Hollandaise and Béarnaise

Hollandaise is considered an egg-thickened sauce, but the egg doesn't thicken by coagulation as it does in a liaison or in a custard sauce. Instead, it works by emulsification.

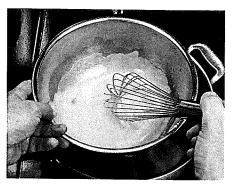
An emulsion is a uniform mixture of two unmixable liquids. In the case of hollandaise, the two liquids are melted butter and water (including the water in the lemon juice or the vinegar reduction). The two stay mixed and thick because the butter is beaten into tiny droplets and the egg yolks hold the droplets apart. You will encounter emulsion again when you prepare mayonnaise and other salad dressings in Chapter 21.

Two recipes for hollandaise are given. The first is the classic version, flavored with lemon and a vinegar reduction (see Figure 8.15). (You may also see recipes that include shallots in the reduction, in imitation of beurre blanc, but this is not traditional, according to Escoffier.) The second recipe, flavored with just lemon juice, is slightly quicker and easier to make.

Figure 8.15 Making hollandaise sauce.



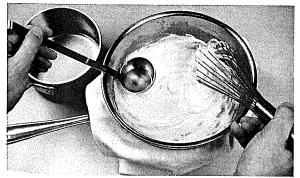
(a) Combine the egg yolks and reduction in a stainless-steel bowl.



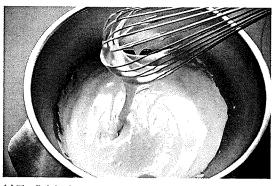
(b) Whip over a hot-water bath.



(c) Continue to whip over a hot water until thick and light.



(d) Very slowly whip in the butter. (Set the bowl in a saucepan lined with a kitchen towel to hold it steady.)



(e) The finished sauce should be thick but pourable.

HOLDING HOLLANDAISE SAUCE

Hollandaise sauce, as well as other sauces in this family, poses a special safety problem. It must be kept warm for service, but it must be held below 140°F (60°C) so the eggs don't curdle. Unfortunately, bacteria grow quickly in this temperature range. Therefore, extra care must be taken to avoid food-borne diseases.

The following sanitation procedures must be observed to avoid the danger of food poisoning:

- 1. Make sure all equipment is perfectly clean.
- 2. Hold sauce no longer than $1\frac{1}{2}$ hours. Make only enough to serve in this time, and discard any that is left over.
- 3. Never mix an old batch of sauce with a new batch.
- 4. Never hold hollandaise or béarnaise—or any other acid product—in aluminum. Use stainless-steel containers.

Guidelines for Preparing Hollandaise and Béarnaise

Students tend to be afraid of hollandaise because it has a reputation for being difficult to make. True, precautions are necessary to avoid overcooking the eggs and to get the right consistency. But if you follow the instructions in the recipe carefully and keep in mind these guidelines, you should have no trouble.

Many of these rules have one object in common: Don't overcook the egg yolks, or they will lose their ability to emulsify.

- 1. Cool the reduction before adding the yolks, or they will overcook.
- 2. Use the freshest eggs possible for the best emulsification. For safety, pasteurized eggs are recommended (see pp. 814 and 1058).
- 3. Beat the yolks over hot water.

An experienced cook is able to beat them over direct heat, if care is taken, without making scrambled eggs. Until you have gained some confidence, it is safer to use a hot-water bain-marie.

4. Use a round-bottomed stainless-steel bowl.

The whip must be able to reach all the eggs to beat them evenly. Also, stainless steel will not discolor the sauce or give it a metallic flavor.

- 5. Have the butter warm but not hot, or it may overcook the eggs. If it is too cool, it might solidify.
- 6. Add the butter slowly at first.

The yolks can absorb only a little at a time. Add a few drops at first and beat in thoroughly before adding more. If you add butter faster than it can be absorbed, the emulsion may break.

7. Don't add more butter than the egg yolks can hold.

Remember this standard proportion:

6 egg yolks per 1 pound (450 g) clarified butter

8. Broken or curdled hollandaise can be rescued.

First, try adding I teaspoon (5 mL) cold water and beating vigorously. If this doesn't work, start over with a couple of egg yolks and repeat the procedure from step 6 in the recipe, adding the broken sauce as you would the butter.



U.S.

YIELD: 1 QT (1 L)

METRIC

Hollandaise Sauce I 🔷

INGREDIENTS



2½ lb	1125 g	Butter
1/ 4		
¼ tsp	1mL	Peppercorns, crushed
¼ tsp	1 mL	Salt
6 fl oz	175 mL	White vinegar or wine vinegar
4 fl oz	120 mL	Water, cold
12	12	Egg yolks (see Note after Hollandaise II)
2–4 tbsp	30-60 mL	Lemon juice
to taste	to taste	Salt
to taste	to taste	Cayenne

Per 1 fl oz (29.57 mL): Calories, 280; Protein, 1 g; Fat, 31 g (99% cal.); Cholesterol, 155 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 310 mg.

PROCEDURE

- 1. Review guidelines for preparing hollandaise and béarnaise (above).
- 2. Clarify the butter (see p. 192). You should have about 2 lb (900 g) clarified butter. Keep the butter warm but not hot.
- 3. Combine peppercorns, salt, and vinegar in a saucepan and reduce until nearly dry (au sec). Remove from heat and add the cold water.
- 4. Pass the diluted reduction through a fine strainer into a stainless-steel bowl. Use a clean rubber spatula to make sure you transfer all flavoring material to bowl.
- 5. Add the egg yolks to bowl and beat well.
- 6. Hold the bowl over a hot-water bath and continue to beat the yolks until thickened and creamy.
- $7. \ \ Remove the bowl from the heat. Using a ladle, slowly and gradually$ beat in warm clarified butter, drop by drop at first. If the sauce becomes too thick to beat before all the butter is added, beat in a little lemon juice.
- 8. When all the butter is added, beat in lemon juice to taste and adjust seasoning with salt and cayenne. If necessary, thin the sauce with a few drops of warm water.
- 9. Strain through cheesecloth if necessary and keep warm (not hot) for service. Hold no longer than 1½ hours (see above).

Hollandaise Sauce II 🐠



YIELD: 1	ΩT (1 L)	Control of the second	
U.S.	METRIC	INGREDIENTS	
2⅓ lb	1125 g	Butter	
12 2 fl oz 3 fl oz to taste to taste	12 60 mL 100 mL to taste to taste	Egg yolks (see Note) Water, cold Lemon juice Salt Cayenne	••••

Per 1 fl oz (29.57 mL): Calories, 280; Protein, 1 g; Fat, 31 g (99% cal.); Cholesterol, 155 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 300 mg. Note: For safety, pasteurized eggs are recommended.

Small Sauces

Maltaise

To 1 qt (1 L) hollandaise add 2-4 fl oz (60-125 mL) orange juice (from blood oranges, if possible) and 2 tsp (10 mL) grated orange rind. Serve with asparagus.

PROCEDURE

- 1. Review guidelines for preparing hollandaise and béarnaise (p. 196).
- 2. Clarify the butter (see p. 192). You should have about 2 lb (900 g) clarified butter. Keep the butter warm but not hot.
- 3. Place the egg yolks and cold water in a stainless-steel bowl and beat well. Beat in a few drops of lemon juice.
- 4. Hold the bowl over a hot-water bath and continue to beat until the yolks are thickened and creamy.
- 5. Remove the bowl from the heat. Using a ladle, slowly and gradually beat in the warm butter, drop by drop at first. If the sauce becomes too thick to beat before all the butter is added, beat in a little of the lemon juice.
- 6. When the butter is all added, beat in lemon juice to taste and adjust seasoning with salt and cavenne. If necessary, thin the sauce with a few drops of warm water.
- 7. Keep warm (not hot) for service. Hold no longer than 1½ hours (see p. 195).

Mousseline

Whip 1 cup (250 mL) heavy cream until stiff and fold into 1 qt (1 L) hollandaise.

Béarnaise Sauce 🔮



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YIELD: 1	QT (1 L)		
U.S.	METRIC	INGREDIENTS	PROCEDURE 1. Review guidelines for preparing hollandaise and béarnaise (p. 196). 2. Clarify the butter (see p. 192). You should have about 2 lb (900 g) clarified butter. Keep the butter warm but not hot.
2½lb	1125 g	Butter	
2 oz	60 g	Shallots, chopped	 Combine the shallots, vinegar, tarragon, and peppercorns in a saucepan and reduce by three-fourths. Remove from heat and cool slightly. To make it easier to beat with a wire whip, transfer the reduction to a stainless-steel bowl. Use a clean rubber spatula to make sure you get it all. Let the reduction cool a little. Add the egg yolks to the bowl and beat well. Hold the bowl over a hot-water bath and continue to beat the yolks until thickened and creamy. Remove the bowl from the heat. Using a ladle, slowly and gradually beat in the warm clarified butter, drop by drop at first. If the sauce becomes too thick to beat before all the butter is added, beat in a little lemon juice or warm water. Strain the sauce through cheesecloth.
1 cup	250 mL	White wine vinegar	
2 tsp	10 mL	Dried tarragon	
1 tsp	5 mL	Peppercorns, crushed	
12	12	Egg yolks (see Note)	
to taste	to taste	Salt	 9. Season to taste with salt, cayenne, and a few drops of lemon juice. Mix in the parsley and tarragon. 10. Keep warm (not hot) for service. Hold no longer than 1½ hours (see p. 195).
to taste	to taste	Cayenne	
to taste	to taste	Lemon juice	
2 tbsp	30 mL	Chopped parsley	
1 tsp	5 mL	Dried tarragon	

Per 1 fl oz (29.57 mL): Calories, 280; Protein, 1 g; Fat, 31 g (97% cal.); Cholesterol, 155 mg; Carbohydrates, 1 g; Fiber, 0 g; Sodium, 300 mg.

Note: For safety, pasteurized eggs are recommended.