



Iva de Souza, BA in Physical Education
Integrative Health & Fitness Consulting

How to Make Bone Broth



If you aren't already making bone broth regularly, I'd encourage you to start today! It is an incredibly healthy and very inexpensive addition to any diet and the homemade versions beat store bought broth in both taste and nutrition (by a lot).

This is the one nutrient rich food that anyone can afford to add!

What is Broth?

Broth (or technically, stock) is a mineral rich infusion made by boiling bones of healthy animals with vegetables, herbs and spices. You'll find a large stock pot of broth/stock simmering in the kitchen of almost every 5-star restaurant for its great culinary uses and unparalleled flavor, but it is also a powerful health tonic that you can add to your family's diet.

Broth is an excellent source of minerals and is known to boost the immune system (chicken soup when you are sick anyone?) and improve digestion.

Its high calcium, magnesium, and phosphorus content make it great for bone and tooth health.

Bone broth also ***supports joints, hair, skin, and nails due to its high collagen content.***

In fact, some even suggest that it helps ***eliminate cellulite as it supports smooth connective tissue.***

It can be made from the bones of beef, bison, lamb, poultry, or fish, and vegetables and spices are often added.

Your grandmother used to make it a lot!

Broth is a traditional food that your grandmother likely made often (and if not, your great-grandmother definitely did). Many societies around the world still consume broth regularly as it is a cheap and highly nutrient dense food.

Immune boosting drink

Broth is also helpful to have on hand when anyone in the family gets sick as it can be a soothing and immune boosting drink during illness, even if the person doesn't feel like eating.

Broth is very high in the amino acids proline* and glycine* which are vital for healthy connective tissue (ligaments, joints, around organs, etc).

Look for high quality bones from grass fed animal or fish

In selecting the bones for broth, look for high quality bones from grass fed cattle or bison, pastured poultry, or wild caught fish. Since you'll be extracting the minerals and drinking them in concentrated form, you want to make sure that the animal was as healthy as possible.

How to Make Bone Broth:

- 2 pounds (or more) of bones from a healthy source
- 2 chicken feet for extra gelatin (optional)
- 1 onion
- 2 carrots
- 2 stalks of celery
- 2 tablespoons Apple Cider Vinegar
- Optional: 1 bunch of parsley, 1 tablespoon or more of sea salt, 1 teaspoon peppercorns, additional herbs or spices to taste. I also add 2 cloves of garlic for the last 30 minutes of cooking.

You'll also need a large stock pot to cook the broth in and a strainer to remove the pieces when it is done.

What to do:

The first step in preparing to make broth is to gather high quality bones. You can save them when you cook. Since I roast chicken at least two to three times a month, I save the carcass for making broth/stock.



I usually aim for 2 pounds of bones per gallon of water I'm using to make broth. This usually works out to 2-3 full chicken carcasses. If possible I'll also add 2 chicken feet per gallon of water (completely optional!).

You'll also need some organic vegetables for flavor. These are actually optional but add extra flavor and nutrition. Typically, I add (per gallon of water and 2 pounds of bones):

- 1 onion
- 2 large carrots (if from an organic source, you can rough chop and don't need to peel)
- 2 celery stalks, rough chopped



I also add, per batch, a bunch of parsley from the garden. Since I make in bulk, I usually use about 4 times the amount of each of these. You can make in any amount, just multiply or divide the recipe up or down.

If you are using raw bones, especially beef bones, it improves flavor to roast them in the oven first. I place them in a roasting pan and roast for 30 minutes at 350.

Then, place the bones in a large stock pot (I use a 5 gallon pot). Pour (filtered) water over the bones and add the vinegar. Let sit for 20-30 minutes in the cool water. The acid helps make the nutrients in the bones more available.

Rough chop and add the vegetables (except the parsley and garlic, if using) to the pot. Add any salt, pepper, spices, or herbs, if using.



Now, bring the broth to a boil. Once it has reached a vigorous boil, reduce to a simmer and simmer until done. These are the times I simmer for:

- Beef broth/stock: 48 hours
- Chicken or poultry broth/stock: 24 hours
- Fish broth: 8 hours

During the first few hours of simmering, you'll need to remove the impurities that float to the surface. A frothy/foamy layer will form and it can be easily scooped off with a big spoon. Throw this part away. I typically check it every 20 minutes for the first 2 hours to remove this. Grass-fed and healthy animals will produce much less of this than conventional animals.

During the last 30 minutes, add the garlic and parsley, if using.

Remove from heat and let cool slightly. Strain using a fine metal strainer to remove all the bits of bone and vegetable. When cool enough, store in a gallon size glass jar in the fridge for up to 5 days, or freeze for later use.

How to Use:

Homemade Broth/Stock can be used as the liquid in making soups, stews, gravies, sauces, and reductions. It can also be used to sauté or roast vegetables.

Especially in the fall and winter, we try to drink at least 1 cup per person per day as a health boost. My favorite way is to heat 8-16 ounces with a little salt and sometimes whisk in an egg until cooked (makes a soup like egg-drop soup).

In times of illness (which doesn't happen often) we will usually just drink bone broth until we start feeling better as it supports the body but is very easy to digest so the body's energy can go to healing. In cases of stomach bugs or vomiting, bone broth often calms the stomach very quickly and helps shorten the duration of the illness.

If you aren't already, make bone broth a regular part of your kitchen routine. Its health boosting, inexpensive and easy... you can't afford not to!

Glycine* is required for synthesis of DNA, RNA and many proteins in the body. As such, it plays extensive roles in digestive health, proper functioning of the nervous system and in wound healing.

In addition:

- Glycine aids digestion by helping to regulate the synthesis and of bile salts and secretion of gastric acid
- It is involved in detoxification and is required for production of glutathione, an important antioxidant.
- It helps regulate blood sugar levels by controlling gluconeogenesis (the manufacture of glucose from proteins in the liver)
- It also enhance muscle repair, muscle growth by increasing levels of creatine and regulating HGH (human growth hormone) secretion from the pituitary gland. This wonderful amino acid is also critical for healthy functioning of the central nervous system.
- In the brain, it inhibits excitatory neurotransmitters, thus producing a calming effect
- Glycine is also converted into the neurotransmitter serine, which promotes mental alertness, improves memory, boosts mood, and reduces stress.

Proline

- Reverse atherosclerotic deposits - It enables the blood vessel walls to release cholesterol buildups into your blood stream, decreasing the size of potential blockages in your heart and the surrounding blood vessels.

- Proline also helps your body break down proteins for use in creating new, healthy muscle cells.

In Health

Iva