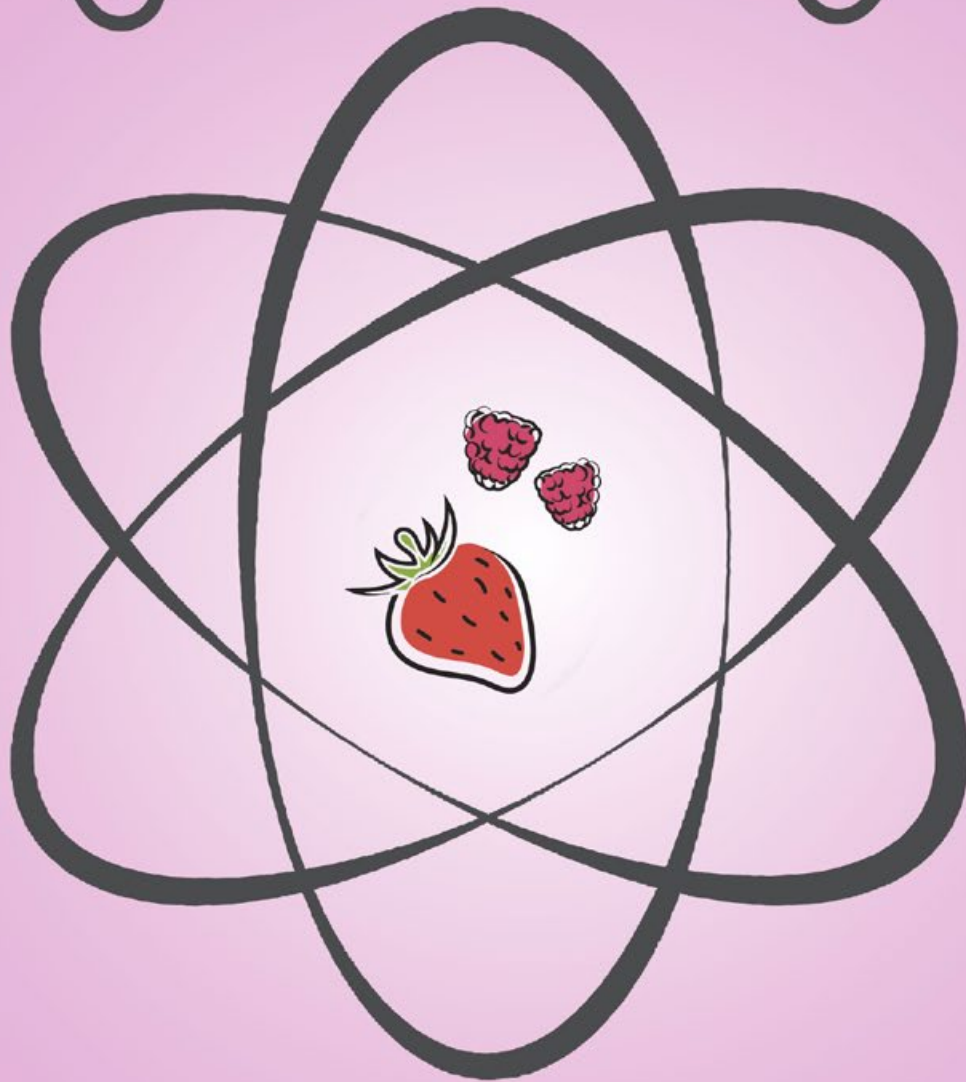


Nutrivore

GUIDE TO



Berries

BY THE TEAM AT NUTRIVORE

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Introduction to Berries

Berries are a truly ancient food in the human diet, and have been part of the human diet since long before agriculture. In fact, they were a seasonal staple of prehistoric hunter-gatherer populations all around the world—including in extreme environments like the Arctic, where they served as one of the few available plant foods for far north-dwelling populations like the Inuit and the Sami. Blackberries were even found preserved in the stomach contents of the 2500-year-old “Haraldskær Woman,” a bog body found in Denmark!

Throughout the centuries, berries continued to be eaten fresh, dried, fermented, and turned into important survival foods like pemmican (a mixture of berries, meat, and fat that originated with Indigenous tribes of North America). And, science has given us plenty of reasons to keep eating them today! These nutrient-dense superfoods are not only delicious; they’re also consistently linked with powerful and diverse health benefits.

So, no need for us to beat around the bush: let’s gobble up the details about the amazing world of berries!



What Are Berries?

Like many plant foods, berries have both a botanical definition and a culinary one. From a botanical standpoint, berries include any fruit produced from the ovary of a single flower, containing multiple seeds and fleshy pulp. By that definition, berries include some surprising members (bananas, watermelon, tomatoes, grapes, eggplant, and pumpkin!) while excluding some we'd expect to see on the list (like blackberries, strawberries, and raspberries).

However, most of us are much more familiar with the culinary definition: berries being any small, pulpy fruit with lots of little seeds. Along with being a more intuitive classification, this definition makes berries easier to discuss as a food group with shared nutritional features and health benefits. So, that's the definition we'll be using here!

With that in mind, the berry food group includes some fruits that many of us are already familiar with, such as:

- **BLACKBERRIES**
- **BLUEBERRIES**
- **CRANBERRIES**
- **HUCKLEBERRIES**
- **RASPBERRIES**
- **STRAWBERRIES**
- **BLACKBERRY-RASPBERRY HYBRIDS** such as *boysenberries, tayberries, and loganberries*

However, while these might be the most common berries on store shelves and local bushes, it's far from a complete list! There are actually over 400 different species of berries, ranging dramatically in flavor (from super sweet to mouth-puckering tart) and color (yellow, red, purple, white, green, and blue)!

Some of these more unique berries include:

- **AÇAÍ BERRIES**, which are small, round, and dark purple, somewhat resembling a grape, and are a major staple of some traditional populations in the Brazilian Amazon
- **BILBERRIES**, which are a European relative of the blueberry
- **CLOUDBERRIES**, which belong to the rose family and are amber-colored and tart
- **ELDERBERRIES**, which are earthy, tart-sweet berries known for their medicinal benefits
- **GOJI BERRIES OR WOLFBERRIES**, which are native to Asia and have been an ingredient in traditional Chinese, Japanese, Korean, and Vietnamese medicine since the 3rd century BC

- **GOOSEBERRIES**, which are round, brightly green colored, and striped
- **LINGONBERRIES**, which are similar to cranberries but less tart
- **MARIONBERRIES**, which are cultivars of blackberries and have sweet, tart, complex flavors
- **MULBERRIES**, which grow on deciduous trees of the *Morus* genus and can be white, lavender, or black
- **RED, WHITE, AND BLACK CURRANTS**, which are bush-grown berries often consumed dried
- **SALAL BERRIES**, which are dark blue, distinctively flavored, and meaty textured
- **SALMONBERRIES**, which belong to the rose family, resemble raspberries in shape and size, and have a subtle sweet taste
- **THIMBLEBERRIES**, which are delicate, sweet, and bright red

What Makes Berries So Great?

When it comes to human health, berries are jam-packed with beneficial compounds (pun totally intended)! Not only are they rich in some important micronutrients; their edible skins and seeds means we get a higher concentration of fiber, fat, and phytonutrients than most fruits deliver.



Phenomenal Phytonutrients

Berries offer an outstanding spectrum of phytonutrients, which drive many of their health-promoting properties!

For one, the bright colors of berries deliver more than just aesthetic appeal: they're also the result of phytonutrient plant pigments that have numerous biological effects! For example, berries are great sources of anthocyanins—a type of plant pigment that bestows blue, purple, and red coloration. Anthocyanins appear to have anti-inflammatory and neuroprotective effects, could improve glucose tolerance, may reduce the risk of chronic diseases like heart disease and cancer, and may even have pain-relieving properties (due to an affinity for certain “pain-sensation” cell membrane receptors in the brain!). Blueberries, raspberries, cranberries, black currants, salal berries, bilberries, mulberries, and blackberries are particularly rich in **anthocyanins**!

Many berries also contain **carotenoids**—phytonutrients that bestow yellow, orange, red, and purple pigmentation. Goji berries, cloudberries, and blueberries are particularly good sources of the carotenoids lutein and zeaxanthin, which play major roles in maintaining eye health due to their high concentration in the retina and their ability to filter harmful blue-light rays (in turn protecting critical parts of the eye from light-induced oxidative damage). As a result, these two phytochemicals can help reduce the risk of age-related macular degeneration and cataracts. Goji berries, specifically, are also a great source of the carotenoid astaxanthin—an antioxidant that helps protect against damage from UV rays.

Berries also contain **phytosterols** (including sitosterol and stigmasterol), which can help block absorption of cholesterol in the small intestine, due to having a similar chemical structure to animal cholesterol. As a result, these phytochemicals can help reduce high levels of LDL cholesterol in the blood (without impacting HDL levels) and potentially reduce the risk of heart disease.

Additionally, berries are good sources of **tannins**—astringent phytonutrients that serve as antioxidants, improve blood lipids, reduce blood pressure, help fight microbial infection, and can even benefit dental health (by combatting harmful oral bacteria and inhibiting plaque formation). Berries high in tannins include blueberries, strawberries, cranberries, and raspberries.

And, that's still only scratching the surface of the phytonutrients berries are bursting with! They also contain phenolic acids like **ellagic acid** (which has antiviral, anti-cancer, and anti-inflammatory activity) and **gallic acid** (which possesses antioxidant activity three times greater than vitamin E or C!), **quercetin** (which has cardio-protective and anti-cancer properties), **ursolic acid** (which has immune-modulating, anti-diabetic, anti-inflammatory, liver-protective, cardio-protective, and antimicrobial effects), and **pterostilbene** (the main antioxidant in blueberries, which is an analog of resveratrol and may play a particularly beneficial role in Alzheimer's disease!).



In all, each type of berry boasts its own unique phytonutrient composition (and subsequently, health benefits), making it a great idea to "eat the rainbow"!

Fabulous Fiber

Berries are excellent sources of fiber, particularly in the form of cellulose, pectin, and hemicellulose. Fiber is a great example of a nutrient that isn't labelled as essential, but that is absolutely fundamental for our health! Along with regulating gut motility (promoting regularity) and some gastric hormones, it supplies our gut bacteria with fermentable substrate (i.e., food!) so that important microbes can flourish and remain diverse. High fiber intake also reduces the risk of cardiovascular disease and of many forms of cancer (especially colorectal cancer, but also liver cancer, pancreatic cancer, and others), and promotes overall lower inflammation. High-fiber diets reduce the risk of mortality in cases of kidney disease and diabetes, and can even reduce your risk of dying from an infection!

Per cup serving, berries contain the following amounts of fiber:

- **BLACKBERRIES:** 7.6g
- **BLUEBERRIES:** 3.6g
- **BOYSENBERRIES:** 7g
- **CRANBERRIES:** 3.6g
- **ELDERBERRIES:** 10.2g
- **GOJI BERRIES:** 3.6g
- **HUCKLEBERRIES:** 3.6g
- **MARIONBERRIES:** 7.6g
- **RASPBERRIES:** 8g
- **STRAWBERRIES:** 3g
- **TAYBERRIES:** 6.5g

Magnificent Micronutrients

Berries are well known for their nutrient density, and each variety has a unique profile of micronutrients. Here are some highlights!

- **COPPER**, a trace mineral involved in glucose and cholesterol metabolism, gene expression, free radical scavenging, red blood cell production, and the growth, development, and maintenance of various organs (including the heart and brain). High-copper berries include blackberries (about a quarter of the DV per cup) and raspberries (12% of the DV).
- **MANGANESE**, a mineral that serves as a cofactor and component of numerous enzymes—giving it roles in carbohydrate metabolism, amino acid synthesis, gluconeogenesis, detoxification, lipid processing, free radical defense, bone and collagen formation, and wound healing. Blackberries contain 40% of the DV for manganese, while raspberries contain 36%, and blueberries and strawberries contain about a quarter of the DV.
- **VITAMIN C**, a water-soluble vitamin with powerful antioxidant properties, with important roles in the immune system and collagen production. Per cup serving, strawberries contain nearly the entire DV for this nutrient! Blackberries and raspberries contain about a third of the DV, while blueberries and cranberries contain 16%.
- **VITAMIN E**, a fat-soluble vitamin that serves as an important antioxidant, protecting the lipids in cell membranes from oxidative damage. Berries high in vitamin E include blackberries (about a third of the DV per cup), raspberries (28% of the DV), and cranberries (11% of the DV).
- **VITAMIN K**, which plays a vital role in coagulation, bone metabolism, cellular function, and the prevention of soft tissue calcification. Blackberries and blueberries contain about a quarter of the DV per cup.

Did Someone Say Omega-3?!

Although berries aren't typically known for their fat content, they actually contain slightly higher amounts than most fruits, due to their abundance of tiny edible seeds! And, this makes them a surprising source of fat alpha-linolenic acid (ALA), the only truly essential omega-3 fatty acid.

Although ALA doesn't always get as much attention as the long-chain omega-3s DHA and EPA abundant in fatty fish, that's not for lack of benefits! In fact, ALA has been independently associated with decreases in cardiovascular risk factors (including triglycerides, total cholesterol, LDL cholesterol, and blood pressure), a reduction in arterial plaque, healthier heart rhythm, and better cardiovascular disease outcomes (including lower rates of heart disease mortality and arrhythmia). [A 2021 meta-analysis](#), encompassing nearly 1.2 million participants, found that every 1 g daily increase in ALA intake was associated with a 5% drop in both cardiovascular disease mortality and all-cause mortality!

Additionally, ALA has been identified as potentially cancer-protective. Higher blood and tissue levels of ALA are associated with lower incidence of colon cancer, rectal cancer, and breast cancer (as well as lower risk of

existing breast cancer metastasizing). Likewise, a variety of in vitro experiments show that ALA can inhibit the proliferation of various cancer cell types—including breast cancer cells, bladder cancer cells, colon cancer cells, prostate cancer cells, and esophageal cancer cells.

Although ALA has been less thoroughly studied for other conditions, research has also linked higher ALA intake with a reduced risk of pneumonia, stroke, multiple sclerosis-related depression and fatigue, multiple sclerosis relapse, and clinical depression. There's even some evidence it can inhibit the growth of *H. pylori*, the bacteria responsible for stomach ulcers.

On top of that, ALA can be partially converted into DHA and EPA, in turn contributing to the health effects of these longer-chain omega-3 fats—including their important roles in regulating inflammation, pain perception, blood pressure, neurological health, immunity, eye health, gut health, and fetal development!

Per cup serving, some common berries contain the following amounts of ALA:

- **RASPBERRIES**: 10% of the DV (155 mg)
- **BLACKBERRIES**: 8% of the DV (135.4 mg)
- **ELDERBERRIES**: 8% of the DV (124 mg)
- **STRAWBERRIES**: 6% of the DV (98.8 mg)
- **GOJI BERRIES**: 6% of the DV (90 mg)
- **LOGANBERRIES**: 5% of the DV (87 mg)
- **BLUEBERRIES**: 5% of the DV (85.8 mg)

Health Benefits of Berries

Although many studies lump berries in with “fruit” as a general category, research looking specifically at the effects of berry consumption confirms what we might already suspect: berries are berry berry good for us! In fact, they show benefits for conditions as wide-ranging as cancer, neurological disease, cardiovascular disease, type 2 diabetes, osteoporosis, and gut health. Here’s a rundown of the impressive evidence!



Reduced risk of cancer:

Berries and their phytonutrients have been shown to affect cancer risk and progression in a number of ways—including protecting cells against oxidative damage, inhibiting cell proliferation, suppressing inflammation, inducing apoptosis (programmed cell death), inhibiting the formation of blood vessels that feed tumors, and protecting against DNA damage.

Animal and human studies have confirmed these protective effects! For example, a variety of rodent experiments have shown that berries such as blueberries and black raspberries can protect against colon and esophageal tumor growth. In humans, [a 2011 clinical trial](#) of colon cancer patients found that consuming 60g of freeze-dried strawberries every day, for a period of one to nine weeks, led to decreased expression of tumor markers in some patients.



Cognitive benefits:

A [2012 longitudinal study](#) found that higher berry intake (particularly strawberries and blueberries) was associated with a slower rate of cognitive decline. Specifically, eating berries at least once per week, compared to less than one serving per month, was associated with up to a 2.5-year delay in cognitive aging!

Likewise, [a small 2011](#) trial of older adults found that daily consumption of wild blueberry juice led to improvements in memory performance, learning, and word recall, and a trend towards reduced depressive symptoms. A [2017 trial](#) similarly found that among healthy older adults, consuming 30 mL of a blueberry concentrate daily for 12 weeks led to improvements in working memory, as well as improved blood uptake and activation in brain areas associated with cognitive function. And, [a 2014 trial](#) found that in children aged 8 to 10, one-time consumption of a blueberry drink led to significant improvements in delayed recall.

Lastly, a 2022 systematic review, spanning 12 studies, looked at the effect of berry consumption on cognitive function in healthy individuals, and found significant positive effects across all cognitive domains (memory, motor skill, executive functioning, attention and concentration, and processing speed)!



Reduced risk of cardiovascular disease:

Berries have been shown to help reduce risk factors for cardiovascular disease! For example, [a 2018 systematic review and meta-analysis](#) found that berry intake could reduce total cholesterol, LDL “bad” cholesterol, triglycerides, and blood pressure, while increasing the level of HDL “good” cholesterol. A [randomized controlled trial from 2015](#) found that blueberries in particular could improve endothelial function in adults with metabolic syndrome. And, [a 2011 crossover](#) trial of overweight individuals showed that after six weeks of consuming a daily strawberry beverage, inflammatory and thrombotic (blood-clot forming) responses were reduced after eating a high fat, high carbohydrate meal! And, [a randomized controlled trial from 2019](#) found that among people with metabolic syndrome, consuming a cup of blueberries daily for six months resulted in a 12 to 15% reduction in cardiovascular risk (owing to sustained improvements in lipid profiles, nitric oxide activity, and vascular function).



Reduced risk of type 2 diabetes:

Research suggests that berries could be a boon for blood sugar control, insulin resistance, and diabetes risk! For example, [a 2010 trial](#) of obese, insulin-resistant adults found that consuming a smoothie containing 22.5g of blueberry bioactives, twice daily for six weeks, significantly increased their insulin sensitivity relative to the placebo group (who received smoothies without any blueberry components). [A 2011 randomized controlled trial](#) similarly found that adding a strawberry beverage to a high-carbohydrate, moderate-fat meal helped reduce the subsequent inflammatory and insulin responses of participants.

And, another [2010 randomized controlled trial](#) found that among healthy (non-diabetic) people, consuming a 150g of a berry puree (consisting of bilberries, cranberries, blackcurrants, and strawberries) was able to reduce their blood glucose response to table sugar. [A similar trial from 2013](#) found that consuming either 150g of strawberries or 150g of a mixed berry puree (strawberries, bilberries, cranberries, and blackcurrants) was able to reduce the participants’ insulin response to wheat bread and rye bread.



Appetite regulation:

[A small 2015](#) trial found that compared to consuming a 65-calorie snack of confectionary sweets, consuming a 65-calorie snack of mixed berries resulted in decreased subsequent energy intake later in the day!



Protection against Parkinson’s disease:

[A 2012 pooled analysis](#) of two American cohort studies, examining nearly 130,000 health professionals, showed that people in the highest versus lowest quintile of berry consumption had a 23% decrease in risk for Parkinson’s disease. A similar effect was seen with consumption of one of the main phytonutrients in berries, anthocyanins (24% decrease).



Improved gut health:

Given their generous fiber content and many prebiotic phytonutrients, it's not surprising that berries have been shown to improve gut health—particularly through modulating the gut microbiome. In fact, research consistently shows they can enhance the presence of good bacteria while also inhibiting the growth of pathogens!

For example, [2022 systematic review and meta-analysis](#) of 11 studies found that among the various fruit types, berries (along with citrus and pome fruits) had a profound ability to increase levels of Bifidobacterium—probiotic bacteria that help reduce inflammation, protect against colon cancer, produce B vitamins, and ferment fiber into beneficial short-chain fatty acids. A [2020 review](#) found that berries are able to alleviate gut inflammation by modulating pro-inflammatory cytokines. Meanwhile, [a 2005 experiment](#) of eight different berry types found that raspberries and cloudberries were the most potent inhibitors of pathogens like Salmonella and Staphylococcus aureus, while cranberries protected against the growth of Listeria, and blueberries were able to reduce endotoxin transport across the gut barrier!



Better bone health:

Research suggests a protective role of berries and their unique constituents on bone health. [A randomized crossover trial from 2023](#) found that in postmenopausal women, consuming freeze-dried blueberries daily (an equivalent of up to 1 cup fresh) for a period of six weeks led to significant improvements in bone calcium retention, indicating protection against bone loss.

[A 2014 review](#) noted that in experimental studies, specific berries (particularly blueberries, elderberries, and cranberries) have been shown to decrease the rate of bone degradation, increase the proliferation of bone marrow cells, increase whole-body bone mineral density and bone mass, increase the number of osteoblasts (bone-building cells), and decrease the number of osteoclasts (bone-degrading cells). One [rodent study from 2014](#) using an experimental model of osteoporosis identified delphinidin, one of the major anthocyanidins in berries, as a particularly important player in protecting against bone loss!



Lower risk of all-cause mortality:

Yep, berries may even be protective of death from all causes—a general measure of health and longevity. [A 2017 systematic review](#), encompassing data from 95 studies, found that eating 100 grams of berries (about two-thirds of a cup) per day on average led to an 8% decrease in all-cause mortality. Similarly, [a prospective study](#) that followed 10,000 Norwegian men for four decades found that compared to not eating any berries, consuming garden berries (red currants, strawberries, or raspberries) more than 14 times per month was associated with a 23% lower risk of all-cause mortality, while eating wild berries (blueberries, cowberries, or cloudberries) more than 14 times per month was associated with a 16% lower risk.

Berries Nutrivore Scores

Berries have an average Nutrivore Score of 489! Some individual berries are as follows:

Blackberries	743
Blueberries	396
Boysenberries (frozen)	263
Cloudberry	646
Cranberries	288
Currants, black	811
Currants, red or white	393
Elderberry	546
Goji berries (dried)	780
Gooseberries	459
Huckleberries	317
Mulberries	719
Raspberries	491
Salmonberries	327
Strawberries	762

A Note on Foraging

Berries are often considered the quintessential “forage food”: depending on where you grew up, you might even have some childhood memories of picking sun-ripened berries off nearby bushes (and maybe eating most of them before they made it home!). And, there’s no reason to stop just because you’re an adult!

Although not all berries grow in all regions, the list of wild edible berries is a long one, and chances are good that at least some varieties may be available near you. Huckleberries, salmonberries, salal, wild strawberries, wild blackberries, wild blueberries, cranberries, mulberries, gooseberries, and wild raspberries are just some of the berries you might encounter.

Depending on the region and the time of year, different berry varieties can be growing as weeds in the backyard (think: blackberries), as ornamental shrubbery (like strawberries and salal), near swamps and marshes (like cranberries), along trails in the forest (like salmonberries and huckleberries), and in various other parts of urban, suburban, and rural environments.

Of course, safety matters here: if you decide to go on a foraging adventure, it’s smart to familiarize yourself with the types of edible berries growing in your area, learn about potentially poisonous lookalikes, and come prepared (long sleeves, pants, and sturdy footwear are helpful!). Likewise, steer clear from areas near pollution and industrial sites, and read up on any local regulations in your area; some places have specific rules and restrictions!

For more information on foraging berries check out the book [Sam Thayer's Field Guide to Edible Wild Plants: of Eastern and Central North America](#).



Wild vs. Cultivated

When it comes to edible berries, there's really no wrong way to go: any berry—whether foraged or store-bought—are going to be a boon for your health (and your taste buds!).

However, it's worth noting that wild berries offer a few extra perks. Along with often having a more intense flavor, wild berries are typically higher in vitamins, minerals, and phytonutrients than cultivated berries. For example, [a 2012 analysis](#) found that wild strawberries, blackberries, and raspberries had between two and five times as many phenolic compounds relative to their cultivated counterparts!



Some Practical Pointers

Berries are at their peak deliciousness when they're fresh and ripe. However, they also tend to be more delicate and perishable than most other fruits, which means a little extra care is needed with their selection and handling. Here are some pointers for getting the most out of your berries!

Selecting Berries at the store:

- Look for berries that are vibrant and free from discoloration. Their color should be uniform and rich, indicating ripeness (berries with white or green spots are a no-go!).
- If possible, gently touch the berries to make sure they're neither too hard nor too soft or mushy. The "Goldilocks zone" for berries is when they yield slightly to the touch!
- Choose berries that are consistently sized within the container. This is one way to stack the odds in favor of uniform ripening.
- Berries should have a pleasant, sweet aroma. If they lack any fragrance, they might be under-ripe or low quality.
- If the berries still have stems and leaves attached, they should be bright green and fresh-looking. Avoid berries with dried or browning stems.
- For the best flavor and quality, buy berries during their peak season (more on that below!).
- Inspect the container or packaging the berries are in for any signs of mold, moisture, or staining. If the packaging is clear, check the bottom to make sure there aren't any crushed or moldy berries.
- If the store has a refrigerated section for berries, choose from there. Cold temperatures help maintain the freshness of berries can indicate the package previously thawed and re-froze).



Storage and cleaning:

Berries are highly perishable, so it's important to store it at the right temperature and in the right environment!

- Sort and remove. As soon as you bring your berries home, sort through them and remove any damaged or overripe ones. This helps protect the quality of the rest of them!
- Don't wash until you're ready to eat them! Even if you spot some dirt, avoid washing berries before storing them. Moisture can promote mold growth and shorten



the lifespan of your berries. Instead, wash them right before consuming.

- Use ventilated containers. Store berries in shallow, breathable containers rather than airtight ones. Lack of airflow can cause condensation to build up and promote spoilage! You can also place a paper towel at the bottom of the berry container(s) to soak up extra moisture.
- Refrigerate! Berries are best stored in the refrigerator, rather than out on the counter. A temperature around 32 to 36 degrees F is ideal.
- Keep them dark. Store berries away from direct sunlight, as heat and light can accelerate the ripening process and degrade their quality.
- Use within a few days. Due to berries having a relatively short shelf life, it's best to eat them within a few days of purchasing (or harvesting) them.
- ...Or, freeze them! If you have more berries than you can consume before they start to spoil, consider freezing them. Wash, dry, and spread them on a baking sheet in a single layer. Once frozen, transfer them to an airtight container or a re-sealable freezer bag. Voila: you now have a great ingredient for smoothies, baking, and other recipes.

Seasonality:

The seasonality for different berries can vary depending on where you live, but here are some general guidelines!

- **BLACKBERRIES:** Blackberries are prominent in the summer, with their season usually spanning from June to August.
- **BLUEBERRIES:** Blueberries are often in season during the summer months, particularly from June to August.
- **CRANBERRIES:** Cranberries are typically harvested in the fall, with their main season spanning from September to October.
- **CURRANTS:** Various types of currants—including red, black, and white currants—can be found in summer, typically from June to July.
- **ELDERBERRIES:** Elderberries usually ripen in late summer, around August to September.
- **GOOSEBERRIES:** These berries may be available in late spring to early summer, around May to June.
- **HUCKLEBERRIES:** Huckleberries are often available from late summer to early fall—especially from August to September.
- **RASPBERRIES:** Some varieties of raspberries might start to ripen in late spring, but their main season typically extends through summer; they can sometimes continue into early fall, too!
- **STRAWBERRIES:** Depending on the region, strawberries can become available as early as late spring, usually from late April to June.

The Bottom Line

Whew! When it comes to these amazing little fruits, the answer is clear: eat, drink, and be berry!

Recipes



BREAKFAST

Double Berry Swiss Oatmeal

PREP TIME

10 minutes + chilling time

COOK TIME

none

YIELD

3-4 servings

1 cup rolled oats
2 tablespoons chia seeds
1-1 ½ cups water or milk (depending on how thick you like it)
¼ teaspoon sea salt
¾ cup Greek yogurt or coconut yogurt
½ cup chopped walnuts, or nuts or seeds of choice
2 scoops unflavored whey or pea protein powder, optional

1 small Granny smith apple, grated or finely chopped
1 banana, sliced
¼ cup dried mulberries (or sub dried cranberries)
¼ cup dried currants (or sub raisins)
1 ½ cup fresh berries for serving
Drizzle of maple syrup for serving, optional

1. The night before serving, combine oats, chia seeds, water, salt, yogurt, walnuts, and protein powder, if using, in a medium bowl with a lid.
2. Carefully stir in the chopped apple, banana and dried berries.
3. Cover with lid and chill in the refrigerator overnight, or at least 2 hours.
4. In the morning, top with fresh berries and a drizzle of maple syrup, if desired.



SALADS

Arugula, Strawberry and Chevre Salad

PREP TIME

10 minutes

COOK TIME

6 minutes

YIELD

2 servings

1 cup raw pecan halves
1 tablespoon oil of choice
2 teaspoons honey
1 teaspoon nutmeg
½ teaspoon allspice
¼ teaspoon cinnamon
¼ teaspoon cardamom

Juice of one lime (approximately 2
tablespoons)
2 tablespoons olive oil or oil of choice
⅛ teaspoon black pepper
8 cups fresh arugula
½ pound fresh strawberries, sliced
¼ cup crumbled chèvre (goat cheese or
dairy free alternative), about 1 ounce

1. Heat a skillet over medium-high heat. Add coconut oil and honey. Add pecans and stir to coat.
2. Sprinkle spices over pecans and stir to coat evenly.
3. Continue stirring constantly and cook until pecans have browned and are fragrant, 5 to 6 minutes. Watch carefully to make sure they don't burn!
4. Pour out onto a plate and let cool.
5. **MAKE DRESSING:** Whisk together lime juice, olive oil and black pepper.
6. Combine arugula, strawberries and pecans in a serving bowl or on two plates. Top with crumbled chèvre.
7. Drizzle lime dressing over salad immediately before serving.



Simple Kale Salad

PREP TIME

10 minutes

COOK TIME

none

YIELD

3-4 servings

1 bunch curly kale or Lacinato kale
2 tablespoons olive oil, or oil of choice
⅓ cup dried currants or cranberries
¼ cup pine nuts

1. Tear kale into 1- to 1½-inch pieces and remove tough stems. Sprinkle with olive oil in a large bowl, and massage with your hands to completely coat.
2. Sprinkle dried cranberries and pine nuts over the top and serve!



ENTRÉES

Apple Chicken Patties with Maple Cranberry Sauce

PREP TIME

20 minutes + chilling time

COOK TIME

1 hour 30 minutes

YIELD

5-7 servings

2 cups fresh or frozen cranberries
½ cup maple syrup
¼ cup water
8 ounces bacon
1 medium onion, minced
1 large Granny Smith or Fuji apple, peeled, cored, and minced
2 teaspoons minced fresh rosemary
2 pounds ground chicken
½ teaspoon sea salt
¼ teaspoon ground black pepper
1 tablespoon olive oil or other cooking fat, if needed

- 1. MAKE MAPLE CRANBERRY SAUCE:** Combine cranberries, maple syrup and water in a small saucepan.
2. Bring to a boil over high heat, then reduce the heat to maintain a simmer.
3. Simmer uncovered for 8 to 10 minutes, stirring occasionally, until most of the berries have popped and the sauce has thickened.
4. Transfer to a serving bowl and refrigerate for at least 1 hour before serving. Store in the fridge and use within 3 months.
5. Place the bacon in a cold skillet and then turn on the heat to medium-high. Cook, flipping once or twice, until the bacon is crispy.



6. When the bacon is crispy, remove it from the pan and add the onion to the bacon fat in the pan. Sauté 5 minutes over medium-high heat, stirring occasionally, until onion is starting to soften. Add the apple and rosemary and continue sautéing until the onion is browned and both the onion and apple are soft, 5 to 8 more minutes. Remove from the pan with a slotted spoon and allow to cool slightly. Do not clean the pan; you will be using it to cook the burgers.
7. Once the bacon has cooled enough to handle, chop into small pieces (think bacon bit size).
8. Combine the ground chicken, bacon, apple, and onion mix, and salt in a bowl. Mix well with your hands and form into 6 to 8-ounce patties.
9. Preheat the pan over medium heat and if there is no bacon fat left in the pan, add a tablespoon of olive oil. Fry the patties in the pan, in batches if needed so as not to overcrowd, until fully cooked, 15 to 25 minutes total, flipping once. To be sure the meat is fully cooked, check the internal temperature of the burgers with a meat thermometer: it should read 160°F.
10. Serve with chilled maple-cranberry sauce.

Whitefish with Strawberry Salsa

PREP TIME

15 minutes

COOK TIME

20 minutes

YIELD

4 servings

1 ½ to 2 pounds whitefish fillets, such as cod, hake, tilapia, or halibut

1 tablespoon olive oil or oil of choice

2 cups sliced strawberries

1 large lime, juice and zest

½ cup chopped red onion

¼ cup chopped cilantro

Salt and pepper to taste

1. Preheat the oven to 425°F. Line a rimmed baking sheet with aluminum foil and spread the olive oil over the top (alternately, use a silicone baking mat and skip the olive oil).
2. Place the fish fillets on the prepared baking sheet. Drizzle the olive oil over the fish and sprinkle it with salt and pepper.
3. Bake for 15 to 20 minutes, until the fish is fully cooked.
4. While the fish cooks, mix together the strawberries, lime juice and zest, onion, and cilantro. Add salt and pepper to taste. Set aside.
5. When the fish is cooked, top it with the salsa and serve.



SNACKS

Granola Bars

PREP TIME

10 minutes

COOK TIME

25 minutes

YIELD

10-16 servings

½ cup coconut flakes, chopped
2 large eggs
1 teaspoon vanilla extract
1 tablespoon honey
Pinch of sea salt
Pinch of ground cinnamon
½ cup finely shredded, unsweetened coconut

½ cup pepitas, chopped
⅓ cup shelled sunflower seeds
3 tablespoons sesame seeds
⅓ cup dried currants (or sub raisins)
⅓ cup dried cranberries, chopped
¼ cup bittersweet mini chocolate chips, optional

1. Preheat the oven to 350°F. Grease a 9-inch-square pan with coconut oil or palm shortening.
2. Toast the coconut flakes in a skillet over medium-high heat for 6 to 7 minutes, until lightly browned, if desired.
3. Place the eggs, vanilla, honey, salt, and cinnamon in a blender and mix for about 20 seconds. Alternatively, whisk well in a medium bowl.
4. Combine all the remaining dry ingredients in a bowl. Pour the egg mixture over the dry ingredients and mix to thoroughly combine. Pour the granola into the pan and press down evenly.
5. Bake for 18 minutes. Let cool completely then cut into bars or squares. Store in an airtight container in the fridge for up to a week.



Berry-Bucha Popsicles

PREP TIME

10 minutes + freezing
time

COOK TIME

none

YIELD

10-12 popsicles

¼ cup honey

2 cups pomegranate juice

1½ cups regular kombucha or water kefir

2 tablespoons lemon juice

1 cup sliced strawberries

¾ cup blueberries

1. Combine pomegranate juice, kombucha, lemon juice, honey and strawberries in a blender. Blend until smooth.
2. Pour mixture evenly into popsicle molds. Drop some blueberries into each popsicle mold. Insert a popsicle stick into each mold.
3. Freeze until completely frozen, at least 4 hours.



Berries with Earl Gray Coconut Cream

PREP TIME

20 minutes + chilling time

COOK TIME

10 minutes

YIELD

4-6 servings

1 cup heavy cream, or sub coconut cream
2 tablespoons honey, divided
5 teaspoons (about 3 tea bags) loose Earl Grey tea, divided
4 cups mixed berries (such as blueberries, raspberries, halved blackberries, pitted and halved cherries, and/or sliced strawberries)
Pinch sea salt
¼ cup pistachios, shelled

1. Bring cream to a simmer in a small saucepan over medium heat. Remove from heat and stir in 4 teaspoons tea and 1 tablespoon honey; let steep 5 minutes. Strain through a fine-mesh sieve into a medium bowl. Discard the solids and chill coconut cream in refrigerator until cold, at least 2 hours.
2. Toss berries, salt and remaining tablespoon honey and teaspoon tea in a large bowl. Let sit, tossing occasionally, until berries begin to soften and release some of their juices, 15 to 20 minutes.
3. Grind pistachios in a spice grinder or clean coffee grinder to the consistency of coarse sand.
4. Divide berry mixture among bowls. Top each with coconut mixture and pistachios.



DESSERT

Chiffon Cake with Chocolate Glaze and Raspberries

PREP TIME

30 minutes + cooling time

COOK TIME

1 hour

YIELD

10 servings

7 large eggs, 2 whole and 5 separated
1 teaspoon cream of tartar, divided
1 ½ cups cane sugar or maple sugar
1 ½ cups cassava flour, all-purpose flour, or gluten-free flour alternative
1 teaspoon baking soda
½ teaspoon sea salt
¾ cups water

½ cup olive oil or oil of choice
1 tablespoon vanilla
6 ounces dark chocolate chips, about 1 cup
4-6 ounces milk or dairy-free milk of choice, depending on desired consistency
1 to 2 pounds raspberries (or any berry you like)

1. Preheat oven to 325°F.
2. Beat egg whites with ½ teaspoon cream of tartar to form stiff peaks.
3. In a medium bowl, combine sugar, flour, baking soda, salt and remaining ½ teaspoon cream of tartar.
4. In a large bowl, whisk together whole eggs, egg yolks, water, oil and vanilla. Add flour mixture and whisk to form a smooth batter. Gently fold in egg whites until completely combined. Pour batter into a 16-cup ungreased tube pan. Bang the pan once on the countertop to pop any bubbles.
5. Cook for 1 hour, until a toothpick pierced in the middle of the chiffon cake comes out clean. Cool the cake to room temperature upside down, by inverting tub pan over a funnel or wire rack, at least 2 hours.
6. Once the cake is completely cooled, run a knife around both the inner and outer edge of the tube pan. Invert cake onto a serving platter.
7. Prepare glaze: In a double boiler, melt chocolate chips. Alternatively, melt chocolate chips in the microwave in 30-second intervals, stirring each



time, until the chocolate is melted and smooth. Slowly whisk in the milk until the desired consistency is reached. It should be thick, but pourable.

8. Gently spoon warm glaze over the top of the cake allowing it to dribble down the sides.
9. Decorate the cake with about half of the raspberries. To serve, slice using a serrated knife or angel food cake cutter, and serve the cake with the remaining raspberries.



TIP: Use a high quality dark chocolate for a less sweet glaze (and a higher Nutrivore Score), or use milk chocolate chips or semi sweet chocolate with a tablespoon of maple syrup for a sweeter version.

Strawberry Rhubarb Cobbler

PREP TIME

20 minutes

COOK TIME

30 minutes

YIELD

10 servings

1 ½ cups all-purpose flour, gluten-free flour blend, or grain-free flour alternative

1 teaspoon baking soda

1 teaspoon cream of tartar

¼ teaspoon sea salt

¼ teaspoon cinnamon

¼ teaspoon cardamom

4 tablespoons lard or butter, cold

¾ cup heavy cream or coconut cream

1 ½ pounds rhubarb, chopped

½ cups of maple syrup or cane sugar

3 tablespoons arrowroot powder or cornstarch, or use 6 tablespoons flour or flour alternative

3 tablespoons water

1 ½ pounds strawberries, sliced

½ teaspoon vanilla

2 teaspoons orange zest

1 teaspoon cinnamon

1 tablespoon maple sugar or cane sugar

1. Mix flour, baking soda, cream of tartar, salt, cinnamon, and cardamom together in a large bowl.
2. Add the lard, then use a whisk or two knives to cut the lard into the cassava flour mixture until it resembles dry oatmeal; the largest pieces of lard should be no bigger than peas.
3. Add cream and mix until the dough is soft and leaves the side of the bowl. If the dough is still dry or crumbly, add water a tablespoon at a time until the dough comes together.
4. Roll out dough ¼ inches thick. Use a 2 inches biscuit cutter to make into 10 to 12 biscuits.
5. Preheat oven to 400°F.
6. Put chopped rhubarb and maple syrup into a saucepan and bring to a simmer over medium-high heat. Simmer until rhubarb is soft but not mushy, about 8 minutes.



7. Mix arrowroot powder with water and pour into rhubarb. Stir constantly until it thickens, about 1 minute.
8. Remove from heat and fold strawberries, vanilla and orange zest into warm rhubarb.
9. Pour rhubarb mixture into a 9" x 9" baking dish. Arrange biscuits on the top of the rhubarb mixture. Mix cinnamon and maple sugar together and sprinkle over the top of each biscuit.
10. Bake 20 minutes. Let cool at least 15 minutes before serving. Store leftovers in the fridge for up to a week.

Berry Trifle

PREP TIME

30 to 45 minutes

COOK TIME

30 minutes

YIELD

8 servings

1 ½ cup fresh or frozen organic strawberries

1 ½ cup fresh or frozen mango (or use 1 cup of your favorite store bought jam in place of the strawberries and mango)

3 large eggs

¾ cup cane sugar or maple sugar

⅓ cup water

1 ½ tsp vanilla extract

1 cup all-purpose flour, gluten-free flour blend, or grain-free flour alternative

1 teaspoon baking powder

¼ teaspoon salt

1 ½ cups whole milk or 1 can full-fat coconut milk

2 ½ tablespoons maple syrup or sugar of choice

1 vanilla bean

2 bay leaves

3 large eggs, well beaten

⅓ cup good quality dark rum (for family-friendly option, flame ¾ cups rum)

3 cups fresh berries, plus more to garnish

Fresh mint, for garnish (optional)

1. Prepare jelly filling: Place berries and mango pieces in a saucepan and bring to a simmer over low heat. Simmer uncovered for 20 minutes, until juices are thick and mango is very soft. Blend with an immersion blender or food processor until smooth. Cool completely. Alternatively, use 1 cup of your favorite store bought jam.
2. Preheat oven to 350°F. Prepare a 12"×18" rimmed baking sheet by lining with wax paper and heavily greasing the wax paper with oil. Alternatively, use a greased silicone liner.
3. In the large bowl of a standing mixer, beat eggs on high until thick and yellow. Add sugar and gradually beat in. Add water and vanilla and mix until combined.



4. In a separate bowl, mix flour, baking powder, and salt. Add to stand mixer and beat just until smooth.
5. Spread batter out onto prepared baking sheet. Take the time to spread the surface evenly and into the corners.
6. Bake for 12-15 minutes, until top is just starting to turn golden brown and a toothpick comes out clean. Meanwhile, lay out a piece of parchment paper (roughly the size of your baking sheet), cover with a large tea towel and another layer of parchment paper.
7. Remove cake from oven and immediately invert over parchment. Carefully peel off the wax paper. Starting from one of the shorter sides, roll the cake up in the parchment/tea towel. Let the rolled-up cake fully cool on a wire rack.
8. Once completely cooled, gently unroll the cake. Remove the parchment and tea towel. Spread the top side evenly with the cooled jelly filling. Roll the cake back up.
9. Wrap up the jellyroll in parchment or wax paper and refrigerate, seam side down, until ready to assemble the trifle, at least 1 hour, or overnight.
10. **PREPARE CUSTARD:** Add milk and sugar to a saucepan over low heat. Split the vanilla bean down the middle and place and add to milk, along with bay leaves. Heat milk slowly over low heat until very steamy and just shy of simmering. Add a ladle of the hot milk to the beaten eggs while stirring the eggs vigorously. Then add the egg mixture back to the saucepan, stirring constantly. Continue to stir constantly until custard thickens (should coat a wooden spoon), about 4 to 5 minutes. Remove from heat and discard bay leaves. Remove vanilla bean halves and scrape the inside of the vanilla beans with a sharp knife to collect the vanilla seeds and add back into the custard. Discard the vanilla bean pod. Refrigerate until cold before assembling the trifle.
11. **ASSEMBLE THE TRIFLE:** Slice the jellyroll into $\frac{3}{4}$ " slices. Line a large glass bowl with the jellyroll slices. Place any extra cake in the bottom of the bowl. Carefully drizzle each piece of cake with rum. Fill the inside of the bowl with the fruit (slice any bigger berries, if needed). Pour the cooled custard over the fruit in the middle of the bowl. Place some extra fruit on the top for a garnish. Garnish with mint leaves, if using.



FOR A FAMILY-FRIENDLY OPTION: heat $\frac{3}{4}$ cup good quality dark rum in a wide-bottomed saucepan or skillet on the stove on low heat. When it starts to steam, remove to a well-ventilated area (like outside!) and carefully light it on fire (use a barbecue lighter, extra-long match/taper, or kitchen blowtorch). Let it burn, swirling the pan gently every once in a while, until the flames go out by themselves. You should be left with about $\frac{1}{3}$ cup of lovely very low-alcohol rum. Let it cool before drizzling on the cake.

Strawberry Mini Sponge Cakes

PREP TIME

15 minutes

COOK TIME

12 minutes

YIELD

8-12 mini cakes, depending on size of pan

1.2 ounce bag freeze-dried strawberries

5 eggs

2 tablespoons butter, coconut oil or oil of choice

3 tablespoons maple syrup, honey or sugar of choice

½ cup all-purpose flour, gluten-free flour blend, or grain-free flour alternative

¼ teaspoon salt

¼ teaspoon baking soda

½ teaspoon cream of tartar

1 cup fresh berries, for serving

Whipped cream, optional, for serving

2 ounces dark chocolate, shaved, optional, for serving

1. Preheat oven to 350°F. These are best cooked either in a silicone mini-cake or muffin mold or in a muffin pan with silicone liners. If you don't have liners, grease your muffin pan generously.
2. Place freeze-dried strawberries in a blender. Blend for 30 seconds, until they are a fine powder. Add the eggs, butter, and sugar. Blend for 20-30 seconds. Add the flour, salt, baking soda and cream of tartar and blend again or whip in by hand until just combined.
3. Pour into your prepared pan, filling each cup about ⅔ full.
4. Bake for 12-15 minutes or until slightly golden brown and a toothpick comes out clean.
5. Let cool completely and serve with fresh berries. If desired, top each cake with a dollop of whipped cream, and, using a fine grater, grate dark chocolate on top.



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Award-winning public speaker, New York Times bestselling author and world-renowned health expert, Dr. Sarah Ballantyne, PhD believes the key to improving public health is scientific literacy. She creates educational resources to help people improve their day-to-day diet and lifestyle choices, empowered and informed by the most current evidenced-based scientific research.



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