

STOCKS & BROTHS

Soothing – Protective – Restorative – Time saving

OVERVIEW

Stocks provide building blocks for the rapidly growing cells of the gut lining and they have a soothing effect on any areas of inflammation in the gut. That is why they aid digestion and have been known for centuries as healing folk remedies for the digestive tract.

DO NOT use commercially available soup stock granules or bullion cubes, as they are highly processed and are full of detrimental ingredients such as MSG (a neuro-toxin).

HEALTH BENEFITS

- Contain easily absorbed minerals – calcium, magnesium, phosphorus, silicon, sulphur, etc.
- Calcium in stocks are easily utilized
- Joint stocks contain chondroitin, sulphates and glucosamine important for bones and joints
- Fish stock is a good source of iodine important for the thyroid gland
- Bone marrow provide some of the best healing remedies for the gut lining and the immune system
- Rich in amino acids and protein
- Rich in gelatine (an incomplete protein) – Gelatine is a hydrophilic colloid, meaning it attracts and holds liquids. It aids digestion by attracting digestive juices to food in the gut, thus aiding the body to eliminate waste material effectively.

ECONOMIC BENEFITS

- Make in bulk and freeze in convenient portions – keeps 4-6 months frozen
- Keeps up to 2 weeks in the fridge, esp. when gelatinous. Re-boil if it's been longer.
- Meat or fish stock will keep well in the fridge for at least 7 days or it can be frozen
- Can be used in quick meals by adding a few vegetables
- Soup bones are a lot cheaper than meatier cuts

DIFFERENCE BETWEEN MEAT STOCK & BONE BROTH

MEAT STOCK is made with **raw** meat on a bone and it needs to be cooked just long enough to cook the meat thoroughly (2 – 3 hours), so it can be eaten, and so the bone marrow can be taken out of the bone and consumed. The meat stock made this way is usually clear and delicious, with an excellent nutritional value esp. in amino acids.

BONE BROTH is made out of bones, which can be raw or cooked or a mixture. Many people collect cooked bones from their meals, keep them in the freezer and use them for making the broth. In order to leach minerals out of the bones we add vinegar to the water. It is not necessary to add vinegar to the meat stock unless you need it for particular taste. Bone broth may have quite a different nutritional composition from the meat stock and a different taste.

Both are beneficial in their own way.

What Meats to Use?

To make good meat stock you need:

- Joints, ribs
- Bones (marrow bones, knuckle bones, left over bones after a meal)
- A piece of meat on the bone
- A whole chicken (very gentle on the stomach)
- Chicken carcasses
- Giblets from chicken
- Goose or duck
- Whole pigeons
- Pheasants
- Sheep's neck
- Oxtail
- Off cuts from filleting fish (heads and frames)
- Prawn (head and shells)
- Crab shells
- Lobster bodies
- Sinews and cartilaginous off-cuts, tendons
- Feet and heads (esp. rich in gelatine)
- Other inexpensive meats

It is essential to use **bones and joints**, as they provide the healing substances, not so much the muscle meats. Ask the butcher to cut in half the large tubular bones, so you can get the bone marrow out of them after cooking.

Use organic meats where possible.

- Chicken should be organic or free-range at the least.
- Beef either organic or **fully**-grass-fed. Some grass-fed meat are fed grass up until a few weeks before slaughter when they are grain-fed to fatten them up. Ask your trusted butcher about this.
- Lamb per definition should all be grass-fed.

HOW TO MAKE STOCK/BROTH

PREPARATION

Let the bones, joints and meat sit overnight in a (preferably) glass container with about ¼ cup apple cider vinegar, some salt (Himalayan, celtic sea salt) and water (filtered). You can also add a bit of pineapple or papaya juice, or ROCHWAY dried papaya fruit if you wish. This all helps to break down the collagen in cartilage and connective tissues accelerating the formation of gelatine, as well as extracting calcium and other minerals from bones, and softening bones.

You can also roast bones beforehand for a darker colour and deeper flavour.

PROCEDURE:

- Put the whole lot into your slow cooker or large pot and fill it about 2/3 with cold filtered water. Water has to be slowly heated (don't use hot water) as the albumin protein contained in bones will only dissolve in cold water. Albumin contributes to the clarity of the stock.
- You can add more herbs, spices, salt, onions or vegetables if you wish. We sometimes add some Dulse (or other seaweed) flakes to make it rich in iodine. Be careful to not add too much salt. Remember that your stock will reduce in size as water evaporates and become more concentrated which will make it saltier.

Slow Cooker – put on LOW setting

Soup Pot – bring to a boil, cover and simmer on a low heat (boiling furiously produces cloudy stock and loses too much volume)

- Cook for 6 – 24 hours (all day or overnight). We've even had it in the slow cooker for up to 36 hours (esp. if it's a *bone* broth), but you'll have to keep on adding water from time to time if you're going to do it this long. Fish stocks only need to go for 2 hours or so as the oils in fish can become rancid from long cooking.
- After cooking take the bones and meats out and sieve the stock to remove small bones.
- Strip off all the soft tissues from the bones as best you can to add to soups or use in curries.
- Extract the bone marrow out of large tubular bones while they are still warm. Bang the bone on a thick wooden chopping board.
- If space is an issue you can now simmer the stock to make a reduction. This will set as a gel and is very handy for reconstituting to make quick sauces and for adding to vegetable or meat dishes. Gelatinous nature of stock has to do with proportions of cartilage, bones and water and length of cooking. The goodness is present even if there is no gelling.

ADDING VEGETABLES

This is optional. You can either just drink the broth as a liquid, or you can make a meal out of it by adding vegetables you like. Certain vegetables will enhance the flavour of stock whereas some will spoil it:

USE:

Onions	Garlic	Celery	Carrots
Parsley	Thyme	Coriander	Ginger
Turmeric	Lemongrass	Tomatoes	Kaffir leaves
Mushrooms	Shiitake	Herbs	Bay Leaves

AVOID:

Zucchini	Capsicum	Eggplant
Potatoes	Pumpkin	Sweet potato
Too much Rosemary		

RECIPE IDEAS

ORGANIC CHICKEN STOCK

Makes about 5L stock

4 Organic chicken carcasses
6 Organic wings
6 Organic necks or, if you can find them, gizzards and feet (optional)
8L filtered water
¼ - ½ cup apple cider vinegar
½ tbsp. salt (Himalayan or celtic sea)
4 bay leaves
3 large onions, coarsely chopped
½ head celery wash and coarsely chopped
1 bunch parsley

For an Asian style stock add – lemongrass, thai basil, coriander roots and stems, kaffir lime leaves, ginger sliced.

- Proceed as explained under HOW TO MAKE STOCK.
- About 10 min. before finishing the stock add parsley. This will impart additional mineral ions to the broth and more flavour.
- Cool and then refrigerate.
- Fat will congeal on the surface. Remove if you like as you use the stock.
- We like to freeze 1L containers so we always have the basis of a quick nutritious and delicious meal.

FISH STOCK

Makes about 4L

3 or 4 whole frames of non-oily fish such as Blue eye or Snapper
2 tbsp olive oil or butter
2 leeks washed and cut in fine strips
2 carrots rough cut

1 bunch Thyme
1 bunch Parsley
1 Bay leaf
6 Black peppercorns
¼ cup white Wine vinegar
4L cold filtered water

- Heat a large stainless steel pot
- Add the oil or butter and all the vegetables
- Cook gently 10 min to soften the vegetables
- Add the fish frames and cover with cold water
- Add the vinegar
- Bring to a boil and skim all scum that rises to the surface
- Tie the herbs together in a muslin bag and add to the pot
- Reduce the heat cover and simmer for between 4 – 12 hours
- Top up the water as necessary
- Strain and discard the solids
- Allow to cool in the fridge, discard fat removed from the surface
- Portion into freezeable containers and label with the date made

BEEF STOCK

Makes about 4L

6 large carrots cut in medium dice
¼ a head of celery diced medium chunks
2 leeks washed and chopped
2 large onions medium diced
4 large mushrooms, diced (for flavour and colour)
2 tomatoes (not essential but flavoursome)
3kg of beef bones
6 – 8L filtered water
½ tbsp. salt (Himalayan or celtic sea)
½ bunch Thyme
3 bay leaves
½ tbsp. black peppercorns
¼ cup apple cider vinegar
½ - 1 bottle red wine (for flavour)

- Place all the cut vegetables into a large baking tray (DO NOT use an aluminium baking tray) and toss with a little animal fat (ghee, butter, goose fat, etc.)
- Spread the bones over the top
- Place in oven preheated to 180 degrees C
- Roast until the bones are browned and the vegetables have softened
- Tip all of this into your stock pot and cover with cold filtered water
- If there are any meaty bits left in the roasting tray deglaze with the vinegar and red wine
- Add this to the pot
- Add the salt, herbs and peppercorns
- If deglazing was not needed add the vinegar and wine to the pot
- Cover and quickly bring to a rolling boil
- Turn heat down so that the liquid is just simmering (Boiling hard produces cloudy stocks)
- Simmer partially covered for 3 – 36 hours (the longer the better)
- In last 15 min. add the fresh herbs
- Strain and keep the liquid into glass jars or storage containers
- Allow to cool, and then refrigerate
- Fat will rise and seal the top of the stock. Remove this fat as you use the stock. Keep this fat for roasting meats and vegetables.
- This stock will keep 1 – 2 weeks in the fridge, 3 – 6 months in the freezer

SAUCES

This is invaluable for getting some good nutrition into a fussy eater and is also very easy to make.

- Reduce gelatinous stock
- Season
- Thicken with butter or cream

REFERENCES:

MINDD Foundation – Holly Davis

Gut & Psychology Syndrome – Dr. Natasha Campbell-McBride