

MODULE 5: PREP & COOKING III | TRANSCRIPT

LESSON 4

# Dry-heat Cooking Methods

Now that you have a solid understanding of basic moist-heat cooking techniques, let's move onto the dry-heat cooking possibilities—after a few general thoughts.

For dry-heat cooking, let's use some of the tips we learned about for moist-heat cooking like mise en place, choosing the right utensils for certain cookware, and setting a timer. We'll also add...

## **No overcrowding the pan**

Loading a pan with too much food doesn't allow air to circulate around the food, which traps steam released from foods, which hinders the Maillard reaction, which leads to disappointing searing action. Give each piece of food some space in a pan, so they aren't overlapping or even touching (unless you want to slow Maillard reaction), and they'll reward you with beautifully colored, crisp, sog-free, and flavorful results. If you don't have a large enough pan to prevent overcrowding, cook in batches. It's worth it.

## **Don't blame “cooking”—you have the control**

If something burns, it's not “cooking's” fault. If something doesn't go as planned, adjust for next time, because ultimately, you have control of the heat. So, if you're heating a pan and you start to see smoke, back off the heat. Remember use the right oils depending on their smoke point. If you see smoke in an oiled pan, it's worth starting over. If something burns, it's not the end of the world, but you were in control of the heat so take note and adjust next time. Use a timer. Be nice to yourself.

## **Oils—a quick recap**

Grapeseed and avocado are great high-smoke-point oils for sautéing and searing. Coconut oil adds buttery, slightly sweet flavor to dishes, but like olive oil it doesn't have as high of smoke point as grapeseed and avocado, so coconut and olive oil shouldn't be used for high dry-heat preparations like stir fry. Try them for medium-high, medium- to medium-low-heat cooking.

## Searing (aka pan searing)

It's that technique that kicks off our friend the Maillard reaction—the caramelization of food that builds great depth of flavor. We're simply placing food in a hot, oiled pan and leaving it be so exterior sugars in the food begin to crust up, locking in flavor and moisture within the food. This process creates fond in the bottom of the pan, which is umami magic waiting to be deglazed or braised into more flavor for a final dish.

### Steps

Heat an open, shallow pan or skillet to medium-high (use a high-walled pan if you'll be braising or adding liquids after searing) and add just enough high-smoke-point oil to thinly coat the bottom of the pan—too much oil and you'll be frying.

Place your vegetables into the pan in one layer, and listen for the sizzle. Sizzle means Maillard reaction is in action. Season with a pinch of sea salt, but don't stir the food—you can flip a piece to check on progress, but allow it to cook undisturbed until browned underneath. Use tongs or a fork to turn the vegetables to sear the other side(s).

If you want to expedite cooking, or soften the vegetables, cover the pan for 1–2 minutes to trap some steam being released from the veg. Once both sides are caramelized, and the food is fork tender, not mushy, remove from heat and serve, or move on to the next technique (like braising). Season with salt and pepper to taste if needed, or better yet, a squeeze of lemon. Broccoli never tasted so good as it does seared!

## Sautéing

Similar to searing, but we're going to stir the food or shake the pan so the food moves as it cooks. This is a pretty essential cooking technique for many dishes since we prepare aromatics like onions combined with other veggies and herbs to create so many different recipes. It's also a technique used to cook foods through

entirely, to enjoy right away, to start a stew, or to add to other cooked dishes like noodles, rice, and grains. Either way, it cooks food quickly, but make sure foods are cut uniformly, and bite-sized for even cooking times.

## Steps

Heat an open pan or skillet to medium- or medium-high (higher walls keep ingredients in as you shake or stir or eventually braise) and add just enough medium- to high-smoke-point oil to thinly coat the bottom of the pan.

Place your vegetables into the pan in one layer and shake or stir. Season with a pinch of sea salt and continue stirring or shaking occasionally so the food softens, and if you like, browns on all sides. Remember, you don't have to add caramelization or brown the foods, you can simply soften if you want more delicate flavor. Adjust the heat to yield the result you're after—browned or un-browned. Different recipes call for different sauté results. You don't have to stir constantly, just occasionally.

## ***“Sweating veggies”***

Now, let's talk about a term that falls under this sautéing technique. You'll find it used when preparing aromatics for a dish. It's called “sweating veggies,” and it's simply sautéing veggies until they just begin to release moisture and soften. You start sweating veggies by placing evenly diced aromatic veggies (about ¼" high) in a heated, oiled pan to soften (and/or brown) before adding additional ingredients to build flavors in a dish. Follow the recipe, as some call for browning of the veggies to add caramelized flavor and umami to the dish, and some call for simple, softened, translucent vegetables. Try medium-high heat for browning, and medium- to medium-low heat sautéing to yield lightly colored, softened veggies.

## Frying

There are a few types of frying that can be used for preparing crusty, crunchy favorites from onion rings, to tempura, to fritters: pan frying aka shallow frying, and deep frying.

For safety's sake, always remove as much moisture as possible from foods before putting it into hot oil and do not put frozen foods into hot oil. For more tips, check out the safety resources for this module. It's best to follow a recipe for any particular frying steps and tips, but here are the differences between shallow frying and deep frying.

## ***Pan frying/shallow frying***

to cook foods in a generously oiled, high-walled, wide pan or pot over medium- to medium-high heat. Food bottoms are partially submerged or halfway submerged in oil and foods are turned only once, maybe twice, so the hot oil can brown and crisp up the food—it's best to leave foods relatively undisturbed as they cook. This technique is often used for recipes like fritters or battered foods and it's a great way to start using the frying technique for those that are intimidated.

### **Steps**

Slowly heat a large (12"–16"), high-walled, heavy pan or Dutch oven to “medium-” or “medium-high”—not “high” as this can scorch your oil—and add just enough high-smoke-point oil to submerge the food no more than halfway. This will likely be  $\frac{1}{8}$ "– $\frac{1}{4}$ " of oil. For safety, make sure the cookware rises at least 2" above the top of the oil once pan is filled and the food is in.

Heat oil to 375°F, so when food is placed in the pan and hits the oil, it sizzles. Don't let it get so hot that it smokes, if it does, you'll need to allow it to cool, then discard and start over. If the oil is appropriately hot, it will cook the foods quickly so they don't have to hang out in the oil for very long.

Now, place your foods into the oil to fry per the recipe time specified, which is likely between 5–10 minutes on one side and 3–5 on the other once flipped. Use a metal spatula or tongs to turn the food. Don't overcrowd the pan, if you have to, fry in batches.

Once golden brown, remove from the oil—things can burn quickly and some foods continue browning once removed from the oil so keep that in mind. Place on a paper-towel-lined plate or cookie sheet to drain and cool.

When finished frying, completely cool the oil before discarding. OR strain any bits of fried foods out of the oil, rebottle, store in a cool, dry, dark place and use again within 3 weeks.

## ***Deep frying***

Potatoes, tots, green beans, sweet potatoes, doughnuts—so many foods are tasty deep fried. You don't need us to tell you that. But you may need us to tell you how to do it properly. Most homes don't have a deep fryer, but you can make it work at home with a tall pot and a frying basket, with a deep, high-heat-ready sieve with feet, or by using a metal slotted spoon. Be sure to use a very high-smoke-point oil for frying and for starchy foods like potatoes, parboil them for 3–4 minutes first and dry them well before frying for the crispy exterior, soft-pillow-y interior texture that will be the only way you ever want to eat fried potatoes again.

### **Steps**

Slowly heat a large Dutch oven or deep pot to “medium-” or “medium-high”—not “high” as this can scorch your oil—and add just enough high-smoke-point oil to entirely submerge the food by 1"–2". For safety, make sure the cookware rises at least 4" above the top of the oil once pot is filled and the food is in.

Heat oil to 375°F, so when food is placed in the oil, it sizzles. Don't let it get so hot that it smokes, if it does, you'll need to allow it to cool, then discard and start over. You can take the handle of an unsealed, wooden spoon or chopstick and set it in the oil. If teeny bubbles form around the contact point, it's hot enough. If the oil is appropriately hot, it will cook the foods quickly so they don't have to hang out in the oil for very long, which can unfortunately result in overly greasy fried foods. Also note that once the food goes into the oil, the temperature will drop, so make sure it's hot enough.

Now, place your foods into the oil to fry per the recipe time specified, which is likely between 5–10 minutes on one side and 3–5 on the other once flipped. You can place the food directly into the pot (use a slotted spoon to avoid splatter) and flip and remove using tongs or a slotted spoon, or you can submerge the foods into the oil via a frying basket or deep sieve. Don't overcrowd the pot, fry in batches. It may take some practice, and the first few food items dropped in the oil may not go as planned, but stay with it, you'll find your rhythm.

Once golden brown, remove foods from oil—keep in mind that things can burn quickly and some foods continue browning once removed from the oil. Place on a paper-towel-lined plate or cookie sheet to drain and cool.

Completely cool the oil before discarding. OR strain any bits of fried foods out of the oil, rebottle, store in a cool, dry, dark place and use again within 3 weeks.

## Stir-frying

Similar to sautéing, but we're going to stir the food or shake the pan constantly as it cooks over very high heat with a little oil. Stir-fried foods are usually served over noodles, cooked grains or rice, so be sure to time things so these other items are cooked once the stir fry is ready. You can also add these cooked ingredients to the stir-fry action itself.

You don't need a wok to stir-fry foods, a large skillet works very well. If you have a wok, by all means use it, but we'll be demonstrating with a skillet since most folks have one of those.

Simply, stir-frying is a technique that cooks food quickly, yielding beautiful crunch and color, but make sure foods are cut uniformly, and bite-sized for even cooking times. This is a great opportunity to use *mise en place*, so all ingredients are prepared and nearby for effortless, quick cooking.

## Steps

Make sure your vegetables are dry to the touch before adding to the pan—use a paper towel or kitchen towel to blot dry if needed.

Heat a wok, a large open pan, or a skillet to “medium-high” or “high” if you know that temp won’t burn your oil. Wet fingers with water and drop a few beads into the pan, if it dances around and evaporates in under 2 seconds, the cookware is hot enough. Now, add a very high-smoke-point oil to the edges of pan and swirl to coat the entire pan.

Add your aromatic vegetables first—they should sizzle—stir for 10 seconds, and then add dense vegetables and stir for 1 minute until colors are bright. Add less-dense vegetables and stir fry for another minute until colors are bright.

Stir-fry usually involves a sauce of some kind, so if the recipe calls for it, add now by drizzling evenly over all ingredients (don’t pool it all in the middle as it can reduce temperature of your cookware, same goes for oil) or pour it around the edges of the pan and stir to incorporate. Continue stirring for 2–3 minutes until most of the liquid is cooked off and vegetables are bright and crisp, yet tender.

If using, add any grains or noodles and stir fry for another minute—if you eat eggs, this is the time to add a scrambled egg to your stir fry. If you want egg-y flavor without the eggs, try adding some kala namak salt (aka India black salt) for a subtle sulphur flavor reminiscent of eggs. Stir-fry all food in batches if necessary to avoid overcrowding the pan.

## Roasting

Now we leave the stovetop and venture into the oven to cook some good food. Roasting is a lot like sautéing, but there’s less stirring, and we’re doing the cooking in the oven in a baking dish where heat is coming from all sides. Pretty much any vegetable tastes great roasted and this is a terrific simple technique to try on beet, broccoli, and Brussels sprouts haters. Make sure you cut vegetables to similar sizes for even cooking times. Parboil dense foods if you’ll be roasting

alongside quick-cooking ones or roast in batches, longer-cook-time veg roast for 10–15 minutes first, then add softer veggies to finish the roasting time.

Technically, “roasting” is done at temperatures above 400°F, but we’ll call for “roasting” at temperatures below that when the starting structure and desired outcome of the food requires a longer time in the oven. Softer foods (like broccoli) that have a solid structure can benefit from a high-temp, short-timed roasting, while dense vegetables (like carrots or beets) whole or cut to larger size will benefit from a longer, slower roast at a lower temperature so they don’t burn.

## Steps

Preheat the oven to 325°F–475°F, according to the recipe suggestion. Toss bite-sized, cut vegetables (or whole, large-cut) in 1–2 tablespoons of oil or more until evenly coated and glossy—use your hands to really get in there and massage every piece. The oil helps bring out incredible flavor and crispy edges.

Scatter into a baking dish (preheat the dish itself for 15 minutes for extra browning power) and season the veggies with salt and pepper so every piece gets hit with the seasoning. Overcrowding rules apply here too—make sure the veggies have room to breathe, this will allow for caramelization.

Roast the vegetables according to recipe time, or until they’re fork tender and browned with crispy edges. Halfway through cook time (start around the 10- to 15-minute mark), you can give the dish a shake or a stir to encourage browning on all sides. You can always remove the pan from the oven to stir or flip, too, then return it.

## Broiling

This fast, dry-heat cooking technique exposes food to intense heat in an effort to brown and caramelize that food. It’s a little like grilling indoors, only you don’t get a flame-grilled char flavor and the heat comes from a rod above in an electric oven and in a gas oven, it comes from a flame above. Follow the broiling times specified in a recipe, or start with a 10-minute broil and check in on food as it cooks, adding time as needed.

Broiled foods can be marinated, seasoned with a rub or oil, and simple salt and pepper. You can also baste foods as they broil by brushing or spooning warm oil or marinade over broiling foods. If basting, be sure to use a warm basting liquid so it doesn't reduce the heat in the oven.

Note that parchment paper can burn when broiling foods, and glass bakeware can shatter, especially if cool liquids are added during broiling. Stoneware, a rimmed baking sheet, or a broiling pan work well. Just make sure you have a tray underneath your cookware to catch any liquids that may run off of foods.

Also, broilers differ, so the first few times you use it, keep a close eye on the foods as they cook.

## Steps

Season vegetables with salt and pepper, or any seasonings you like, and be sure to brush or coat in a high-smoke-point oil to thoroughly hydrate the food and the seasonings. Broiling is a good opportunity to cook larger-cut vegetables. Try ¼"-thick strips of entire sweet potatoes, cauliflowers steaks, and entire, or halved root veggies like parsnips.

Adjust the oven rack to the height specified by your recipe. The closer to the top of the oven, the closer to the heat source. In general, you want 4"–5" between the top of the food and the heat source, but for a gentle, even cook without too much charring, create more space. Middle rack works well.

Preheat the broiler for 5–7 minutes. Then, scatter your oiled and seasoned food onto the broiling pan making sure you don't overcrowd. Space equals drool-worthy browning.

Place your broiling pan on the top rack and close the oven door. After 5–10 minutes, check on your food. Baste if you like and when the food is browned to your liking, remove the pan and flip food with a fork or tongs to brown the other side. If exterior is cooking too quickly, move the rack down and away from the heat source once browned until its fork tender.

## Baking

A science unto itself, and worthy of another course entirely, baking is a cooking method that uses dry oven heat over a longer amount of time to usually cook a dough or batter, or recipes like granola. Baking creates crackers, cookies, pies, tarts, pastry, flatbreads, quick breads, and yeasted breads to name only a few results. As heat travels through a dough or batter, it cooks the inside and dries the outside. Biological or chemical leavening agents are often added to baked goods to create lift. Always follow a recipe to the letter when baking as exact measurements are crucial.

**For an entire course about gluten-free baking visit: [GlutenFreeBakingAcademy.com](https://GlutenFreeBakingAcademy.com).**

## Lesson Actions

Choose one of the dry-heat cooking techniques that's new to you—go outside of your comfort zone and add a new approach to your good food cooking toolbox. Use that new technique to cook a favorite food you've always loved in a new way. Serve with some of the rice or grains you've prepared from a previous lesson. Also, cook without a full recipe! Make a stir fry using this simple go-to sauce:

### “Easy Stir Fry Sauce”

It's delicious on everything and once you make it your pantry will be stocked for more! You can do this. Simply, whisk together the ingredients to make the sauce, mise en place 2 cups of your favorite vegetables and follow the steps we've just outlined for stir frying. If you use the optional arrowroot, just make a slurry with the veggie stock first, and then whisk into the other ingredients.

Serve with some of the rice or grains you've prepared from a previous lesson.

Adjust quantities to suit your taste and if you like, share your results with us in the classmates community.