



Simple, Delicious, and Healthy Smoothies

Celebrate LGBTQ+ &
Taste the Rainbow!

Smoothie Recipes & More

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✦ **HAPPY** ✦
✦
Pride



Let's celebrate
Pride all year long
with smoothies
inspired by each
color of the
rainbow.

Please enjoy these
smoothie recipes
and helpful tips
for incorporating
smoothies into
your diet.



Freedom

Equity

Acceptance

Strength

PRIDE



Love

Confidence

Equality

Inclusion

Self-worth

Dignity

Expression



Smoothie Benefits

Smoothies take 5-10 mins to prepare and blend. We all have busy schedules and eating nutritiously should not take long.

Fruits, vegetables, and fungi are packed with many different nutrients, including vitamins, minerals, soluble fiber & phytonutrients (also called phytochemicals). Phytonutrients are nonnutritive compounds found in plants and fungi that are thought to have **positive health benefits such as protection from disease/cancer. Soluble fiber feeds your gut microbiome.**

Smoothies are refreshing, providing water for your daily hydration needs.

Visually stimulating. Plant pigments are synonymous with phytochemicals and give fruits and vegetables their vibrant rainbow of colors. Plant pigments fall into three main categories: carotenoids, chlorophylls, and flavonoids.

On average, each smoothie costs about \$3.50 to create.

Smoothies are an affordable way to incorporate nutritious food into your diet.

When fruits and vegetables are blended, nutrients are released from within the non-digestible plant cell walls, making smoothies **easier to digest and absorb than whole plants.**








More Smoothie Benefits

Smoothies can **conveniently provide an on-the-go snack** or a side dish in a meal.

Smoothies can be refrigerated and frozen. Refrigerate for no longer than 5 days. If placed in the freezer, store them for no longer than 2 weeks to preserve taste. When ready to consume from the freezer, place the frozen smoothie in the refrigerator the night before and enjoy the next day.

See recipes on the next page. All recipes make 2 servings, except the green smoothie which makes 3. One serving is 12 ounces.

Each smoothie has similar and unique benefits, many of which are listed below:

	Antioxidant Recovery
	Cardio health
	Eye Health
	Immunity Support
	Gut health





Red Smoothie



Flavonoid pigments, including anthocyanins (red-purple) and betalains (purple-red), are found in raspberries or strawberries and beets, respectively, giving this smoothie its bright red color.

Did you know that beets and spinach contain nitrates, which can help dilate blood vessels, allowing your heart to pump more blood and nutrients throughout your body?

Ingredients*: (~\$3.80)

Beets (3/4 cup)

Raspberries or Strawberries (1/2 cup)

Spinach (2 cup)

Frozen Pineapple (1/2 cup)

Lime Juice (2 Tbsp)

Ripe Banana (1 cup)

Unsweetened Greek Yogurt or Dairy Free Yogurt (1/2 cup)

Water (1.5 cup)

*Want to ensure your smoothie is blended well? See [Other Helpful Tips](#) on page 12 following the recipes to learn how.

Regular consumption of dietary nitrate-containing foods has been shown to be performance-enhancing in endurance athletes conducting aerobic exercise.

Consume this smoothie 2.5 to 3 hours before competition or high-intensity exercise for potential ergogenic (performance enhancing) effects.

Note: It is normal for urine and/or stools to be red after consumption.





Orange Smoothie



Carotenoid pigments, including carotenes, are found in oranges, carrots, and mangos giving this smoothie its bright reddish-orange color. The darker the orange color, the more beta-carotene in these foods.

Carotenoids such as beta-carotene, alpha-carotene, and beta-cryptoxanthin are provitamin A's that can be converted into active forms of vitamin A, which are essential for eye health, cell growth, and immune system function.

Ingredients*: (~\$2.00)

Orange (1 large, peeled, seeds removed)

Carrot (2 medium)

Mango (1 cup frozen or fresh)

Vanilla Extract (1/4 tsp)

Banana (1 large, frozen or fresh)

Fresh Turmeric Root (1 inch) or dried (1 tsp)

Ice Cubes (4)

Cold water (3/4 cup)

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Oranges and mango are also high in vitamin C. Other fruits high in vitamin C include papaya, strawberries, pineapple, and kiwifruit, which have more vitamin C per serving than oranges.

While turmeric root appears orange, its pigments are golden-yellow, characteristic of the photochemical polyphenol called curcuminoids. Curcumin has the potential for anti-cancer, antioxidant, anti-microbial, and anti-inflammatory properties, especially when consumed with piperine, a major component of black pepper.





Yellow Smoothie



The carotenoid pigment xanthophylls in pineapple, xanthophyll & lutein in yellow carrots, and the flavonoid betaxanthin in the golden beets are responsible for the vibrant yellow color in this smoothie.

Because of the variety of yellow fruits and vegetables, this smoothie is high in dietary nitrates from the beets, vitamin A from the carrots, and vitamin C from the pineapple.

Ingredients*: (~\$3.70)

Golden Beets (1 medium-sized)

Pineapple (1.5 cups frozen or fresh)

Banana (1 large, frozen)

Coconut or Almond Milk (1 cup)

Lemon (1 small, squeezed)

Yellow Carrot (1 large)

Ginger (1 inch, peeled)

Ice cubes (3)

Optional: Yellow Kiwi (1 peeled)

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Carotenoids, vitamin A, and vitamin C are beneficial antioxidants with anti-inflammatory effects that can protect you from disease and enhance your immune system.

The yellow color of a lemon is not from any of the yellow pigments discussed; instead, lemons are initially green, becoming yellow as the chlorophyll in the rind is replaced with anthocyanins as they ripen. Some lemons stay green due to inadequate sunlight exposure and not enough ripening time on the tree.





Green Smoothie



Chlorophyll is the pigment responsible for the green color of plants. There are two types of chlorophyll: *chlorophyll a* is blue-green and the more common *chlorophyll b* is green. They differ in color because of their different chemical structures, a methyl vs an aldehyde group attached to one of its carbons.

When cooking, color changes and destruction of chlorophyll can be minimized by keeping heating times short and heating food uncovered in a pan for the first few minutes.

Ingredients*:(~\$2.40)

Celery (4 whole celery stalks)

Curly Kale (1 leaf, remove middle stem)

Spinach (1.5 cups)

Cucumber (1 large)

Romaine (1.5 cup)

Granny Smith Apples (1 large or 2 if a sweeter flavor is desired)

Parsley Leaves (1/2 cup)

Lemon (2 medium, squeezed or 3 if a stronger tart flavor is desired)

Ginger (2 inches peeled)

Ice (5 cubes)

Water (1/2 cup)

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Phytochemicals such as antioxidants protect the body, including cellular DNA and metabolic substances, against free radicals that cause oxidative damage that can lead to disease, tumor growth, and certain cancers.





Blue Smoothie



Phycocyanins are light-absorbing pigment-protein complexes that give this smoothie its distinct blue color. Phycocyanins are extracted and concentrated from blue-green algae called spirulina, which can also be consumed & added to smoothies.

You will also find an abundance of the flavonoid creamy/white/yellow pigments anthoxanthins found in jicama, banana, mushrooms, ginger, and possibly white-flesh dragon fruit.

Ingredients*:(~\$5.70)

Blue Algae (1.25 Tsp)

Jicama (1 cup)

Banana (2 large, frozen)

Mushroom (4 pods, cleaned)

Ginger (2 inch, peeled)

Pear or Apple (peeled, core removed)

Dragon Fruit (1 whole, peeled)

Lemon (2, squeezed)

Lemon Zest (1/2 inch peel)

Ice (6 Cubes)

Water (3/4 cup)

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Both phycocyanins and anthoxanthins are thought to have anti-aging, anti-inflammatory and antioxidant properties.

Furthermore, many of these foods contain other phytochemicals with antioxidant, cardioprotective, & immune-boosting properties.





Purple Smoothie



The flavonoid pigments anthocyanin in blueberries, purple basil, red cabbage, and blackberries give this smoothie its purple-red color. Anthocyanin color is affected by pH. Acidic conditions intensify a red color, while alkaline conditions promote a blueish and sometimes a green hue.

Berries are packed with phytochemicals called polyphenols (phenolics), largely flavonoids (anthocyanins) and tannins (ellagitannin).

Ingredients*:(~\$3.40)

Blueberry (1 cup)

Purple cabbage (1/2 cup, shredded)

Purple/Thai or Regular Basil (1 Tbsp, chopped)

Blackberry (1/2 cup)

Lemon (1, squeezed)

Mixed Greens (1/2 cup)

Optional: 2 figs fresh or dried (rehydrated overnight)

Ice cubes (4)

Water (1/2 cup)

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Polyphenols have antioxidant, anticancer, and anti-inflammatory properties, and have been associated with decreased risk of high blood pressure, heart disease, stroke, and dementia. Polyphenols increase the delivery of blood to the heart and brain.

Cabbage is a great source of prebiotic fiber that provides nutrients to your gut microbiome.





Other Helpful Tips:

Meal Prepping Option: prepackage smoothie recipes in individual packages.

Except for liquids & ice, place half of each recipe (one-third for the green smoothie) in freezer-appropriate containers/plastic bags and place in the fridge for up to 5 days or freezer for up to 14 days. When ready to eat, defrost the frozen portion for 5-10 mins at room temperature or in the microwave for 60 to 90 seconds; then, place in a blender with liquids.

In what order should you blend your ingredients if you have a lower-powered blender to prevent chunky pieces? Blend each step for 15 secs before blending the next step.

1. Liquids such as water, lemon juice, lime juice, vanilla extract, coconut/almond milk
2. Fibrous/stringy vegetables and roots such as celery, cabbage, beets, carrots, turmeric, ginger, and lemon zest.
3. Dried fruit such as dates, figs, raisins
4. Ice cubes
5. Dark leafy vegetables such as kale, beet greens, collards
6. Herbs such as parsley, basil, cilantro
7. Salad greens such as spinach, mixed greens, romaine lettuce
8. Fungi mushrooms
9. Any type of frozen fruit
10. Berries such as blueberries, raspberries, strawberries, blackberry
11. All other fruits such as pineapple, banana, orange, mango, kiwi, apple, pears, dragon fruit, figs
12. Powders such as blue algae (spirulina)

Store and transport smoothies in plastic bottles or glass mason jars.

- I use BlenderBottle and Ball containers/jars but any brand will do.
- Store smoothies for up to 5 days in the fridge, or up to 14 days in the freezer.
- Please note: red, purple, and blue color fruits and vegetables contain the phytochemicals anthocyanins, which react with metal ions in iron, tin, or aluminum containers and lids. Store smoothies with these colors in plastic or glass-only containers and lids.





Adding More Protein:

Need more protein? Most of these smoothies have protein in them but not at the levels adequate to maximize protein synthesis for optimal recovery.

On average, the body can only digest and utilize about 20-25g of protein at any one time. Any extra protein that is consumed is typically not useful and is removed by the kidneys. The body does not have the ability to store protein, only a limited amount of amino acids.

Here are some foods and supplements you can add to boost your smoothie's protein content:

- 3/4 cup of **yogurt** can add 5-17g of protein. If eating plant-based, plant yogurts often have lower levels of protein, especially coconut--exceptions include soy and pea-based. Also, coconut can have high levels of saturated fat which is beneficial to limit. Almond-based yogurts are usually low in protein unless pea protein has been added. Check the nutritional label. A good rule of thumb is to choose yogurt that is higher in protein than the sugar added and at least 5g of protein per serving.
- 1/2 cup of white **beans**, such as cannellini, navy, and great northern have neutral flavors and can add 8g of protein without a strong bean taste, often masked by the other ingredients in the smoothie.
- 1 tablespoon of **chia seed** or 2 tablespoons of **flaxseed** can add 2 or 3g of protein, respectively, and essential Omega 3 fatty acids (alpha-linoleic acid) that have been correlated with better brain health and anti-inflammatory properties.
- 1/4 cup of **other nuts and seeds** such as almonds, walnuts, cashews, pumpkin seeds, etc can add 6-10g of protein.
- 1 tablespoon of **hemp seeds** provides about 3 grams of protein. Hemp seeds do not contain THC unless contaminated during processing, a risk of consuming any food or supplement.
- 1-2 scoops of your favorite **protein powder** can add 10-30g; typically, adding more than 1 scoop will significantly change the texture of your smoothie, often creating a gritty mouth feel.





Blenders & Smoothie gadgets:



Kitchen Tools used for these smoothies recipes:

- Vitamix 5200 Standard blender
- Ball jars and lids
- 2 cup glass liquid measuring cup
- Peeler
- Cutting board
- Sharp knife
- Citrus juicer

You'll need access to a blender, which may or may not be a challenge depending on your budget. I use a Vitamix 5200 Standard, which is high-powered and costs around \$450-500. I've been using this blender for 7 years and bought this as an investment in my health because food is medicine. However, you don't need one like this to make delicious smoothies, although some blenders do a better job of blending up ingredients.

Consider these thrifty blender options:

- Vitamix Explorian 10-Speed Blender: \$289
- Vitamix One: \$249
- Cleanblend Commercial Blender: \$165
- Ninja Professional Plus Blender w/ Auto-iQ: \$79
- Magic Bullet 11 Piece Personal Blender: \$40
- Oster 6-Cup Blender: \$29



WE ARE ALL UNIQUE



A COLORFUL BLEND OF THE RAINBOW



About the Author: Nicholas Sterghos (he/him/his) is a Registered Dietitian Nutritionist & a recent Metropolitan State University of Denver 2023 graduate from the Dietetic Internship Program. His graduate studies were in nutrition & exercise physiology at Teachers College, Columbia University in NYC. He is a graduate of West Point and served in the Army for 7+ years while racing professionally in the sport of triathlon. His favorite charity is The Global Healthy Living Foundation & his nutrition passions include food equity, climate change mitigation, and sports performance.

