo. Take a minute to assess where you're starting. Jot down frequency, type, and any side effects such as pain or bloating.

NOTE:

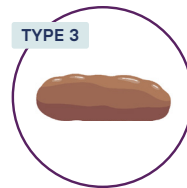
At Pendulum, we believe poo shouldn't be taboo. Your bowel habits are directly linked to your health. With an improvement in gut health, you may notice changes in your stool.



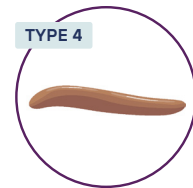
Separate hard lumps like nuts



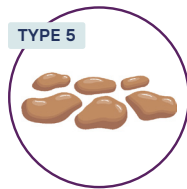
Lumpy and sausage-like



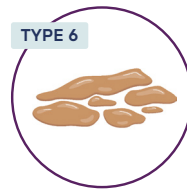
Sausage shape with cracks



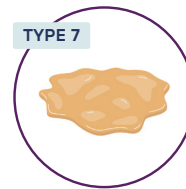
Like a smooth, soft sausage or snake



Soft blobs with clear-cut edges



Mushy consistency with ragged edges



Liquid consistency with no solid pieces

Date	What type was it?	Notes

Managing your health takes guts

Pendulum products restore missing beneficial bacteria to your gut microbiome. By nurturing and nourishing these beneficial bacteria, you're supporting a healthy microbiome.

How to take your probiotics

Take a minute to figure out the best time for you to take Pendulum probiotics. Glucose Control has been shown to be effective when taken twice daily with food. Akkermansia needs to be taken only once daily with food. It's important to avoid taking probiotics on an empty stomach so they make it to the large intestines (where your gut microbiome is).

When I'll take my probiotics

Breakfast

Lunch

Dinner

Notes

Three ways to eat your way to a healthier gut

1

Build healthy eating patterns

- Balance your food groups
- Limit added sugars
- Eat fewer simple carbohydrates like bread and pasta

2

Eat minimally processed, high fiber foods such as:

- Vegetables
- Whole fruits
- Whole grains
- Beans and peas
- Nuts and seeds

3

Focus on microbiome boosters:

- Polyphenols
- Antioxidants
- Fermented foods
- Prebiotics



All about Akkermansia

The microbe *Akkermansia muciniphila* has many healthy benefits:

- An abundance of *Akkermansia muciniphila* in the gut is associated with a healthy weight.¹
- *Akkermansia muciniphila* is involved in maintaining intestinal integrity.²
- *Akkermansia muciniphila* treatment is shown to reverse metabolic disorders, fat-mass gain, inflammation, and insulin resistance.³

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6223323>
2. <https://www.mdpi.com/2076-2607/6/3/75>
3. <https://www.pnas.org/content/110/22/9066>

Breaking down the -biotics

In addition to *Akkermansia muciniphila*, it's important to nurture other healthy strains. To do this, we can think about prebiotic and probiotic food sources.

The microbiome is so incredibly diverse and includes trillions of organisms (bacteria, viruses, and fungi). Some

microbiome strains can be found easily in foods while others are more difficult to find and seem to be missing in certain disease states.

When we think about microbiome and nutrition, it's important to know about "the biotics."



Prebiotics

These are fibers to feed the probiotics.



Probiotics

These are healthy bacteria.



Postbiotics

These occur when probiotics "eat" prebiotics—a good thing!



Synbiotics

These are a probiotic and a prebiotic together as one.

Prebiotics

- Food for probiotics
- Increase the density of bacteria in your gut microbiome

Top prebiotic foods

Chicory root	Apples
Dandelion greens	Konjac root
Jerusalem artichoke	Cocoa
Garlic	Burdock root
Onions	Flaxseeds
Leeks	Yacon root
Asparagus	Jicama root
Bananas	Wheat
Barley	Seaweed
Oats	



Probiotics

- Foods for good bacteria
- Increase the diversity of bacteria in your gut microbiome

Top probiotic foods

Kefir	Apple cider vinegar
Sauerkraut	Tempeh
Natto	Buttermilk
Kombucha	Raw cheese
Brine-cured olives	Kimchi

MIX AND MATCH

Support a healthy gut by mixing foods containing prebiotics and probiotics:

- Add leeks to a vegetable stir fry and top with kimchi.
- Top yogurt with almonds.



First, know your needs

It's important to determine your nutrition requirements—how many calories and grams of carbohydrates, protein, and fats you need each day. If eligible, your Pendulum dietitian will provide this. While we don't recommend counting for life, this is a good start to learning the best portions for your body.



Always check with your health-care provider before making changes to your diet. Be sure to confirm any dietary restrictions you may have.



Your daily total of calories will be distributed across carbohydrates, protein and fat.

- Beans
- Brown rice
- Corn
- Peas
- Potatoes
- Quinoa
- Whole fruits
- Whole-grain breads, cereal, and pasta

- Eggs
- Lean meats
- Low-fat dairy
- Plant-based protein such as lentils, powdered peanut butter, chia seeds, and hemp seeds
- Tofu

- Avocados
- Cold-water fish
- Flaxseed
- Nuts
- Olive, algae, and canola oils
- Seeds

Get your fill of fiber

Dietary fiber is found mostly in fruits, vegetables, nuts, legumes, and whole grains. It's a type of carbohydrate that passes through the body undigested—meaning it won't affect your blood sugar levels. Fiber is an important part of a healthy lifestyle while living with Type 2 diabetes.

Fiber not only helps us feel full longer, slows the absorption of sugar, and helps lower cholesterol—it also feeds the gut microbiome. Eating more fiber helps keep the microbes in our gut happy, healthy, and diverse, improving our overall gut health.

Current
Fiber Intake

Grams

My Fiber
Goal

Grams



The best way to check your fiber intake is by reading food labels. (See page 14 for help.) Fiber is listed under the total carbohydrates section.



Get familiar with the fiber content of fresh fruits and vegetables. You can easily check their nutrition info using an app such as [CalorieKing](#).



Aim for foods with more than 3 grams of fiber per serving—either soluble or insoluble.

Added Bonuses

Weight Loss

Fiber can help you feel full longer, keeping hunger in check and preventing you from overindulging.

Heart Health

Soluble fiber may help lower your cholesterol and risk of heart disease.



Types of fiber

Insoluble Fiber

Stimulates gut peristalsis and digestion

FEEDS GUT MICROBIOME? ❌

BENEFITS

- Helps with colon health
- Helps with digestion

SOURCES

- Whole-wheat flour
- Wheat bran
- Nuts
- Beans
- Veggies such as cauliflower, lettuce, and green beans

Resistant Starch

Carbohydrates that resist digestion and function similarly to fiber

FEEDS GUT MICROBIOME? ✅

BENEFITS

- Helps with digestion
- Helps slow the absorption of glucose

SOURCES

- Oats
- Beans
- Legumes
- Cooked and cooled potatoes
- Cooked and cooled rice

Soluble Fiber

Dissolves in water and forms a gel-like material

FEEDS GUT MICROBIOME? ✅

BENEFITS

- Reduces low-density lipoprotein (LDL) cholesterol
- Helps slow the absorption of glucose

SOURCES

- Oats and barley
- Peas
- Beans
- Fruits and veggies: apple, citrus fruits, carrots, barley
- Psyllium



"Let's nourish your microbiome through foods you enjoy eating! I'm here to support you on your journey to achieve your health and wellness goals without 'giving up' any of your favorite foods."

Jennifer McManus, RDN, LD, CDCES
Pendulum Dietitian

Polyphenols: What are they?

Polyphenols are micronutrients that are naturally occurring in plants. They are commonly found in many fruits, vegetables, spices, cereal, nuts, and in some of our favorite beverages and treats. Polyphenols are beneficial antioxidants, and they have also been found to increase the *Akkermansia muciniphila* population in the gut.¹

1. <https://www.nature.com/articles/ejcn2010221.pdf?origin=ppub>



"There's no 'one size fits all' when it comes to nutrition. I am passionate about helping individuals find joy in eating through providing tailored nutrition advice. I can't wait to support you on your health journey."

Tara Karr, MS, RD, LDN, CDCEs
Pendulum Dietitian

Top Polyphenol-containing Foods

Seasonings	Fruit	Vegetables	Nuts + seeds	Extras
Cloves	Blueberries	Black olives	Flaxseeds	Dark chocolate
Peppermint	Black currants	Green olives	Hazelnuts	Red wine
Oregano	Plums	Artichokes	Pecans	Coffee
Sage	Cherries	Red onions	Almonds	Black tea
Rosemary	Blackberries	Spinach	Walnuts	Green tea
	Pomegranates			Grape seed extract

Let's add more fiber!

Choose fruit as a snack or dessert

FIBER (GRAMS)

1 medium pear	6
1 medium apple (with skin on)	4
1 cup of raspberries	8
1 cup of sliced avocado	9

Add healthier choices to your snack stash

Try raw vegetables such as sliced bell peppers, broccoli florets, carrots, and cauliflower.

¼ cup of pistachios	3
3 cups of air-popped popcorn	3.5

Go with whole grains

Swap out white bread for whole-grain bread.

Whole-grain pasta, cereal and brown rice are great sources of fiber.

Whole-grain foods are minimally processed so they retain their fiber content.

4. Throw in some beans, peas, or lentils

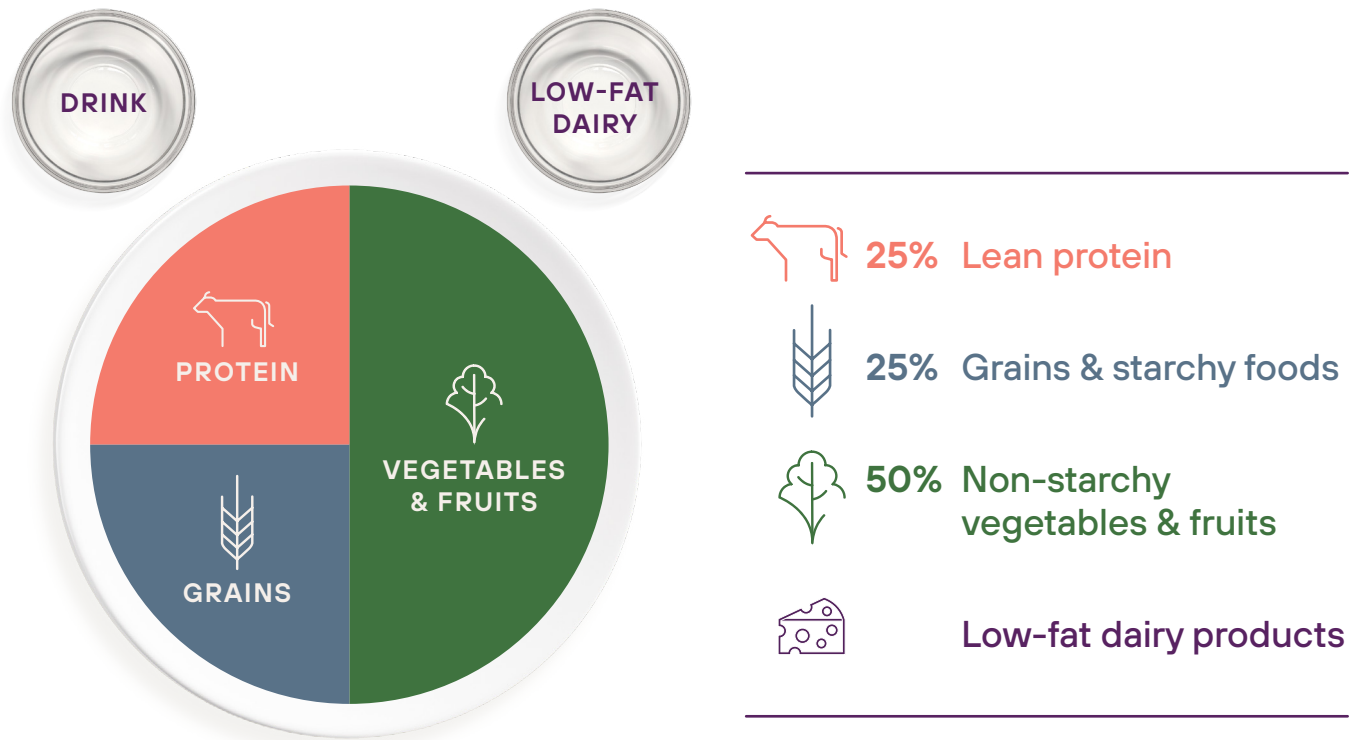
These lovely legumes make for great soups, salads, side dishes, and even entrées.

½ cup of split peas	25
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Create the perfect plate

If you're not a label reader and don't like counting calories or macronutrients, then the "plate" method is perfect for you. It's the easiest way to make sure you're eating a balanced meal. You can enjoy the foods you like in the correct portion size for your needs.



Be a master of your own plate. Here's how.

- 1 Imagine dividing your plate into three sections, like shown above.
- 2 Fill half of your plate with non-starchy vegetables and fruits.
- 3 Fill a quarter of your plate with whole grains or complex carbohydrates.
- 4 The remaining quarter of your plate is for lean protein.
- 5 Add a side of low-fat dairy as the last step to complete your plate.

Read it before you eat it

To make healthy choices, you have to know what's actually in the foods you eat. That's where the Nutrition Facts label comes in. But what do those words and numbers mean to your nutrition needs? These tips will help you make sense of it all.

Nutrition Facts	
12 servings per container	
Serving Size	1 Packet (28g)
Amount per serving	
Calories	100
% Daily Value*	
Total Fat 2g	3%
Saturated Fat 0.5g	3%
<i>Trans</i> Fat 0g	
Polyunsaturated Fat 0.5g	
Monounsaturated Fat 0.5g	
Cholesterol 0mg	0%
Sodium 75mg	3%
Total Carbohydrate 18g	7%
Dietary Fiber 3g	9%
Soluble Fiber 1g	
Total Sugars 0g	
Includes 0g Added Sugars 0%	
Protein 4g	
Vitamin D 0mcg	0%
Calcium 120mg	8%
Iron 7.8mg	40%
Potassium 100mg	2%
Thiamine 0.1mg	10%
Phosphorus 130mg	10%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

◀ Look at the serving size and compare it to your actual portion size

◀ Find the total carbohydrates per serving

◀ Find the total grams of dietary fiber per serving

Watching your blood glucose levels?

Net grams of carbohydrates

Because fiber and sugar alcohols don't affect blood glucose levels, you can subtract these from your total grams of carbohydrates. This gives you a "net carbohydrate" count.

No label? No problem

What if something doesn't have a label, such as fresh fruits or vegetables? It turns out there's an app for that. Our favorite is [CalorieKing](#). You can also look up the nutrition info at [fda.gov/food](https://www.fda.gov/food).

1600 Calorie Healthy Microbiome Meal Plan

CALORIES 1,540 | FAT 50g (29%) | CARBS 180g (47%) | FIBER 37g | PROTEIN 97g (25%)

Breakfast

	SERVING SIZE	CALORIES	FAT	CARBS	FIBER	PROTEIN
Egg-white omelet	2	34	0	1	0	7
Red pepper, chopped	¼ cup	10	0	2	1	0
Onion, chopped*	¼ cup	17	0	4	1	0
Greek yogurt, plain	5 oz	137	0	19	0	14
Raspberries*	½ cup	32	0	7	4	1
Whole-wheat toast*	1 slice	75	1	13	1	3
Almond butter	1 tbsp	101	10	3	1	2

Lunch

Whole-wheat bread*	2 slices	150	2	26	2	6
Turkey slices	2 oz	50	1	3	1	9
Low-fat mozzarella	1 slice	72	5	1	0	7
Romaine lettuce	2 leaves	2	0	0	0	0
Tomato	2 slices	10	0	2	1	1
Mustard	2 tsp	7	0	1	0	0
Orange (fruit)	1 small	62	0	15	3	1
Pistachios	¼ cup	171	14	9	3	6

Dinner

Chicken breast, baked	4 oz	124	1	0	0	26
Carrots, steamed*	1 cup	52	0	12	4	1
Cauliflower rice	1 pouch	35	0	6	6	2
Whole-wheat roll*	1 roll	76	2	13	1	2
Dark chocolate— 70%–85%*	1 oz	170	12	13	3	2

Snacks

Apple slices*	1 cup	93	0	25	4	1
Peanut butter powder	2 tbsp	60	2	5	1	6

*Polyphenol-containing foods

2000 Calorie Healthy Microbiome Meal Plan

CALORIES 2,163 | FAT 75.5g (31%) | CARBS 260g (48%) | FIBER 55g | PROTEIN 127g (23%)

Breakfast

	SERVING SIZE	CALORIES	FAT	CARBS	FIBER	PROTEIN
Sourdough toast	1 slice	100	1	19	1	3
Avocado, smashed	1 cup	233	21	13	10	3
Feta cheese	2 oz	150	12	2	0	8
Arugula	¼ cup	0	0	0	0	0
Egg whites, scrambled	2	34	0	1	0	7
Salt and pepper	To taste	0	0	0	0	0
Greek yogurt, nonfat	5 oz	137	0	19	0	14
Blueberries*	½ cup	42	0	10	2	1
Coffee	1 cup	0	0	0	0	0
Creamer	2 tbsp	20	1	2	0	0

Lunch

Spinach leaves*	2 cups	14	0	2	1	2
Eggs, hard-boiled	2 large	154	10	2	0	12
Chickpeas, dried	2 tbsp	34	1	6	2	2
Edamame*	¼ cup	94	4	7	3	8
Sweet potato, air-fried*	1	100	0	23	4	2
Yogurt-based salad dressing	2 tbsp	40	2	5	0	1
Banana	1 medium	105	0	27	3	1

Dinner

Chicken breast, baked	4 oz	124	1	0	0	26
Chickpea pasta	2 oz	190	4	34	4	11
Marinara sauce	½ cup	65	2	10	2	2
Broccoli, steamed*	1 cup	30	0	6	2	2
Whole-wheat roll*	1 roll	76	2	13	1	2
Parmesan cheese	1 tbsp	22	1	0	0	2
Strawberries*	1 cup	49	1	12	3	1

Snacks

Fiber bar	1 bar	140	4	29	9	2
Popcorn mini cakes	20 cakes	120	3.5	18	4	3
Low-fat mozzarella cheese stick	2	90	5	0	0	12

*Polyphenol-containing foods

My food tracker

Date

Total cal

Fiber goal

Breakfast

SERVING SIZE CALORIES FAT CARBS FIBER PROTEIN

	SERVING SIZE	CALORIES	FAT	CARBS	FIBER	PROTEIN

Lunch

	SERVING SIZE	CALORIES	FAT	CARBS	FIBER	PROTEIN

Dinner

	SERVING SIZE	CALORIES	FAT	CARBS	FIBER	PROTEIN

Snacks

	SERVING SIZE	CALORIES	FAT	CARBS	FIBER	PROTEIN

Tip: If you aren't meeting your fiber goal, try increasing total fiber by no more than 5 grams per day and increase your fluid intake to help alleviate any gastrointestinal symptoms.

Goal setting

With goal setting, it's important to make sure your goals are SMART, an acronym that helps with setting goals you can actually achieve. Go back to page 2 and look at your health goals. Maybe you mentioned losing weight, lowering A1C levels, or boosting energy. Let's make a plan to help you get there. For example, if you want to lose weight by eating healthy, an example of a smart goal would be "I will add one high fiber healthy snack to my meal plan three days a week for the next month." OK, you give it a try. Take some time to set smart goals below.



My goals

1 _____

2 _____

3 _____

Notes

Ongoing support

When paired with Pendulum probiotics, incorporating expert advice from our in-house team of registered dietitians can help take your wellness goals to the next level. As a Pendulum member, you have exclusive access to nourishing add-ons that fit your lifestyle.



30-Minute Follow-Up Coaching Call

Let's keep the conversation going! 30-minute follow-ups are a great way to continue checking in to help you meet your health goals.

[Schedule with your dietitian](#)

Healthy Microbiome Meal Plans

Scratch "Research Healthy Recipes" off your to-do list! We've got you covered: four-week meal plans tailored to your dietary lifestyle in a handy PDF format.

[Learn more](#)

[!\[\]\(870f5d5e9c0d57485634be3ecf52f3ca_img.jpg\) See all nutrition offerings](#)

Pendulum isn't a health-care provider, doesn't provide any professional medical services, and doesn't have a "patient" relationship with you. The information collected by Pendulum isn't intended for use in the diagnosis, treatment, management, or prevention of diabetes. During the coaching call, expect to have fun chatting about nutrition with one of Pendulum's registered dietitians. We'll discuss your individual needs, provide you with personalized nutrition goals, and provide educational resources to help you achieve your health and wellness goals.

Visit PendulumLife.com