Understanding Foie Gras

Temperature is key to cooking this delicate and luxurious ingredient

BY WAYNE NISH

ost people have heard of fresh foie gras, but not many people have tasted it, let alone cooked with it. Foie gras is full of romance and the promise of sensual pleasure, but it's also pretty intimidating. Not everyone knows exactly what it is, it's very expensive, and it has a reputation for being tricky to prepare. I got to know—and love—foie gras when I worked as the hot appetizer chef at the Quilted Giraffe in New York City. I must have prepared three pounds of fresh foie gras every day over the course of a year, so I became very familiar with its temperamental ways. Actually, it isn't difficult to work with as long as you understand a few simple principles. Once you taste a crisply sautéed slice, with its deep, rich, powerful flavor and startlingly silky texture, you'll know that fresh foie gras is something worth learning about and trying yourself.

WHAT IS FOIE GRAS?

Foie gras (pronounced FWAH GRAH), which means "fat liver" in French, is the liver from ducks or geese that have been specially fed to produce large, rich livers. This fattening process, called gavage (gah-VAHZH), takes place for a couple of weeks before slaughter. The process involves feeding the birds a rich, corn-based diet using electronic pumps. Gavage has been criticized as being unnatural and unpleasant for the animals, but producers point out that ducks and geese don't chew their food before swallowing, so the pump-feeding doesn't provoke a gag or other disturbing reflex in the bird.

Foie gras is a very rich and potent ingredient, and therefore should be served in small portions, almost always as an appetizer or as a garnish to a dish rather than as a main course. There are lots of ways to prepare foie gras—sautéed, poached, baked, or made into pâté or a mousse—but the two standard methods for fresh foie gras are sautéing slices to be served hot and baking whole livers in a terrine to serve cold.

Foie gras is produced in many parts of the world, notably in the Gascony, Périgord, and Alsace regions of France, and in eastern Europe. There was no pro-



duction the United States until the early 1980s, when the demand became strong enough to make commercial operations feasible here. Still, there are only two commercial producers in the U.S., one in the Hudson Valley of New York and the other in California's Sonoma Valley.

Duck, duck, goose. In the U.S., only ducks are raised for foie gras, not geese. According to Ariane Daguin of D'Artagnan, a leading distributor of fresh duck foie gras, geese are more susceptible to disease and are more temperamental than ducks. They must be fed more frequently and for a longer period of time, and they demand the comfort of the same "goose girl" to aid in their daily feeding.

Nonetheless, geese are still raised for their livers in Europe. Foie gras *d'oie* (FWAH GRAH DWAH) is an even richer product than duck liver (foie gras *de canard*). This higher fat content makes goose liver less suitable for sautéing because the high heat causes more

Fresh foie gras is the ultimate in rich ingredients, so pair it with a sharp partner for balance and complexity. Here, crisp sautéed slices are served with apples, fresh pea shoots, and a gingery, spicy mango sauce.



Muscovy ducks step up to the feed pump. To produce the enlarged foie gras livers, the birds are fed a rich, copious diet for a few weeks before slaughter.

FOR FRESH FOIE GRAS D'Artagnan, Inc., 399-419 St. Paul Ave., Jersey City, NJ 07306;

800/DARTAGN or

201/792-0748.

SOURCES

Hudson Valley Foie Gras and Duck Products, RR#1 Box 69, Ferndale, NY 12734; 914/292-2500 (can steer you to local distributors).

Sonoma Foie Gras, Guillermo Gonzalez & Assoc., PO Box 2007, Sonoma, CA 95476; 800/427-4559 (in California) or 707/938-1229. fat to melt. Conversely, the lower heat used in terrine production makes goose liver suitable and economical for this cooking method.

RECOGNIZING QUALITY

Here in the U.S., there is little romance to the purchase of foie gras. There are no colorful market stalls of vendors who have personally raised their animals. The cook who wants to prepare foie gras at home can contact a mail-order distributor who sends the liver by overnight courier (see sources at left).

The USDA requires that fresh foie gras sold in this country be classified by size and quality. The higher the grade, the fewer blemishes the liver will have and the larger it will be. Grade-A livers must weigh at least one pound, Bs are between eight and fifteen ounces, and Cs are under a half-pound. The size of the liver will determine how "veiny" it will be. The basic vein network is the same in all the livers, so bigger specimens have relatively more "meat." You want a liver with few veins because if they're not removed adequately they can mar the smooth texture of the finished dish. Also, bits of blood from the veins will discolor the foie gras when it's cooked in terrine form.

Foie gras is a fresh product that is highly perishable, and it has a very high fat content. It must be kept at a constant temperature of 38° to 40°F during its handling, packing, and distribution to keep it wholesome and fresh. In fact, the ducks themselves are chilled before the livers are removed so that the livers stay cold and firm and keep their natural shape.

Judging texture. To the novice, a brick-hard grade-A liver would seem to be the most desirable. In fact, however, its firmness means it has an extremely high fat content, which will result in more fat melting

off during cooking. With a high-fat liver, you can wind up with a small piece of sautéed liver or a smaller baked terrine. A grade-A liver with a bit of give, but not sponginess, is the most desirable. A very spongy liver will have a low fat content and will burn when sautéed. I found that out the hard way in my earlier days at the Quilted Giraffe. When I first handled one of these spongy livers I thought it felt a little different, but I decided to go ahead and cook it. The second I put a slice in the sauté pan, I knew that it was going to burn, so I quickly threw in a knob of butter, which saved the day. If you do get a liver that feels spongy and bounces back when you press it and you have time to return it, contact the supplier, who should willingly replace it with a better one. If you don't have time, or you don't realize that you have a spongy liver, just remember the butter trick.

HANDLING BEFORE COOKING

The only real preparation that fresh foie gras needs before cooking is some careful deveining. Some cooks like to let the livers come to room temperature before deveining. This softens them and makes it slightly easier to pull the veins from the livers. I prefer to devein the livers when they're cold. First of all, as with any meat, the warmer foie gras gets, the more susceptible it becomes to bacteria. Also, as the liver softens, it becomes very fragile and is more liable to break apart. It's difficult to get nice slices from a broken liver, and for terrines, more fat will be rendered off during baking. For sautéing, I don't think a lot of deveining is needed, other than removing the obvious pieces from the surface of the liver. The sautéed slices will be golden brown so you won't see any discoloration from blood. For terrines, however, a little more extensive deveining is required. You'll get the most vein with the least disintegration of the liver if you know the way the veins run. See the diagram opposite for details.

To devein. Unwrap with liver and blot it with a paper towel. The liver should be a pale beige; trim off any yellow or green spots. Each liver consists of two lobes, one slightly larger than the other. If there are a few bits of thin, white membrane clinging to the outside, pull them off. Gently pull apart the lobes with your hands, noting that they are connected by a vein through the center of the two lobes. Cut this vein with a knife. Hold one lobe firmly in your hand and with a pair of flat-end tweezers, grasp the end of the vein that was severed. Gently pull with a slow, even motion. In the best case, the gentle pull will cause the rest of that portion of vein hidden inside the liver to pull free. For more extensive deveining, gently probe with the tweezers, a paring knife, or your fingers to find and remove the network of veins (see diagram opposite). Sometimes a clump of white fat is nestled between the two lobes, attached to a very thin membrane, which should be peeled off with your fingers. Keep the deveined livers cold until you're ready to cook them.

DELICIOUS EITHER HOT OR COLD

The trend in restaurant cooking these days is to offer sautéed slices of fresh foie gras rather than the more traditional foie gras terrine. Until the early 1980s, only canned terrines were available in the U.S. due to import restrictions, so people tend to associate even freshly made terrines with the old-style canned versions. Also, sauté recipes generally require far less preparation and labor to make, so they're preferred by restaurant chefs.

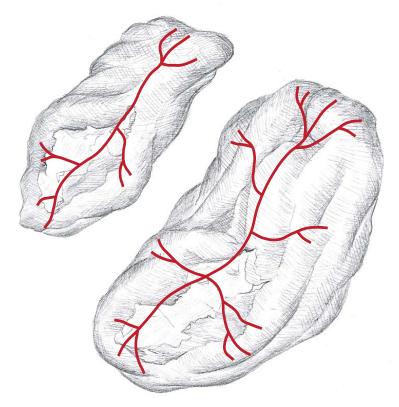
Quick, high heat for sautéing. Sautéing foie gras is by far the most simple way to prepare it. Nonetheless, while the cooking is accomplished in a matter of minutes, you must use your sense of touch to identify the precise moment when the liver is fully cooked but not overcooked. As foie gras cooks, a lot of fat is rendered off so the slices go from cold, firm slices that are full of solidified fat to softer, springier slices that have had much of the fat cooked off. As you cut your



This grade-A duck liver has a good, clear color and a desirable texture—firm but slightly supple, with no trace of sponginess. The author carefully pries apart the two lobes in preparation for deveining and slicing.



A hot, thin knife and careful measuring yield neat slices and no waste. The author cuts the liver fairly thick because it shrinks during cooking. It's important to work quickly to keep the liver cool and unmelted.



slices for sautéing, touch them to gauge the texture when cold. During cooking, feel them again so you can monitor the transformation. Knowing exactly when foie gras is done to perfection is an acquired skill, so the best thing to do is to cook a lot of it!

When you sauté foie gras, you want to use very high heat so that the outside is quickly seared, which forms a delicious crisp surface and helps to keep the slice from completely melting away. I heat my black iron sauté pan until it's very hot. The slices cook quickly and should be served right away, so be prepared with your plates and other ingredients.

Long, slow cooking for terrines. While terrines may be currently less fashionable in American restaurants, they are a wonderful way to experience the sublime flavor and texture of fresh foie gras. Making a terrine yourself is a lot less expensive than buying one from a gourmet store, too. Another advantage for the home cook is that terrines can be made up to a week ahead of serving. In fact, they need at least two days "curing" time after baking in order for the flavors to develop. Probably the most important thing to remember when making a terrine is to be gentle—handle the liver gently, use gentle heat and a water bath for cooking, give the terrine enough time to rest and cure, and take care when slicing the finished terrine.

Strategies for gentle cooking. The best pan to use is a heavy, enameled-iron terrine mold. Oven-proof ceramic or porcelain works too, but the heav-

Deveining takes patience and nimble fingers. The sketch shows approximately where the veins run. Use the tip of a paring knife and your fingers to slit and gently pry open the liver to reveal the veins so you can pull them out.

Testing by touch for doneness. As the slice of firm, cold liver cooks, it renders fat and becomes softer. Notice how hot the pan is, a crucial factor for getting a good crust that tastes great and keeps too much fat from cooking off.



For gentle cooking, the terrine is bundled in foil and hathed in hot water before baking. While sautéed foie gras needs high heat, terrines need the low, even heat provided by a water bath. It's easy to test the internal temperature of the foie gras by piercing the foil with an instantread thermometer.



After cooking, the terrine needs a weight and a wait. The gentle pressure from about five pounds of jars compresses the lobes of foie gras for neater slices. A two-day wait wrapped in plastic in the refrigerator improves the flavor and texture.



ier the mold the better so that the heat is distributed slowly and evenly. The terrine mold should be carefully wrapped in foil and placed in a bain-marie (a water bath), which can just be a roasting pan filled with boiling water. The actual cooking time will vary depending on the size of your foie gras and on the shape of your terrine, but I recommend setting your oven to 325°, which should keep the water in the bain-marie at about 160°. The most important temperature to gauge is the internal temperature of the liver. You can check this during cooking by inserting an instant-read thermometer into the center of the terrine. Don't push it in so far that the tip gets close to the bottom or sides of the mold or your reading will be too high—you want to know the temperature at the heart of the livers. One hundred ten degrees produces a rosy pink terrine, which is the way I like it because the texture is very creamy and silky. Cooking it rare like I do is one more reason to be sure to keep it cool during handling.

My terrine recipe is very basic, just some flavoring from a sweet-wine marinade and salt and pepper. It's very important to season a terrine enough before cooking. Once it's cooked, it's difficult to add salt and pepper. The seasonings really need to be impregnated in the liver. I like to dissolve the salt in the wine so that I can actually taste the saltiness before I marinate the liver, and so that the salt penetrates the liver more evenly than if I just sprinkled it on. If you unintentionally undersalt a terrine, the best remedy is to serve it with a salty-savory relish, like an onion and cranberry compote, which will help balance the flavors.

SAUTEED FOIE GRAS WITH CARAMELIZED APPLES & MANGO SAUCE

Serve this appetizer with a semisweet wine that has rich, deep fruit to enhance the mango and apple and to balance the richness of the foie gras—a vendange tardive (lateharvest) Alsatian Riesling or a Coteaux du Layon Chaume from the Loire. Serves eight.

FOR THE MANGO SAUCE:

2 Tbs. olive oil

2 shallots, peeled and sliced

1-in. piece unpeeled ginger, sliced thin 1 small chile pepper, split and seeded

11/2 cups mango purée (made from fresh, ripe mangoes, peeled, cut into chunks, and puréed)

Few drops lime juice Few drops sake (optional) Freshly ground black pepper

1 grade-A fresh duck foie gras, about $1\frac{1}{2}$ lb. Salt and freshly ground black pepper

- 2 Tbs. butter
- 1 tsp. sugar
- 1 tsp. salt
- 2 Granny Smith apples, peeled, cored, and cut into 12 wedges each
- 4 cups mixed fresh greens (watercress, arugula, pea shoots, or a mesclun mix), plus a few more for decoration

1 Tbs. water or white vermouth

For the sauce—In a small saucepan, heat the olive oil and add the shallots, ginger, chile pepper, and a pinch of salt. Cook over low heat until the shallots are soft but not brown, about 3 min. Add the mango purée and heat briefly. Remove from the heat, leave to infuse for about 1 hour, and then pass through a fine strainer. Season with lime juice, sake, and salt and pepper to taste. Reserve at room temperature.

To cook the foie gras—Blot the foie gras dry, separate the lobes, and devein (see discussion, pp. 38-39). Using a long, thin, slicing knife, cut each lobe into %-in. slices, rinsing the blade with hot water between each slice. Use smooth pulling strokes to slice; do not saw back and forth. Keep the slices cold until you're ready to cook them.

Heat two 10-in. sauté pans over medium-high heat. Season the foie gras slices with salt and pepper. When the pans are hot, add the foie gras, pressing firmly on each piece so it makes good contact with the hot pan. Sauté the first side until brown, about 1 min., turn, and continue cooking until the pieces are soft when pressed. During cooking, pour off the excess fat and reserve for cooking the apples. When done, transfer the foie gras slices to paper towels to drain. Keep warm.

To cook the apples—Pour off any remaining fat in one of the pans and let it cool slightly. Add the butter, let it melt, then sprinkle in the sugar and salt. Put the apple slices in the pan and turn them to coat in the seasonings. Cook over medium heat until lightly browned, pouring over them about 1 Tbs. of the reserved foie gras fat for flavor. When done, transfer the apples to paper towels to drain. Keep warm.

To wilt the greens and assemble the dish—Pour off any remaining fat from the pan and wipe with a paper towel. Add the greens to the pan along with the water or vermouth. Toss for a few seconds until slightly wilted and remove immediately. Divide the wilted greens among eight appetizer plates. Arrange three slices of apple next to the greens, place two slices of foie gras on top of the greens, and spoon some mango sauce across the front of the plate. Decorate with a few fresh greens, if you like (see photo on p. 37). Serve immediately.

FOIE GRAS TERRINE

Pour a glass of a lighter-style French Sauternes or an Auslese Riesling from the Mosel to serve with the terrine. Makes one terrine.

2 grade-A fresh duck foies gras, about 3 lb. total 1½ cups sweet white dessert wine, such as Muscat de Beaumes de Venise or a late-harvest Riesling 2 Tbs. kosher salt

HONEY-THYME VINAIGRETTE: 1 Tbs. honey 1 tsp. coarsely cracked black peppercorns Salt to taste $\frac{1}{2}$ tsp. fresh thyme leaves 1/4 cup champagne vinegar 3/4 cup extra-virgin olive oil

Mixed tender salad greens Fresh figs, quartered Grilled bread

To make the terrine—Blot the livers dry, separate the lobes, and devein (see discussion, pp. 38-39). Pour the wine into a large bowl, add the salt, and stir to dissolve. Add the livers and marinate at room temperature for 1 hour or in the refrigerator for 3 hours, turning often. Heat the oven to 325°F. Cut a piece of heavy cardboard



to fit the inside top of a heavy terrine (a 10-in. rectangular one works well) and wrap it in foil. Arrange the livers in the terrine in the following pattern: one large and one small lobe on the bottom layer, with their curved outsides down; one small and one large lobe on the top layer with their curved outsides up. Basically, you're restoring the livers to their original shape. Press firmly to fit them snugly into the terrine. Pour over some of the remaining wine to fill the mold. Wrap the terrine in several layers of foil, place in a larger pan, and add boiling water to come halfway up the side of the terrine.

Put the terrine and water bath in the heated oven and cook until the internal temperature of the livers is about 110°; this can range from 35 min. to $1\frac{1}{2}$ hours. Remove from the oven and allow to cool about 15 min. Unwrap the terrine, put the foil-wrapped cardboard on top, and then rewrap the terrine in plastic wrap. Arrange a couple of cans or other objects that weigh about 5 lb. on top and then refrigerate for two days.

To make the vinaigrette—Whisk together the honey, pepper, salt, thyme, and vinegar until the honey is dissolved. Whisk in the oil drop by drop until the sauce is slightly thick and emulsified. Taste and adjust seasoning.

To slice the terrine—Remove the weights, peel off any solid fat, and run a sharp knife around the edge of the terrine. Invert it onto a board or platter and let the terrine fall out. Cut 1/4- to 1/2-in. slices with a thin knife dipped in hot water.

To serve—Toss the greens with a few spoonfuls of the vinaigrette to coat lightly. Do the same with the figs. Arrange a slice of foie gras, a cluster of greens, a pile of figs, and two pieces of toast on each plate. Serve immediately. The leftover terrine will keep, well wrapped, up to a week.

Wayne Nish changed careers in his early thirties and went to cooking school. He landed a job at the renowned Quilted Giraffe in New York and soon after became the executive chef at La Colombe d'Or. He is now the coowner, with partner Joe Scalice, of two Manhattan restaurants, March and La Colombe d'Or.

A slice of foie gras terrine is rich and satiny smooth with a hint of sweetness from its muscat wine marinade. Spread it on crusty grilled bread, to eat with figs and greens dressed in a sweet-tart vinaigrette.