

Fermented Foods for Weight Loss

Feeding your microbiome: How to add probiotics and prebiotics to your diet

Fermented foods are projected to be one of the leading weight loss trends throughout 2019, but they've actually been around for a long time. The fermentation process is one of the oldest examples of food preservation, and fermented foods have been a foundational staple of the human diet throughout history.

Unfortunately our modern ways of eating – processed, high fat, high salt, and high sugar foods – have taken the place of more traditional and healthful ways of eating. Fermented foods are now one of the least consumed foods in the U.S., despite the fact that they are one of the most important for gut health, specifically for your gut microbiome. Studies show that daily and long-term consumption of fermented foods can lead to improved weight loss.

What are fermented foods & why are they beneficial for weight loss?

The fermentation process transforms the food into a substance that's rich in microbes and compounds beneficial for health. Specifically, because of their high prebiotic (food for microbes) and probiotic (actual microbes) content, fermented foods feed the beneficial bacteria in our guts. This helps to increase the amount of good microbes, and crowding out harmful ones. These “good”

bacteria help digest food, fight off pathogens, and balance the gut microbiome – an important factor in weight management. Fermented foods are also high in fiber, which creates a lasting feeling of fullness, resulting in lower calorie consumption. Studies show that adding more fiber into your diet alone can result in the same amount of weight loss as extreme dieting.

Like adding fiber into the diet, studies show that incorporating probiotic bacteria from fermented foods and supplements, can result in more weight loss in overweight participants. Based on recent studies, these probiotics may prevent fat accumulation by suppressing lipid (or fat) absorption from the food you eat and promoting fat excretion through the feces. A 2015 study overfed participants a high fat diet and gave one group probiotics and the control group a placebo; the probiotic group gained 50% less body fat than the placebo group. When regularly consumed, both kimchi and sauerkraut have been associated with lower obesity rates in rodents and human subjects.

While these studies are compelling, if you're consuming probiotic bacteria primarily for weight loss (or other health reasons) it's important to consume them from food as opposed to a probiotic supplement. Some probiotic strains have actually shown to promote weight gain, so sticking to the real stuff in whole food form will ensure you're getting high quality, beneficial microbes that work synergistically with other beneficial food compounds and fibers to promote health.

The Case of Microbial Imbalance

Studies also show that imbalances in the gut microbiome – specifically a high *Firmicutes* to *Bacteroidetes* ratio and low diversity – can cause our bodies to extract more calories from the food we eat, therefore making weight gain more likely. Our gut bacteria play a key role in breaking down food particles and some bacteria are better at it than others, enabling more calories to be digested (instead of excreted in the feces) and harbored by the body. Two studies have illustrated that alterations in gut bacteria can lead to vastly different body compositions. When bacteria from two mice strains – one lean and one obese – were transplanted to germ-free mice, those who received the bacteria from the obese mice became obese and those who received bacteria from the lean mice stayed lean. The same is true when bacteria were transplanted from the guts of two identical twins – one lean and one obese – into germ-free mice; the obese twin's bacteria made that recipient mouse fat, while the bacteria from the lean twin did not.

While we are still unsure as to exactly how our gut microbiome dictates our weight, these scientific studies tell us that the beneficial bacteria in our guts, as well as the probiotic-rich foods we consume, play a leading role in maintaining a healthy body weight and in one's ability to lose weight.

But how do we make sure our microbiome is one that promotes a healthy weight? There are many ways, but the best way is to consume high fiber, prebiotic- and probiotic-rich foods like... fermented foods!

A Differentiation Worth Noting: Pickled vs. Fermented

We often lump together pickled and fermented foods and assume they are one and the same. But in fact, pickling and fermenting are quite different. Pickling preserves food using an acidic substance like vinegar, and these foods when found in grocery stores usually undergo extreme heat to preserve and sterilize, destroying any beneficial microbes. Fermenting differs in that the acidic substance is created by the food itself – microorganisms (bacteria and yeast) convert carbohydrates into alcohols or organic acids. These foods are rich in beneficial bacteria and are the good stuff we want to consume.

Fermented and pickled foods fall into three categories: pickled (pickles and other jarred vegetables that are shelf stable, found in grocery stores), fermented (including alcoholic beverages and kombucha), and fermented *and* pickled (which includes kimchi, sauerkraut, and other ferments that must be refrigerated) – these are the number one choice when it comes to promoting weight loss and a balanced microbiome.

Probiotics are all the rage these days! Also known as “good bacteria”, probiotics are found in fermented foods and dietary supplements. Equally important is the lesser known **prebiotics**, non-digestible fibers that act as fertilizers to help stimulate the growth of good bacteria. All prebiotics are fiber but not all fiber is a prebiotic! Probiotics introduce new bacteria into the system whereas prebiotics feed the bacteria already in the gut. Prebiotics are most healthy raw, undercooked and even cooked but eaten cooled! You can find both of these in supplement form but trying adding to your diet throughout the day. When probiotics are combined with prebiotics they are known as **synbiotics**.

Probiotic-rich foods

- ☐ Plain full fat Greek yogurt
- ☐ Kefir
- ☐ Sauerkraut
- ☐ Miso
- ☐ Pickles
- ☐ Tempeh
- ☐ Kimchi
- ☐ Kombucha tea

Prebiotic-rich food

Asparagus. Eat raw or lightly steamed for the most prebiotics. **Synbiotic pairing:** Dip asparagus spears in a sauce made of plain kefir blended with a drizzle of olive oil, lemon zest, and a pinch of salt

Banana (unripe or raw). Buy green and eat before fully ripened. Try sliced, mashed or frozen and blended into “nice cream”. **Synbiotic pairing:** Whirl a frozen banana in a blender with plain, full-fat yogurt, a handful of greens, and a tablespoon of nut butter for a smoothie

Buckwheat groats. Allow cooked buckwheat to cool for the most prebiotics, then top a green salad with a scoop of these gluten-free pseudo-grains. **Synbiotic pairing:** Make buckwheat pancakes and serve alongside grilled tempeh “bacon” strips

Cabbage. Toss raw cabbage with rice-wine vinegar and sesame oil for an Asian-inspired salad. **Synbiotic pairing:** Make your own sauerkraut for a synprobiotic treat

Chickpeas. Soak and cook dried chickpeas to make hummus (cooked chickpeas have lower levels of prebiotic fiber than dried). **Synbiotic pairing:** Top hummus with naturally fermented pickles or other vegetables

Dandelion Greens. For the most prebiotics, eat these bitter greens raw; mix with milder salad greens like romaine and baby spinach. **Synbiotic pairing:** Top with goat cheese or a yogurt-based dressing

Fennel. Slice the bulb, which has more prebiotics than the fronds, and eat raw. **Synbiotic pairing:** Toss with plain yogurt and top with zaatar, a Middle Eastern spice mixture

Garlic. Eat raw for the most prebiotic power. Try sprinkling minced raw garlic into a warm soup as a spicy garnish. **Synbiotic pairing:** Chopped crushed garlic and blend with plain yogurt, grated, and drained cucumber, chopped dill, and lemon juice for an easy Greek tzatziki sauce

Jerusalem artichokes. Peel and slice thinly using a mandolin. Add raw to a salad, or toss with olive oil and roast at 400 degrees Fahrenheit until lightly brown. **Synbiotic pairing:** Try with a kefir dressing: blend plain kefir with olive oil, lemon zest, and salt

Jicama. Cut into little sticks to snack on or add to salad for some extra crunch. **Synbiotic pairing:** Dip into a tangy cucumber cilantro dip: add chopped cucumber, cilantro leaves and mint leaves, lemon, salt and pepper to Greek yogurt

Lentils. Add a scoop of cooked lentil to any salad for a prebiotic protein boost. **Synbiotic pairing:** In addition to lentils, top your salad with sauerkraut or other pickled vegetables

Oats (rolled and steel-cut). Top cooked oats with a handful of wilted baby spinach, a sunny-side-up egg, and freshly ground pepper. **Synbiotic pairing:** Mix 1/3 cup each uncooked steel-cut oats, plain full-fat yogurt and milk of choice in a Mason jar, along with 1 tablespoon chia seeds. Refrigerate overnight and serve in the morning

Onion. Eat raw or lightly cooked for the greatest prebiotic effect. Try sprinkling raw into your favorite soup. **Synbiotic pairing:** Whisk miso paste with water and bring to a simmer for an aromatic miso broth. Add onions and cook until just softened

Pistachios. Eat a handful or sprinkle onto a salad for added crunch. **Synbiotic pairing:** Toss into a blender along with plain kefir, a handful of spinach, and a frozen banana for a prebiotic green smoothie

Potatoes. Boil and allow to cool. Toss with oil and vinegar and finely chopped veggies for a prebiotic side salad. **Synbiotic pairing:** Serve with sauerkraut

Radicchio. Eat raw in a salad, or toss with olive oil and roast, then drizzle with olive oil. **Synbiotic pairing:** Mix raw, shredded radicchio with plain yogurt, lemon juice, and lemon zest for a side salad

Radishes. Cut off the greens and slice to add to a salad or smoothie. Leave the tops on to hold while you dip into some extra virgin olive oil and a little sea salt. **Synbiotic pairing:** Cut the radish into thin slices and spread them with some chevre or goat cheese

Watermelon. Cube and sprinkle with coarse sea salt for a simple snack. **Synbiotic pairing:** Top sliced watermelon with sprinkles of feta cheese, and drizzle with olive oil and balsamic vinegar

Microbiome Supersupplements

To reinoculate with probiotics and prebiotics

A good probiotic contains many diverse species

Contains at least 3 types of *Lactobacillus*: *acidophilus*, *rhamnosus*, *plantaris*

Contains different types of *Bifidobacter*

Bonus if contains *Acidophilus reuteri*

Should contain between 50 billion and 200 billion bacteria

Most probiotics do NOT contain *Acidophilus gasseri*, but it has shown to be extremely effective in promoting weight loss. You can buy it separately or buy a probiotic that contains it

Microbiome Superspices

Cinnamon, balances blood sugar and therefore insulin, helping to prevent insulin resistance and thereby curing your body to BURN FAT rather than store it

Turmeric, a natural anti-inflammatory that helps heal the gut, support the microbiome, and promote good brain function