Although today's chef is trying to limit labor costs at every turn, there are chefs that believe some things are worth the time. Most agree that creating a flavorful Thai curry paste with a mortar and pestle is the way to get the best results.

One such chef is David Thompson of Nahm restaurant, the only Thai restaurant in London that has been awarded Michelin stars. Hand-pounded paste has a longer shelf life and thickens the sauce more effectively. He still swears by their results, so much so that stations on the line at his restaurant can have up to three mortars turning out dressings and pastes to order throughout dinner service. These tools of the kitchen are prevalent in many cuisines around the world. Spending a week with Chef Thompson in Bangkok taught us both a few things about maximizing a mortar and pestle's functionality in manipulating texture and maximizing flavor. In this article, we will share our experiences with you and focus on the fragrant pastes of Thailand.

It seems simple enough ... add your ingredients and pound away, using every ounce of energy in your soul to pulverize the aromatics into a flavorful paste. Yes ... and no. The use of this ancient kitchen tool is not as simple as it may seem. Which mortar and pestle to purchase, what ingredients you select, when they are added to the mortar and the technique with your pestle all contribute to the success, transforming a multitude of ingredients into a delicious paste.

## Which Mortar and Pestle to Choose

The first step in the process is selecting your mortar and pestle, and they are available in just as many sizes and different materials as dishes they churn out flavor-packed pastes for. Select a mortar made of a hard material such as granite, since you will be exerting a relatively large amount of force on it; however, the oldest mortars are made of clay with a sugar palm wood pestle – these are now used primarily for Som Tom, the fiery green papaya salad from Northeast Thailand. Beware, some Latin American variations of this tool are composed of lava rock; and although the coarseness of this stone is ideal for grinding, the brittle tendency of the lava rock can result in gritty pastes and chipped teeth. The cavity of the mortar should be deep and wide enough to fit all of the ingredients required in the bottom third. They average from five to seven inches in diameter and weigh a whopping 12 to 16 pounds. Too small and the ingredients fly all over the place, and a little larger is okay. Similar to a wok, the design allows for small amounts of paste top be created in a larger mortar.

A stone mortar and pestle is similar to a well-seasoned cast iron pan. Water is fine yet caustic soaps are not. If you really need to take some aromatic characteristic out of it, pound some raw rice until fine, the rice will absorb the oils and most flavorings that may be stuck in the nooks and crannies. To rid the mortar of any rice fragments, rinse the mortar well after the rice is pounded.

## Getting Ready to Pound

Before adding anything to the mortar, there is some basic prep work that needs to be done. First, chop the larger and tougher ingredients to aid in their pulverization. Items like galangal, ginger, shallots and garlic are usually peeled first. Rhizomes like galangal are sliced against the grain in 1/8- to ¼-inch thick slices to shortened fibers; ¼-inch thick slices are fine. Garlic and ginger should be chopped or sliced – this knife work will save a lot of pounding and saves considerable time considering it will take only seconds to cut these ingredients as desired with a knife.

Remove fresh chilies’ tough stems but do not pull off the stem. Instead, cut the stem...
just above the crown where it meets the fruit. This will enhance the aromatics of your paste by releasing the full fragrance of the chili. Spices are usually toasted individually and cooled prior to adding to mortar. Many curry paste recipes call for ingredients to be toasted or roasted. This will add a smoky flavor to the paste and must be done before the ingredient is added to the paste.

When adding ingredients, start with the end result in mind – that is, a coarse or fine paste depending on the dish. Start by adding the ingredients hardest to break down into a paste. Note that this does not always mean the hardest ingredients first. While a black peppercorn is much harder than a dried chili, it is much easier to break down into a paste; thus the dried chilies should be added first. Combine these tougher ingredients with any salt you intend to add as it will act as an abrasive and aid in the pulverization, saving you time and energy.

Get your hands involved! Are you left-handed or right-handed? Place the pestle in your dominant hand. Next, take your other hand and flatten with four fingers side-by-side and thumb extended out, place over top of the mortar, leaving a gap to pound through. This will partially cover the opening, preventing so many things from flying out. This is especially necessary at the beginning; once you get the paste going, you only need to do this if you are concerned with getting splattered – yet keep it in mind that when a speck of a chili-packed paste lands in your eye, will you wish you would have used both hands.

When using dehydrated ingredients such as dried and refreshed chilies, be sure to squeeze out as much water as possible before adding them to the mortar. Excess amounts of water will make for messy pounding and result in a less shelf-stable curry paste; higher water activity levels equal accelerated bacterial growth.

The Rhythmic Sounds of the Kitchen

Now it is time to start pounding! There are a few subtle nuances that will enhance your ability to safely and effectively use the mortar and pestle. I was confused when Chef Jane Alty, the chef testing recipes with Thompson, yelled out across the kitchen “Wow Robert, you could make a good wife.” I quickly realized she was referring to my consistent rhythm I was generating with my pestle. I recalled that traditionally in Southeast Asia, the rhythm created when making a paste is used as a judgment to a bride’s ability in the kitchen. I was admittedly insulted and flattered simultaneously. Great rhythm … I smiled … but a potential wife … I shuddered.

First of all, don’t be afraid to use some elbow grease! Make sure the base of the mortar is buffered by a damp cloth to protect the surface below and to ensure a secure base. The mortar and pestle should be placed on a surface that is well-supported. These tools can be heavy, and was mentioned before, a good deal of force will be exerted using this method. The stainless steel tables of professional kitchens have limited support structure underneath, so position the mortar on a corner of the table for a solid backing and a quieter experience. Be sure to relax the wrist, and when striking, aim for the bottom sides rather than the middle. This combination of a relaxed wrist and off-center striking will result in the pestle striking the mortar and then sliding down the side and through the center. This motion drags the ingredients against the inside of the mortar, maximizing the abrasive effects of each action and resulting in splitting the ingredients into fibers, which will aid in thickening your final product. This is especially important when pounding dried fish, for it will result in a light flaky final product as opposed to a powdered effect.

Begin with the drier and tough ingredients first. Dried spices and chilies go in first and get pulverized into a semi-fine paste or powder. Throughout the entire process, use a spoon to scrape down the sides of both the mortar and pestle occasionally. Next, move onto lemon grass, galangal and other similar textured items. Continue to add ingredients one at a time waiting until each ingredient is fully incorporated and at the desired consistency before adding the next item.

Take Time to Smell the Aroma

As ingredients are added, be sure to smell the paste often to see how the flavor is developing. All ingredients vary in their freshness and potency; therefore, recipes
must be adjusted according to the ingredients being used at that time. An accurate understanding of the desired aromatic profile of the curry paste and periodic aroma assessments will ensure that proper recipe adjustments are made. This gets easier with time and repetition.

If adjustments are needed, be sure to concentrate any new ingredients in the middle of the mortar and pulverize them exclusively until they match the consistency of the rest of the paste. It is essential that all new ingredients are pulverized before being incorporated into the paste or it will never reach the correct consistency. If you are uncomfortable using this method, additional ingredients can be ground separately in a spice mill and then added to the mortar.

We warned you that it wasn’t going to be easy! This simple yet labor-intensive, traditional method will result in a flavorful and aromatic low-moisture curry paste. This dryness can only be achieved using this traditional method because no water is needed, as it would be with a blender of food processor, and will provide you with a concentrated paste that has a longer shelf life. Still not convinced it is worth it? Try it both ways and judge the results. Prepare a paste in a mortar and another in a blender and check out the results. If nothing else, using a mortar and pestle will teach you a lesson in layering flavors.

Tips and Shortcuts

• Always rinse chilies and drain well before pounding, limiting the amount of water in the paste. Remove tough stems; if less heat is desired, remove seeds and veins. To get maximum color extraction, soak the chilies for 30 minutes in room temperature water. Then squeeze dry as possible before adding to the mortar.

• When using Holy Basil in the final dish, separate the buds from the leaves and pound the buds into the curry pastes to further enhance their herbaceous aromatic qualities.

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