

## **Stocks**

John Hornick

A free resource for my YouTube course: Chef's Apprentice: Learning to Cook Like a Pro One Small Plate at a Time

Homemade stocks are an important part of a well-stocked kitchen and are easy to make. They are the base for soups and many sauces, they are often used in **reductions** and **glazes**, and they can be used to flavor **preparations** in other ways. They provide richness and depth of flavor, and therefore are one of my building blocks of *insaporire*, the Italian concept of building or layering flavors. I keep all of the stocks listed here in my freezer, in various sized containers, and in ice trays, so I can thaw and use exactly the amount I need. I have included the techniques and ingredients for making traditional stocks, and for modern **demiglace**. I have also included the versatile Japanese stock called **dashi**, which is the easiest and quickest to make and requires only two ingredients.

All stocks must be kept refrigerated and should be used or frozen within a few days. Freeze in various sized containers, including covered ice trays. Label with type and date.

Traditional Stocks:

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All traditional stocks are made in basically the same way, but you can vary them to change or intensify the flavor. An important hallmark of all stocks is that they are made with no salt. This is because the stock is often reduced when used in a **preparation**. If the stock contains salt, reducing it will concentrate the salt, which could result in a dish that is too salty. Stocks also must never be boiled. Boiling causes fat in the stock to **emulsify** with the water, which makes the stock cloudy and greasy and the fat difficult (if not impossible) to remove. You will notice thousands of tiny fat globules in stock that has been boiled. Properly made stock is clear. It may have a sheen, but most of the fat will rise to the top during the chilling step, then solidify, which makes it easy to remove.

To make stock (use a stockpot that, ideally, is taller than it is wide, so that it retains steam):

1. Cover ingredients in cold water (see Stock Chart below). Turn heat up to high. **Bring to a boil** but do not boil. Turn down heat and **simmer** for the cooking time specified in the Stock Chart. The stockpot should not be covered during cooking. Once a large pot of stock gets hot, it may be hard to turn down the heat low enough to avoid boiling. If this happens, offset the pot from the center of the burner.

2. Skim and degrease the stock with a ladle or skimmer as it cooks.

3. Strain the finished stock into a clean pot through a fine mesh strainer or chinois. Discard bones, mirepoix, bouquet garni, and garlic. Cool the stock quickly in the sink with ice, then refrigerate. The next day, **skim** and discard any fat that has formed on the top. Use the stock within a few days or divide and freeze it.

(See YouTube Bonus Lesson: Making Duck Stock)

## Demiglace:

Reduced veal stock makes demiglace, the most luxurious and intensely flavorful of the French sauces, sometimes called "liquid gold." Demiglace is made from veal stock and veal stock is made from veal bones, which yield sufficient gelatin to give this sauce its velvety texture. Historically, demiglace was made by a time-consuming and laborious process, and some purists still believe the old way is best. The modern way to make demiglace still takes time and effort, but less so, and the end result is well worth it. Making demiglace is one example of **reducing to perfection**. If reduced too far, it will become bitter. You be the judge.

To make demiglace:

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1. Slowly **reduce** about 4 quarts of veal stock to about 2 cups. It will become clearer and darker the more it reduces. This should take about 4-6 hours (note: making the veal stock will take about 12 hours). The finished demiglace should be syrupy, with a beautiful surface sheen.

2. Refrigerate.

<u>Dashi</u>:

Dashi is the basic Japanese stock, which is believed to contain the fifth basic flavor, called **umami**, loosely translated from Japanese as "**savory**" (the other four basic flavors are salty, sweet, bitter, and sour). Compared to the traditional stocks of Western cooking, dashi is by far the easiest and quickest to make. I once saw Robert Irvine on TV's "Dinner Impossible" spend hours making a stock for a huge Japanese dinner, while racing the clock, when he could have made dashi in minutes. Dashi has three ingredients: water, kombu (a type of kelp), and dried shavings (flakes) of the bonito fish, which belongs to the tuna family. The same batch of ingredients can be used to make "First Dashi," which is delicately flavored, and "Second Dashi," which is more strongly flavored. To make First Dashi (use a 6 qt. saucepan instead of a stockpot):

1. Gently wipe any grit from a piece of kombu about 6-8" long and 1"-2" wide, but don't wash or wipe off the white powder on its surface. **Bring to a boil** the kombu in 1 qt. of water, then turn off the heat. Remove the kombu and keep it for second dashi.

2. Skim any scum from the water, then drop 1 oz. of bonito flakes into the water and allow them to sink to the bottom.

3. Strain the dashi, pressing the liquid from the flakes with a rubber spatula or wooden spoon. Keep the saturated flakes to make second dashi. Refrigerate.

To make Second Dashi (use a 6 qt. saucepan instead of a stockpot):

1. Repeat the process with the once-used kombu and bonito flakes, but this time simmer the kombu for 2-3 minutes, remove it from the water, add the bonito flakes, then simmer for 3-5 minutes.

2. Strain by pressing the liquid from the flakes with a rubber spatula or wooden spoon, then refrigerate.

(See YouTube Bonus Lesson: Making Dashi)

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## Stock Chart<sup>1</sup>

Ingredient	Chicken/Duck	Beef/Pork/Ham	Veal	Fish/Lobster/Shrimp	Mushroom	Dashi
Bones (raw, cooked, fresh, or frozen; trim away fat from bones; use at least 3 lbs. of bones, except for veal stock)	X (the bones may be roasted or unroasted (see recipe for Roasted Duck Stock on p.	X (the bones may be roasted or unroasted)	X (use about 10 lbs of bones; brown in roasting pan @ 400 F in one layer for about 2 hours, shaking and turning them from time to time)	X (use non-oily fish; for fish stock, use bones and head, but first pound to break open the bones, then rinse away blood; for lobster stock, use bodies and shells; for shrimp stock, use shells, tails, and heads)	NA	NA
Meat Trimmings (no fat, <b>silverskin</b> , or liver)	Х	X (for pork stock, add a ham hock or trotter)	Х	X	NA	NA
Mirepoix (roughly			Brown in olive oil			

<sup>&</sup>lt;sup>1</sup> The basic version of this chart was developed by my chef teacher in cooking school, Pascal Dionot, of Classic Cooking in Scottsdale, AZ.

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	1		r	1	1	
chopped)			and 3 oz.			
Onions -3 parts	X (1 cup for 3 lbs.	X (brown) (1 cup for	tomato	X (1 cup for 3 lbs. of	X (1 cup for $3$	
(to 3 lbs. of	of bones)	3 lbs. of bones)	paste	bones)	lbs. of bones)	
bones)	X (2/3 cup)	X (2/3 cup)		No	X (2/3 cup)	
Carrots -2 parts	X (1/3 cup)	X (1/3 cup)	X (3 cups	X (1/3 cup)	X (1/3 cup)	
Celery- 1 part			for 10 lbs			
			of bones)			
			X (2 cups)			
			X (1 cup)			
Vegetable	Х	X (trimmings of	Х	X (mushrooms; use nothing	Mushroom	
Trimmings		turnips, cabbage,		green)	stems and	
(no green		broccoli, zucchini,			trimmings	
peppers or		and tomatoes work				
fennel)		well in beef stock)				
<b>Bouquet Garni</b>	Х	X (optional: add <sup>1</sup> / <sub>2</sub> to	Х	X (optional: add fennel	Х	
(fresh thyme,		1 clove for beef		seeds)		
bay leaves,		stock)				
peppercorns,						
fresh parsley or						
parsley stems,						
tied in						
cheesecloth)						
Garlic (whole	Х	Х	Х	Х	Х	
head, cut in half						
horizontally)						
White wine				Х		
Water (to cover	Х	Х	Х	Х	Х	Х
ingredients)						
Other			After			kombu
ingredients			bones have			bonito flakes
ingi caronto	1	1		1	l	conto nuito

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	·			T		
			roasted for			
			about 45			
			minutes,			
			brush			
			about 3 oz.			
			tomato			
			paste on			
			the bones;			
			calves feet			
			(optional)			
Cooking Time	2 hours	6 hours	10-12	1 hour	1 hour	About 15 minutes (see
-			hours			`
Special		Blanch meat and	Deglaze			See above
Instructions		bones until they stop	the			
		foaming, <b>skim</b> off	roasting			
		foam, then add the	pan with			
		other ingredients.	water and			
			add this			
			fond to the			
			stockpot.			

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