# Bone Broth: How to Make It and 6 Reasons Why You Should

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Bone broth has become extremely popular recently, especially among health-conscious individuals. This is because it is believed to have many health benefits.

Although there's limited research on bone broth itself, there is plenty of evidence that suggests drinking it may be greatly beneficial.

This article takes a closer look at bone broth, how to make it, and its potential benefits.

#### What is bone broth?

Bone broth is made by simmering the bones and connective tissue of animals.

This highly nutritious stock is commonly used in soups, sauces, and gravies. It has also recently gained popularity as a health drink.

Bone broth dates back to prehistoric times, when hunter-gatherers turned otherwise inedible animal parts like bones, hooves, and knuckles into a broth they could drink.

You can make bone broth using bones from just about any animal — pork, beef, veal, turkey, lamb, bison, elk, buffalo, venison, chicken, or fish.

Marrow and connective tissues like feet, hooves, beaks, gizzards, or fins can also be used.

# Summary

Bone broth is made by boiling down animal bones and connective tissue. This nutrientdense stock is used for soups, sauces, and health drinks.

# How to make bone broth

Making bone broth is fairly simple but there are some important steps for great flavor.

There are many recipes online, but most people do not even use a recipe.

All you really need is a large pot, water, vinegar, and bones.

To get you started, here is an easy recipe you can follow:

# Ingredients

- 1 gallon (4 liters) of water
- 2 tbsp (30 mL) apple cider vinegar
- 2-4 pounds (about 1-2 kg) of animal bones
- Onions, carrots, potatoes are optional
- Salt, pepper, and any seasonings of your choice to taste
- General rule of thumb. Use enough water to cover the bones. A 1:1 ratio of bones to water will produce a more gelatinous broth.

### Directions

- 1. Place bones in a pot and cover with <u>filtered water</u> then blanch for 20 minutes at a slow boil. This helps remove bitterness from the finish broth.
- 2. Place drained bones in a roasting pan and roast for 45 minutes at 450<sup>o</sup>. This helps provide a richer flavor.
- 3. Place roasted bones, filtered water, and other ingredients in a large pot, slow cooker, or pressure canner. Add 2 TBS of Apple Cider Vinegar per gallon of water.
- 4. Bring to a boil and reduce to a simmer and cook for 48 hours. In a pressure canner cook at 10-15# of pressure for 10-12 hours. I always use 15# of pressure. With both processes the longer the better.
- 5. Allow the broth to cool. Strain it into a large container and discard the solids.
- 6. The bones can be reused multiple times. Up to 12 times using the slow cooker method and up to 4 times with a pressure canner. Discard the bones when they crumble when poked with a sharp grilling fork.

To make the most nutritious broth, it is best to use a variety of bones — marrow bones, oxtail, knuckles, and feet. You can even mix and match bones in the same batch. Beef and elk bones as an example. 70%/30% ratio. Elk bones are loaded with extremely healthy no cholesterol fat. I always ask the butcher shop to throw in some extra knuckles (joint bones) in the 20# bag. This provides more collagen in the broth.

Adding vinegar is important because it helps pull all the valuable nutrients out of the bones and into the water, which is ultimately what you will be consuming.

If you want you can also add vegetables, <u>herbs</u>, or <u>spices</u> to your broth to enhance the flavor.

Common additions include <u>garlic</u>, onion, celery, carrot, parsley, rosemary, thyme, and ginger root. These can be added right away in step one. I like adding a little 5 spice seasoning (ground nutmeg, cinnamon, ginger, all spice, cloves). Even bacon end pieces for flavor after the first two rounds with the bones. Ideal bone broth will set up like gelatin once cooled. Usually, only after the first round of processing.

Bone both will last several days in the fridge. Less if there is no layer of fat on top, longer the thicker the layer of fat. I usually process mine in the pressure canner for long term storage. It can also be frozen.

#### Summary

Bone broth is made by simmering bones in water and a little vinegar. You can also add other ingredients to create more flavor.

#### Major Benefits of Bone Broth

#### 1. It contains many important vitamins and minerals

In general, bone broth is very nutritious.

However, the nutrient content does depend on the ingredients you use, as each brings something different to the table.

Animal bones are rich in <u>calcium</u>, magnesium, potassium, phosphorus, and other trace minerals — the same minerals needed to build and strengthen your own bones.

Fish bones also contain iodine, which is essential for healthy thyroid function and metabolism.

Connective tissue gives you glucosamine and chondroitin, natural compounds found in cartilage that are known to support joint health.

Marrow provides vitamin A, vitamin K2, minerals like zinc, iron, boron, manganese, and selenium, as well as <u>omega-3</u> and omega-6 fatty acids.

All these animal parts also contain the protein collagen, which turns into gelatin when cooked and yields several important amino acids.

As the ingredients simmer, their nutrients are released into the water in a form your body can easily absorb.

Many people do not get enough of these nutrients in their diet, so drinking bone broth is a good way to get more.

Unfortunately, it is impossible to know the exact amount of each nutrient contained in the broth because every batch of bones is so different.

# Summary

Bone broth is rich in minerals that help build and strengthen your bones. It also contains many other healthy nutrients, including vitamins, amino acids, and essential fatty acids.

#### 2. It may benefit the digestive system

Scientists have discovered that your overall health depends heavily on the health of your intestinal tract.

Not only is bone broth easy to digest, but it may also aid in the digestion of other foods.

The gelatin found in bone broth naturally attracts and holds liquids. This is why properly prepared broth congeals in the fridge.

Gelatin can also bind to water in your digestive tract, which helps foods move through your gut more easily.

It has also been shown to protect and heal the mucosal lining of the digestive tract in rats. It is thought to have the same effect in humans, but more research needs to be done to show its effectiveness.

An amino acid in gelatin called glutamine helps maintain the function of the intestinal wall and has been known to prevent and heal a condition known as "leaky gut".

Leaky gut, which is associated with several chronic diseases, is when the barrier between your gut and the bloodstream is impaired.

Substances that your body does not normally allow through leak into your bloodstream, which leads to inflammation and other problems.

For all these reasons, drinking bone broth may be beneficial for individuals with leaky gut, irritable bowel syndrome (IBS), or inflammatory bowel disease (IBD), such as ulcerative colitis or Crohn's disease.

# Summary

The gelatin in bone broth supports healthy digestion. It may be beneficial for individuals with leaky gut, as well as irritable and inflammatory bowel diseases.

# 3. It may help fight inflammation

The amino acids found in bone broth, including glycine and arginine, have strong antiinflammatory effects.

Arginine may be especially beneficial for fighting chronic inflammation.

One animal study shows that administering oral arginine to mice with asthma reduced airway inflammation and improved symptoms of asthma.

Another study in rats suggests that supplementing with arginine could help fight inflammation in individuals with obesity, but more research needs to be done in humans to support these results.

While some inflammation is necessary, chronic inflammation may lead to several serious diseases.

These include heart disease, diabetes, metabolic syndrome, Alzheimer's disease, arthritis, and many types of cancer.

Because of this, it is important to eat plenty of anti-inflammatory foods.

# Summary

The amino acids in bone broth can help fight inflammation. Because of this, eating it may help protect against disease.

#### 4. Its nutrients have been shown to improve joint health

Collagen is the main protein found in bones, tendons, and ligaments.

During the cooking process, collagen from bones and connective tissue is broken down into another protein called gelatin.

Gelatin contains important amino acids that support joint health.

It contains proline and glycine, which your body uses to build its own connective tissue. This includes tendons, which connect muscles to bones, and ligaments, which connect bones to each other.

Bone broth also contains glucosamine and chondroitin, which are natural compounds found in cartilage.

Multiple studies have found that glucosamine and chondroitin can help decrease joint pain and lessen the symptoms of osteoarthritis.

# Summary

The amino acids in bone broth help support joint health and consuming it may help lessen the symptoms of osteoarthritis.

# 5. It is weight-loss friendly

Bone broth is typically low in <u>calories</u>, but it can still satisfy hunger.

Studies have found that eating soup on a regular basis can increase feelings of fullness and may be associated with decreased body weight and belly fat.

What is more important, bone broth is high in protein, which may help improve appetite control, increase weight loss, and maintain lean muscle mass.

Plus, one study in 53 men also found that when combined with resistance training, collagen helped increase muscle mass and decrease body fat.

### Summary

The gelatin in bone broth has been shown to help promote feelings of fullness. Consuming it on a regular basis may reduce calorie intake and lead to weight loss over time.

#### 6. It may improve sleep and brain function

The amino acid glycine, found in bone broth, may help you relax. Multiple studies have found that glycine helps promote <u>sleep</u> (<u>32</u>, <u>33</u>Trusted Source, <u>34</u>).

One study found that taking 3 grams of glycine before bed significantly improved the quality of sleep for individuals who have difficulty sleeping (<u>32</u>).

Taking glycine before bed helped participants:

- fall asleep faster
- maintain a deeper sleep
- wake up fewer times throughout the night

This study also found that glycine helped reduce daytime sleepiness and improve mental function and memory.

Therefore, drinking bone broth could have similar benefits.

# Summary

Glycine has been shown to promote sleep. Taking it before bed may help improve quality of sleep, mental function, and memory.

# Tips for using bone broth

Here are some additional tips for making and consuming bone broth.

Blanch bones for 20 minutes at a slow boil, then drain. This helps remove bitterness. And improves taste.

Roast bones at 450° for 45 minutes. This gives your broth a rich flavor.

# Where to get bones

Instead of throwing leftover bones and carcasses from meals in the garbage, save them to make broth.

You can collect the bones in a bag and store them in your freezer until you are ready to cook them. I always have at least 20# of bones in my freezer.

However, if you are not someone who typically buys and eats whole chickens and bonein meat, you may wonder where you can find animal bones to make broth.

You can ask for them at your local butcher or farmer's market. The meat department at most grocery stores will often have them too.

The best part is they are very inexpensive to purchase. Your butcher may even give them to you for free. I get mine at S. Sanpete Meats in Centerfield for \$0.60/#, sometimes \$0.50/# when knuckles have been added. Most other meat shops are \$1 - 2.50/#.

Do your best to find pastured chicken or <u>grass-fed beef</u> bones, since these animals will be the healthiest and provide maximum health benefits to you.

### How to store it

While it is easiest to make broth in large batches, it can only be stored safely in the refrigerator for up to 5 days.

To help your broth last longer, you can freeze it in small containers and heat up individual servings as needed. I pressure can mine in quart jars for long term storage.

#### How often to drink it?

Unfortunately, there is no straightforward answer to this. Many people recommend drinking 1 cup (237 mL) of bone broth daily for maximum health benefits.

Some is better than none, so whether it be once a week or once a day, drink it as often as you can.

You can drink bone broth by itself, but not everyone likes the texture and mouth feel.

Luckily, there are other ways to enjoy it. It can be used as the base for soups, or to make sauces and gravies.

Here is a simple tomato sauce recipe using bone broth.

#### Ingredients

- 2 cups (473 mL) bone broth
- 2 cans organic tomato paste
- 2 tbsp (30 mL) of extra virgin olive oil
- 1/2 tsp (2.5 mL) oregano, chopped
- 1/2 tsp (2.5 mL) basil, chopped
- 2 cloves garlic, minced
- Salt and pepper, to taste

#### Directions

- 1. Place all ingredients in a medium saucepan.
- 2. Heat over medium-high heat for 4–6 minutes, stirring occasionally.
- 3. Reduce to low heat and cover, allowing the sauce to simmer for 5 more minutes.
- 4. Serve over pasta or meatloaf or include it in a variety of recipes.

#### Summary

Get bones from your local butcher or farmers market to make your broth. Just 1 cup a day provides good health benefits.

# The bottom line

Bone broth contains many important nutrients, some of which are known to have incredible health benefits.

However, the research on bone broth itself is still emerging.

What is known for sure is that bone broth is highly nutritious, and it is possible that adding it to your diet may provide a whole host of health benefits.