Savor the Flavor: Using Kitchen Tools and Appliances

Heather Norman-Burgdolf and Janet Mullins, Dietetics and Human Nutrition, and Annhall Norris, Family and Consumer Sciences

When adding flavor to a meal, what is the first thing you think of? Is it herbs and spices? Or the cooking method, such as sautéing or braising? There are several kitchen appliances and food preparation tools that can also take the flavor of your meal to the next level. Are these tools and appliances organized in your kitchen in a way that makes them easy to use? This publication will focus on seven different tools and cooking techniques that add flavor to meals. These include woks for stir-frying, sous vide devices, vacuum sealers, air fryers, smokers, grills, and cast-iron pans. In addition, this publication will discuss organizing your kitchen space in a way that makes preparing meals easy and fun. This information will be helpful for anyone who prepares meals frequently, wants to be adventurous in the kitchen, or has seen a new way to prepare food and wants to learn more.

Simple Stir-Frying

Stir-frying is a common cooking method in Asian cuisine. If you search for stir-fry recipes, you will find endless possibilities and combinations that show the versatility of this style of cooking. Because of the flexibility in ingredients and the quick cook time, stir-fry dishes are an easy weeknight choice, which allows you to use pantry staples and add what you have on hand. It’s also a nutritious choice that is family-friendly and helps you meet the daily recommendations for food groups in one bowl—brightly colored vegetables, lean protein, and whole grains.

Typically, you make stir-fry dishes in a large, dome-shaped pan called a wok that allows for quick cooking. However, you can also prepare them in large, flat sauté pans that provide plenty of space for ingredients to come in contact with heat. You also will need a small amount of cooking oil that can handle higher heat, such as canola or peanut oil. Stir-frying is primarily different from sautéing in that it typically uses higher heat and has a shorter cooking time. This high-heat method allows for color to develop on the food which adds sweetness, a toasted flavor, and texture.
Keeping a few tips in mind, you will be able to put together a stir-fry dish without a recipe.

- Chop everything to similar sizes—usually in strips or diced. This allows everything to cook through in a short amount of time and is true for both vegetables and protein. Large cuts of vegetables and meat do not work well in stir-fry dishes.
- Common protein found in stir-fry dishes include diced chicken and pork, thin strips of beef, tofu, and shrimp.
- If you prefer a vegetarian version or want to stretch the meal to feed several people, bulk up your stir-fry with vegetables. You can accommodate the tastes and preferences of your family by adding your favorite vegetables. More traditional stir-fry dishes include onions, carrots, sweet peppers, broccoli, mushrooms, and sugar snap peas. If you are feeling adventurous, add spicy peppers, kohlrabi, bok choy, or asparagus. You can also use frozen vegetables.
- Add things in order of how long they take to cook—add harder, more dense vegetables, such as carrots, to the pan first and gradually add ingredients based on how long they take to cook.
- As the name suggests with "stir-fry," you want to constantly stir or move the food while in the hot pan to avoid burning.
- At the end of the process, add fresh herbs, spices, and sauces or glaze and heat thoroughly.
- Serve your stir-fry over brown rice or whole-grain noodles for a balanced meal.

Stir-frying is a nutritious choice. Quick cooking methods without water reduce the loss of water-soluble vitamins and nutrients found in vegetables. In addition, using a small amount of oil in cooking, like with stir-frying, helps improve the absorption of certain nutrients and fat-soluble vitamins in the body.

**Sous Vide Your Favorite Dish**

Sous vide is a popular cooking technique you can use to prepare a wide variety of meats and vegetables. Foods cook slowly and precisely in a warm-water bath, yielding tender and flavorful results. This technique involves sealing food in a plastic bag then cooking it under water to an exact temperature. The plastic bag could be either designed for vacuum sealing or a food-grade zip-top plastic bag. You can season the food in the bag with fresh herbs, spices, or marinades.

You can easily do this method at home, and you don’t need experience. You do need a sous vide device (immersion circulator) to prepare foods sous vide. The immersion circulator regulates the temperature and movement of the water. This allows the food to cook evenly at a low, consistent temperature in a set amount of time. The other required items are a deep pot to hold the water and plastic bags of your choice.

There are many benefits to sous vide cooking. Foods cooked using this technique are juicy and flavorful. The slow-cooking method in a sealed bag allows food to cook in its own juices (or marinades) and keep its moisture. The low temperature allows food to maintain its color and nutrients, and since no butter or oil is used, there is little fat. The food in the bag rises to the exact temperature of the water. Once the food reaches that temperature, it won’t go any higher. You should serve the food right after cooking for best flavor and quality. Food is cooked and ready to eat right out of the water bath. But most foods, especially meats, are better when seared—placed on a hot grill or skillet to create a brown exterior and crispness—after coming out of the water. If you are cooking ahead, put the food in a bowl with ice water, so it does not become soft. Do not allow food that has reached its temperature to sit in the water bath as this will have a negative effect on the texture of the food.

High-protein foods are best to cook using sous vide. Eggs are popular because of the control you have over the exact level of doneness. Lean or tough cuts of red meat work especially well as the meat tenderizes during the low, slow cooking time. Chicken and pork work well, too. Refer to the operator’s manual for suggested times and temperatures for certain meat and poultry items. You can also cook many vegetables sous vide. Season root vegetables, green vegetables, and eggplant with fresh herbs and garlic for great results.
Vacuum Sealing in Flavor

A vacuum sealer is a great piece of equipment to have when preserving food. It removes air during packaging to extend the storage time of refrigerated, frozen, or dried foods. This concept makes the machine ideal for prepping food and adding flavor, too. Whether you are prepping for dinner or repackaging food you’ve bought in bulk, a vacuum sealer is a good investment and can be helpful when cooking.

Vacuum sealing works well on any type of beef, chicken, pork, and fish. In addition to preventing freezer burn, vacuum sealing allows the meat to retain its color and texture. It can also be a very effective method for marinating meats. When you remove air from the bag, it speeds up the marinating process and adds flavor quickly, eliminating the need to marinate for several hours or overnight. Add dry rubs, fresh herbs, oils, vinegar, and spices before sealing to enhance flavor in a short amount of time.

You can vacuum seal fresh fruits and most vegetables provided you appropriately prep them before sealing. For more information, see the publications FCS 3-335: Freezing Vegetables and FCS 3-336: Freezing Fresh Fruits. For food-safety reasons, do not vacuum seal garlic, onions, and mushrooms.

Vacuum sealers offer an advantage when cooking sous vide. The thickness of the plastic used in vacuum sealing holds up well over the long cooking time and you get a much better result than using food-grade zip-top plastic bags. In addition, the vacuum sealed bag does not float because you have removed the air, and this allows for even cooking under the water.

When buying a vacuum sealer, be sure to note all the options. Some models have a marinade mode or a wet-sealing mode. This is helpful if you plan to store foods for immediate cooking rather than thaw and then prepare to cook. Some models also will have a pulse mode that allows you to manually stop and start the vacuum. This gives you complete control of the air-removal process, which prevents the crushing of delicate foods such as berries.

Air Fry Anything

An air fryer is a countertop appliance that cooks food by circulating hot air. It is basically a small, powerful convection oven that uses hot air to cook food instead of hot oil. Air fryers provide a healthy alternative to conventional frying because the cooking process uses little or no oil. Food comes out crispy on the outside while moist and tender on the inside.

Air fryers have an electric cooking element, much like a stovetop burner, and a powerful fan that rapidly moves air around the food. Food cooks quickly and evenly because of the concentrated heat source and constant movement of air. You can cook meat and vegetables, both fresh and frozen, in an air fryer. As a rule, chicken, steaks, pork chops and fish do not need any added oil. However, if the meat is lean, you should brush it with a little oil before seasoning and cooking. Vegetables are great in the air fryer. Toss them lightly in oil or cooking spray before cooking. Use an oil with a high smoke point such as vegetable, peanut, or canola when cooking in an air fryer. Use dry seasonings and breaded coatings, too. Less moisture means a crispier product. If you want to baste with marinades, sauces, or honey, wait until the last couple of minutes of cooking for the best result. To prevent sticking, consider spraying the air fryer basket with cooking spray if the food is not coated or lightly tossed in oil.

Smoking Foods

Smoky flavors are popular and have even found their way into cold foods such as ice cream. Smoking meat was one of the first food preparation methods and is now used to add an unexpected flavor to all types of food, including fruits and vegetables. You can use a large outdoor smoker, grill, or small oven appliance to add smoked flavors. Large smokers can be quite expensive and are big, heavy appliances that require outdoor storage. The essential elements of the smoking process are wood chips soaked in a liquid and heated until smoking. The food is placed in the enclosed smoking space where it cooks and absorbs flavor. The heat source can be charcoal, gas, or electric.

There are ways to achieve a smoky flavor that do not involve a lengthy smoking process. A liquid form of smoke flavoring has been available since the late 19th century. This “short cut” ingredient of condensed smoke is sometimes scorned and often used too liberally. There are “smoking guns” and other small appliances to infuse flavorful smoke into small batches of ingredients. Smoker bags—foil envelopes with wood chips—are available in hickory, mesquite, and even bourbon-barrel varieties. The type of wood chips and liquid (such as water or cider) help build the flavor profile.

Adding smoky flavors is a calorie-free but labor-intensive effort so you may want to smoke in large quantities and then freeze your smoky treasure to enjoy later or use as an ingredient. Try smoked beets on a salad or smoky tomato juice in a soup to create a complex flavor combination. Make it a family affair with an outdoor gathering that feeds a crowd with a variety of foods.
The Versatility of Grilling

Grilling can be a fun and quick way to prepare an entire meal for the family. It is often a favorite pastime for many, especially during the summer months. Grilling is a method that uses dry heat from below to cook foods. Grilling creates a unique smoky or slightly charred flavor as the combination of herbs and spices, marinades, oils, and any natural juices or sugars cook directly onto the food. It is best to grill foods on medium-high heat (between 300 degrees and 400 degrees F).

You can cook plenty of foods on the grill, such as chicken, fish, beef, pork, vegetables, and fruit. You can create combinations of these foods to make countless options. For instance, if you love grilling but want to choose a highly nutritious option, create a burger using leaner protein such as ground chicken, tuna, black beans, or adding minced and pureed vegetables to the mix. Grilled vegetables also offer delicious flavors and variety from some typical choices that may be common around the dinner table. For example, mixing chopped onions, carrots, zucchini, asparagus, and potatoes or sweet potatoes creates a powerful combination of delicious flavors that blend great with one another. Simply toss the chopped vegetables in a small amount of oil (just enough to coat), add any desired herbs and spices, create a pouch out of aluminum foil to wrap and seal the vegetables, and heat on the grill until ready (about 20 to 30 minutes). You should also flip the pouch regularly to cook vegetables evenly (about every 5 minutes).

While cooking meat and vegetables on a grill may be familiar to many, cooking many types of fruit on a grill is also easy and delicious! Some good choices for grilling fruit are pineapple, pears, apples, and peaches. The natural sugars present in fruit come out during the heating process and the grill caramelizes them. This creates a robust blend of sweet and smoky flavors that are complementary. Adding a small dollop of fresh whipped cream and some fresh berries to any of these grilled fruits can provide a light and tasty dessert.

Cast-iron Cooking

Cast-iron skillets and Dutch ovens are vessels to add flavor in your kitchen and outdoors. Whether you inherited your cast iron or bought it new, knowing how to care for your pieces is a part of making sure they last for years. You can also look for cast iron in second-hand stores. There are many shapes and sizes to choose from so you’ll need to be selective about your cast-iron wares to be sure you can easily store, access, and care for them.

Cast-iron cookware is heavy and provides an evenly distributed heat transfer when preheated. For example, many cooks place a skillet in the oven to preheat and melt butter before pouring cornbread batter into the skillet. This results in a crispy brown edge without drying out the bread. You can use Dutch ovens to sauté or brown ingredients before adding liquid and cooking in an oven, on a grill, or over a campfire.

Cast-iron skillets are one of the most durable, long-lasting pieces of cookware you can own, but they are tricky to clean and maintain, particularly if you have never cooked with one before. You must season cast-iron skillets before you use them to help the pan develop a nonstick surface. Most cast-iron skillets you buy today come preseasoned. However, if you are not sure if the pan has been seasoned, you can do so yourself in an oven using oils such as canola, sunflower, or safflower.
You should clean a cast-iron skillet immediately after use to maintain the seasoning. Acidic foods such as tomatoes can remove the seasoning if they remain in the skillet for too long, and letting grease stand overnight can result in unpleasant flavors. To clean a cast-iron skillet, wait for it to cool down and then run hot water over it in the sink. Do not let the pan soak in water. If left in water for too long, cast iron will rust. Some experts say a mild soap will not harm the seasoning, however others say any detergent is harmful. All agree you should not run your cast-iron skillet through the dishwasher. To remove food that is stuck to the skillet, you can use a stiff dish brush, sponge, or chainmail scrubber. Do not use scouring pads or steel wool on cast-iron skillets as these will remove the seasoning. Dry the skillet immediately with a clean rag or paper towel to prevent rust. Do not let your cast-iron skillet air dry. Lightly oil the skillet using a small amount of oil on a paper towel once it is dry. It should be shiny, but not sticky.

**Make Your Flavor-building Tools Easy to Use**

A smart layout in your kitchen and cooking areas can help you grab tools to add your favorite flavors quickly and easily. Tools such as spice racks or rotating shelves can help you get organized to cook and know what ingredients you have available. Arrange dried herbs and spices that you frequently use next to each other on the shelf and have flavored vinegars and cooking oils in a place that is easy to grab at the stove. All of these ingredients should be kept away from direct heat and light. Pans you use daily or several times a week, such as that favorite cast-iron pan, should be at your fingertips. Store tools and appliances that help add flavor near where you will use them. Try thinking about your current setup and what might be taking up valuable space that you don’t use often. Working in an organized, well-equipped kitchen and indoor or outdoor eating area will help you serve flavorful meals your family and friends will enjoy.

Consider cost and space when thinking about buying or keeping small kitchen appliances and tools. To save money, consider borrowing appliances or tools you would like to use but may not use often. Buying second-hand or refurbished items is another option. Try to keep only those items that you use often and have them handy for a streamlined cooking experience. You want to be able to clean, maintain, and easily store your favorite tools with minimal effort.

Understanding how to use these items, building skills in the kitchen, and keeping kitchen equipment organized will give you more options for creating flavorful meals. Use these tools and techniques for your favorite family recipes or to try something new.

**References**


