

ASIAN PICKLES

Japan



KAREN SOLOMON

ASIAN PICKLES

Japan

Recipes for Japanese
Sweet, Sour, Salty,
Cured, and Fermented
Tsukemono

KAREN SOLOMON



TEN SPEED PRESS
Berkeley



Copyright © 2012 by Karen Solomon
Photographs copyright © 2012 by Jennifer Martiné
All rights reserved.

Published in the United States by Ten Speed Press, an imprint of the Crown Publishing Group, a division of Random House, Inc., New York.

www.crownpublishing.com

www.tenspeed.com

Ten Speed Press and the Ten Speed Press colophon are registered trademarks of Random House, Inc.

eISBN: 978-1-60774-478-8

Enhanced edition eISBN 978-1-60774-518-1

Food styling by Karen Shinto
Prop styling by Christine Wolheim

v3.1

Other Cookbooks by Karen Solomon

Jam It, Pickle It, Cure It: And Other Cooking Projects
(available in hardcover)

Can It, Bottle It, Smoke It: And Other Kitchen Projects
(available in hardcover and wherever eBooks are sold)

FORTHCOMING EBOOKS IN THIS SERIES

Asian Pickles: Korea (March, 2013)

Asian Pickles: China (July, 2013)

Asian Pickles: India (November, 2013)

FORTHCOMING PRINT BOOK IN THIS SERIES

Asian Pickles: Japan, Korea, China, India, and Beyond (March, 2014)

**VISIT WWW.KSOLOMON.COM FOR MORE
INFORMATION**

Contents

INTRODUCTION

When and How to Serve Tsukemono

Basics of Japanese Pickling

Key Ingredients

—

TRADITIONAL TSUKEMONO

Miso Pickles (Misozuke)

Koji Rice Pickles (Kojizuke)

Rice Bran Pickles (Nukazuke)

Pickled Plums and Pickled Plum “Vinegar”
(Umeboshi and Umezu)

Pickled Ginger (Gari)

Red Pickled Ginger (Beni Shoga)

“Thousand Slices” Turnip (Senmaizuke)
Preserved Seaweed (Kombu no Tsukudani)
Pickled Mustard Greens (Takanazuke)

—

INSPIRED PICKLES

Mixed Ginger and Shiso Pickles
“Sitting Fee” Cabbage Pickles
Pickled Shiso Leaves and Shiso Vinegar
Cucumber and Arame Pickles
Pickled Asian Pear (Nashi) with Lemon
“Wasabi” Pickled Carrots
Puckery Eggplant in Mustard Pickles

—

Measurement Conversion Charts

About the Author

Introduction

Japanese pickles rock. Many of the flavors are quite familiar to those of us who regularly rally around sushi, ramen, and donburi—soy sauce, ginger, the sweet quality of mirin cooking wine—and these ingredients are regularly used in making many Japanese pickles. When I lived in Japan in the 1990s, I bought and gobbled pickles voraciously, and when a meal came to my table with that special little dish of colorful cut-up morsels, I was a happy woman.

So if you have grown bored of the classic bread and butters and dilly green beans, I am pleased to pull back the curtain on a plethora of new pickling possibilities. There are hundreds, if not thousands, of varieties of tsukemono (the Japanese word for pickled foods), many of which vary from region to region, or from home to home.

In no way is this a definitive guide—think of it more as a mix tape of a selection of my favorites: some my own kitchen creations, some classic, and all delicious and not overly labor-intensive. And unlike most tsukemono you'll see on the grocery store shelf, these are all completely devoid of preservatives, artificial colors and flavorings, and other gunky stuff.

These recipes cover a lot of terrain. The first group of recipes are entirely traditional; the second batch are my pickled twists inspired by Japanese flavors and ingredients. Many can be crafted from ingredients found in any large grocery store; just a

few will require a trip to a Japanese market. Some take weeks or months before you can taste your finished pickles; others are chopstick-ready in minutes. So if you're unable to hop the next jetliner or tramp steamer to Japan, you have many routes to transport yourself to the land of Japanese pickles.

Some of the flavors that are going to hit your tongue here are familiar—like the sweet, sharp, cleansing taste of gari, or [pickled ginger](#). But a lot also hail from what may be uncharted territory: the earthen, musky, meaty flavor of [rice bran pickles](#), or the sweet and pleasantly swampy vegetables that emerge from an [amazake](#) cure. I hope that you dig the experience of exploring new and possibly challenging techniques and flavors as much as I do.

When and How to Serve Tsukemono

I'm of the philosophy that pickles pair best with my mouth almost anytime, usually while I'm standing in front of the open refrigerator. But if you must be a stickler, know that Japanese pickles are traditionally served on any number of occasions, including as part of breakfast or any light meal, with rice and soup; at the end of a meal, as they are believed to aid in digestion; or as happy hour snacks with sake, beer, or whiskey. Some dishes, like curries or fried pork, always have a pickled component served on the side of the plate (see [Red Pickled Ginger](#)). And I have heard of many people who jumpstart the day with a tart and puckery [umeboshi](#) (pickled plum)—take that, coffee! In short, even traditionalists pretty much come around to the same conclusion as I do: there is never a bad moment to become one with a pickle.

On a well-laid Japanese table, pickles are presented quite artfully, with a lot of thought given to offering a variety of flavors, textures, and colors (which would explain why so many

store-bought Japanese pickles come off the shelf in Kool-Aid shades of purple, pink, and yellow). Different styles of pickles are often combined; for example, pickles flavored variously with soy sauce, vinegar, and rice bran or miso will share a plate. It is common to see three or more varieties of pickles chopped into tiny bite-sized pieces and arranged side by side in a single small dish. This, my friend, is the pickle as art.

Basics of Japanese Pickling

While some picklers geek out on *what* gets pickled (insert your “We can pickle that!” *Portlandia* riff here), I find I’m more interested in *how*—in working with new pickling techniques and beds (see [Pickling Beds](#), below). If you share my brand of geekitude, then nothing can compare with Japanese pickles. Just a few pickling principles rule the tsukemono school:

1. **Pickling Beds.** Like the organic farmer who says her main crop is the soil and vegetables are an added bonus, I profess the importance of the *pickling bed*—a medium that is reused repeatedly (even indefinitely) and that is the foundation of a number of Japanese pickles. Vegetables or other ingredients cure in the medium for minutes, hours, days, months, or years (!), depending on the style of pickle and the flavor you’re going for. When the pickles are removed, the bed is kept for reuse. Crafting the bed and keeping it pickle-ready is a job unto itself. Bedbound pickles in this book include [rice bran pickles](#), [koji rice pickles](#), and [miso pickles](#).

2. **Pressure.** Another hallmark of tsukemono craft is the use of pressure. Ingredients to be pickled are salted, put in a container, and covered with a weighted drop lid that does not touch the edges of the container. The vegetables are slowly and gently compressed as they release their liquid and the lid lowers

along with them, giving them a crunchy texture. (The resulting liquid is usually discarded, but some like to use it as a flavored, salty component in marinades.)

You can buy wooden drop lids (as well as pickling vessels) made especially for tsukemono, but this is not necessary. Any large bowl or bucket, or the insert of your slow cooker, or a clean large glass jar (even a fish bowl with a wide mouth) will work. The drop lid just needs to fit inside the container—you could try a plate, the lid to a food storage container, a saucer for a flowerpot (clean and wrapped in plastic wrap), or a pot lid. (Note that one can purchase a spring-loaded pickling press, but they tend to exude a lot of pressure—I have a flat batch of umeboshi to prove this point.) Weights placed atop a drop lid allow you, the pickle maker, a lot of control over the rate of the pickle's compression. Again, special weights can be purchased, but why bother? Cans or bottles from your pantry, or even rocks, can be used: weigh them on a kitchen scale to find the object or combination of objects that will give you the weight designated in the recipe.

WHY YOU SHOULD RUN OUT RIGHT NOW AND BUY A KITCHEN SCALE

Don't have a kitchen scale? Go buy one. These days, a good one that's small enough to fit in a kitchen drawer is about \$30. You'll find you will use it for much more than just weighing out vegetables and pressure weights for tsukemono: measuring ingredients for baking, making jam, estimating postage, and weighing your pet hamster. (Come on. You know you want to.)

3. **Squeezing.** This is another means of transformation for vegetables in Japanese pickling. The ingredients are first tossed with salt or some kind of salty medium (like soy sauce) to help draw out their water, left to rest for a bit, and then squeezed vigorously by hand. Squeezing is often used in conjunction with the pressure from a drop lid. In the recipes in this book that call for squeezing (“[Sitting Fee](#)” [Cabbage Pickles](#) or [Pickled Mustard Greens](#), for example), it is important to really make your vegetables rain. Do not gently massage. Do not be a wimp. SQUEEZE without mercy. Added bonus: salty water makes your hands really soft. (Antibonus: it also irritates tiny cuts and hangnails. Ouch!)

4. **Marinade/Vinegar.** While the above techniques tend to be paramount to tsukemono and other Asian pickles, some also take on their flavor the way your grandma’s did: via vinegar brine or some kind of marinade infused with other flavors. Some pickles require time to develop flavors in the bath, whereas others are ready to eat after a quick toss in a vibrant sauce.

A WORD ON CANNING

Don’t do it. For the most part, tsukemono aren’t acidic enough to withstand shelf storage via hot water bath canning, and pressure canning would destroy their crisp texture. The only recipe in this chapter that could possibly be canned (though it’s really not necessary) is [Pickled Asian Pear \(Nashi\) with Lemon](#).

Key Ingredients

Arame (*Eisenia bicyclis*) Arame is a kind of kelp or sea vegetable used in Japanese cuisine; it has a mild flavor and an unchallenging texture. It's usually sold dried (it looks like little dark brown bits of dry grass) and is soaked before using to reconstitute it. Hijiki, a similar sea vegetable, can usually be substituted for arame (though its texture is a bit more toothsome).

Asian Pears (*Pyrus pyrifolia*) Asian pears (called *nashi* in Japan) grow throughout Japan, Korea, Taiwan, and China; they usually ripen in the fall and winter. Most often, the skin is tough and needs to be peeled off, but I have eaten varieties grown in California with skin tender enough for eating. This fruit is super juicy, crunchy, and sweet out of hand. It also makes a [fine pickle](#). (Never seen one? It's pictured [here](#).)

Koji Miso, mirin, sake, rice vinegar, soy sauce, shochu (a vodka-like distilled liquor), [amazake](#), and Chinese fermented black beans all have a lot in common. These workhorses of Asian cuisine all start with the same mold spores, *Aspergillus oryzae*, better known as koji. Koji is the name of both the mold (seed koji) and the ingredient (koji rice) used for cooking and pickling, which is rice coated with the active mold spores. Look for it in Asian markets, online, or in health food stores.

Kombu This thick-cut sea vegetable is frequently used in Japanese cooking, particularly to flavor bonito stock and soups. Some add it to pots of beans to help the beans become tender faster. Rarely is it in the center spotlight as it is in the recipe for [preserved seaweed](#). It is sold in dried sheets, and can be found in Japanese markets and health food stores.

Mirin A very common sauce and flavoring agent, mirin is a sweet fermented rice wine. Some varieties are designed for

drinking, but the cooking variety of mirin, sold amid condiments and not with the booze, has very little alcohol—less than 1 percent. Cooking mirin is most often used in conjunction with soy sauce to add sweetness to dishes; it's also commonly used to season fish. Aji-mirin is mirin with a little added salt; it's okay to use them interchangeably in a recipe, but be sure to adjust your salt accordingly. If you're out of mirin, you can substitute sake (or even dry sherry) with sugar added at a ratio of roughly 3:1 by volume.

Miso Many Japanese dishes, including soups, stews, and marinades, use miso. It's a thick, fermented paste made from soybeans (and/or barley), koji rice, and salt. Depending on the variety of miso (red, yellow, or white), the paste is fermented for weeks, months, or years. It lends a tangy, salty flavor to food, making it a perfect medium for pickles. When shopping for miso, buy it from the refrigerated section. Look for organic, and also for a short ingredient list containing only what's mentioned above.

Rice Bran White rice is a staple food of Japanese cooking; to make it white, the outer husk of the rice grains—the bran—is removed during processing. This byproduct has a few culinary uses, but its most common application (in Japan, anyway, where it's called *nuka*) is pickling (see [Rice Bran Pickles](#)). Nuka is usually sold dried in airtight bags on the shelf. However, sometimes fresh rice bran can be found in the refrigerated section of Japanese markets or health food stores. When working with the fresh stuff, you will need less water than you will with the dried. Also, while fresh nuka often yields better flavor, I've found it spoils more easily.

Shiso I am bonkers for fresh shiso, so much so that the measly quantities I found at the store were no longer cutting it, and I had to start growing my own. Imagine a cross between basil,

anise, thyme, and stone fruit all at once. Yeah, it's that good. The green variety of this pretty little culinary herb often shows up on sushi plates, but the red variety is equally delicious and is a frequent additive to umeboshi, to which it lends its telltale red color. Put it in salads, pickle it, cure it in salt, douse it in vinegar (see [Pickled Shiso Leaves and Shiso Vinegar](#))—it's all good. Shiso leaf has a number of common names, including beefsteak plant, ooba, and perilla; its scientific moniker is *Perilla frutescens*. A note on salted shiso leaves: they are usually found vacuum-sealed on the shelf in Japanese grocery stores.

Ume (*Prunus mume*) Ume is a fruit known as Japanese plum, but it's actually more closely related to apricots. The trees grow widely in Japan and produce a beautiful flower. Ume can be tough to find in the States, but they are available in Japanese markets in June. In addition to being used for umeboshi, they are popularly transformed into umeshu, a sweet, light liquor. The plum can't be eaten raw, but when cured into pickles or booze it has a pleasant, fruity bite.

Umezu The salty brine that forms when salt pulls out the liquid from ume during the making of umeboshi is called umezu, and it's a delicious and salty seasoning that's a great addition to some tsukemono and to other dishes. Umezu can be white or red; both have the plum flavor, while the red variety has the added color of [red shiso leaf](#). Umezu can be homemade, as a byproduct of making umeboshi, or purchased.

Umeboshi When ume are layered in salt and left to ferment for several weeks, they become umeboshi; given their unique puckery and salty flavor, many people call them "salt plums" or "pickled plums." Umeboshi are often eaten with white rice (the plum is supposed to look like the red sun on the white Japanese flag), and they are said to be very good for digestion and for relieving headaches.

**TRADITIONAL
TSUKEMONO**

Miso Pickles (Misozuke)

Miso-zuke are a very old skool Japanese standard with a crisp texture and a salty, sweet, and pleasingly cozy flavor. This is a go-anywhere pickle, and it is at home with rice or grilled meats. It's also a great foray into the world of [pickling beds](#), since the pickling bed (the miso-doko) comes together in under a minute, and the immersion time can be quick. For most vegetables I prefer about 30 minutes, but I've also used firm tofu and left it in for a month, with delicious results that were more like spreadable aged cheese than tofu. I call for red miso because it's my favorite, but feel free to try a mellower white or yellow miso instead. **Makes about 1 cup of pickling bed, enough for 10 to 20 batches of pickles**

TIME: 40 MINUTES TO 1 DAY

$\frac{2}{3}$ cup red miso

1 clove garlic, minced

2 tablespoons mirin

2 tablespoons sake or dry sherry

1 teaspoon kosher salt (optional)

$\frac{1}{4}$ - to $\frac{1}{3}$ -inch thick sliced (and peeled if necessary) firm vegetables such as carrots, broccoli, or turnips, or $\frac{1}{4}$ - to $\frac{1}{3}$ -inch thick sliced watery vegetables such as cucumber or daikon

Combine the miso, garlic, mirin, and sake in a small mixing bowl to form a thick paste. Watery vegetables, like cucumbers and daikon, should first be lightly tossed with the salt and left to drain their

excess moisture for an hour. Rinse and pat completely dry before continuing.

Submerge the vegetables in the paste; don't use more vegetables than can be covered in a thick layer of the paste. Let sit at room temperature for 30 minutes to 1 day. Wipe off or rinse off miso before eating.

The miso-doko (that is, the pickling bed) will last several days on the countertop (this is handy if you're pickling frequently). To add to its longevity, refrigerate the miso-doko between uses. Depending on the water content of the vegetables you're curing, one miso bed can be reused upward of ten times. If you're still enjoying the flavor, continue to reuse it. If it gets too watery to adhere well to the vegetables, drain off the excess liquid. Old pickling beds will eventually lose their salty and sweet flavor, but they can still be used as marinades or soup bases.

Note

For easier cleanup that will help preserve your miso pickling bed, spread half of the miso mixture in a small square container and cover with a layer of thin cotton cloth (like muslin or a square cut out of an old kitchen towel; cheesecloth is too porous unless triple-layered). Spread the cut vegetables in a single layer, and then place another layer of cloth with the remaining miso mixture spread on top. Once the vegetables are cured to your liking, simply lift off the top layer of fabric and remove the vegetables—no rinsing required. Store the fabric with the pickling bed in the refrigerator between uses.



Koji Rice Pickles

Koji Rice Pickles (Kojizuke)

Koji rice is a wonderful thing, and Japanese food would not be the same without it. Sake, miso, soy sauce—they all owe their existence to the hardest working fungus in the food business, *Aspergillus oryzae*. Know what else koji can make? Did you say “pickles”? “Ping-pong!” as folks would say in Japan. You’ve guessed correctly! This pickle is another one that uses a [pickling bed](#), which lurks in your fridge, fermenting engines revved and ready to make quick pickles when you are. In this case, the bed—which is called amazake—is spooned over the vegetable you’d like to cure. It is also a beverage and an excellent marinade for fish. **Makes about 6 cups of fermented rice bed; enough for many batches of pickles**

TIME: ABOUT 2 WEEKS

5 cups water

2 cups short-grained Japanese rice

1¼ cups koji rice

¾ cup kosher salt

Bring the water to a boil in a well-insulated pot with a tight lid (bust out the cast iron if you have it). While you’re waiting, rinse the short-grained rice well in a fine-mesh sieve under running water. Add the cleaned rice to the boiling water and stir. Cover, turn the heat to low, and let cook, stirring often, until the rice is quite soft and mushy and all of the liquid is absorbed, about 25 to 30 minutes. Note that this rice will be much more porridgy than regular cooked rice.

Take the lid off of the pot and remove the pot from the heat. Stirring frequently, and using a kitchen thermometer for accuracy, let the rice cool to 140°F (a small fan or blow dryer on its cool setting can help speed the process), then add the koji rice. Stir well to combine. Cover and keep it toasty warm for 24 hours; I wrap mine in a blanket and keep it over a heating pad on low.

After 24 hours, inspect your amazake. It might not smell so nice, and it will look like thick gruel. Stir in the salt, and transfer the mixture to a very clean pickling crock, glass jar(s), or food-safe plastic container(s) that can hold about 6 cups (3 pints). Cover it loosely with a lid not screwed into place to let air in but keep out insects and debris. Allow the amazake to ferment at room temperature for about 2 to 3 weeks. When ready, it will have a consistency similar to cottage cheese and its smell will have become sweet and quite pleasant. Once it has reached the flavor and sweetness you like, store it in the refrigerator; and it will last for several months.

To make amazake pickles, clean, peel, and slice vegetables $\frac{1}{8}$ to $\frac{1}{4}$ inch thick. For watery vegetables, like celery and radishes, rub them with salt and let them sit for 30 to 60 minutes to draw out some of their moisture; less watery vegetables like carrots don't necessitate this step. Rinse and pat dry, and lay them in a shallow dish. Then, coat them completely on every surface with a thick layer of amazake. Let them sit at room temperature for 30 minutes to 1 day. Serve immediately in the amazake (don't rinse them!); refrigerate any unused pickles for up to 3 days.

Rice Bran Pickles (Nukazuke)

If quick pickles like thin cucumber slices or shredded carrots in vinegar are a one-night stand, then [rice bran](#) pickles are a long-term commitment. Don't get me wrong; I love my nuka-doko (the bed used to make nukazuke) for the magically meaty and earthy pickles it can provide. But this slowly fermented bed can seem like a pet as much as a foodstuff. It needs attention every day—both a thorough stirring from bottom to top and an assessment of its moisture content, its flavor, and its temperature. When I plan to go out of town, I not only need a dog sitter, but I also need to make provisions for my nuka-doko. It is my hope to pass this bed along to my children (as they do in Japan). But in the meantime, I have to remind myself that it's just a pickle. In Japan, nuka-doko may live in a wooden barrel under the floorboards, but any nonreactive kitchen container of sufficient size (at least 1 gallon) in a cool, dark place will work just as well. If you are lucky enough to find fresh nuka, use it in combination with dried for great flavor and ease of care. **Makes about 8 cups of pickling bed, suitable for numerous batches of pickles**

TIME: ABOUT 6 WEEKS

2 pounds dry rice bran

1 cup kosher salt

1 tablespoon yellow mustard powder

½ ounce kombu, broken up or cut into small pieces

6 cloves garlic, sliced thinly

½ ounce unpeeled minced fresh ginger

10 dried small, red chile peppers

About 6½ cups water

In a 1- to 2-gallon vessel made of ceramic, glass, or food-grade plastic, combine the rice bran, salt, mustard, kombu, garlic, ginger, and chiles. Add the water in 3 batches, mixing it into the other ingredients with your clean hands as you go. Stop adding water when the mixture has the texture of wet beach sand suitable for sandcastles—damp and clumping, but not pooling water. Cover the nuka-doko loosely with a lid not screwed into place to let in air but keep out insects and debris. Allow it to sit at cool room temperature in a dark place for 2 to 6 weeks as you prime it.

Prime your pickling bed by immersing at least ½ cup vegetable scraps into the bed and covering them completely; if your vegetable scraps are small, you can tie them up in cheesecloth for easier removal. The next day, remove the scraps and scrape off as much of the rice bran as you can back into the bucket before discarding the vegetables. (Note that you could eat these priming vegetables, but for now they won't have a great flavor.) For at least 2 weeks, but preferably 6, immerse and discard new vegetables daily and stir the bed thoroughly from top to bottom to aerate it, using either clean hands or a sturdy utensil, then pat down the pickling bed into a smooth surface and wipe down the sides of the container.

After about 6 weeks, your pickling bed should have fermented nicely and taken on a pleasant earthen smell; it is now ready to use. Wash, dry, and peel the vegetables to be pickled and completely immerse them without crowding—whole, peeled carrots or turnips, or large chunks of daikon split lengthwise, are a great place to start. For watery vegetables like cucumbers or celery, trim, peel, rub with salt, and let sit for about an hour to extract water, then rinse and pat dry before immersing in the nuka-doko. Let the vegetables sit for 8 to 24 hours to take in the flavor of the bed. Remove the vegetables, keeping as much of the bed as possible in the container.

Rinse off any pickling bed that's clinging to the vegetables, pat dry, and cut into small pieces to serve.

Notes

Ideally, you'll stir the pickling bed daily. If you need to go out of town, give a thorough stir, cover tightly with a tight lid or secure it with plastic wrap, and store the bed in the refrigerator until you're ready to return to daily maintenance.

If you have access to an existing batch of nuka-doko, add a half cup or so to your bed to help jumpstart its fermentation.

If you make sure your nuka-doko maintains the right level of moisture and stays at cool room temperature, this bed can be used almost indefinitely. It's important to stir it daily, aerating from bottom to top. Drain excess liquid that builds up, and add extra nuka and flavorings as needed to keep the bed fresh.

However, if you stop stirring, or if the weather turns quite warm, or if your nuka-doko gets too wet, the contents may grow moldy or take on a funky, sour smell. If your nuka-doko develops a green-blue or pinkish-red mold, discard the bed immediately and start anew. If it has a funky, sour smell, you can try to revive the bed. First, pour the contents into another clean container and scrub the original bucket with very hot soapy water. To the nuka-doko, add $\frac{1}{4}$ cup more mustard powder, $1\frac{1}{2}$ cups (3 ounces) of new dry rice bran, and another $\frac{1}{3}$ cup of kosher salt. Mix it in completely and let the mixture dry out, uncovered, in the refrigerator or in warm sunlight, loosely covered to keep out insects and debris, for 24 to

48 hours, stirring it very well top to bottom three or four times a day.



Pickled Plums and Pickled Plum "Vinegar"

Pickled Plums and Pickled Plum “Vinegar” (Umeboshi and Umezu)

If I had to pick one pickle that best represents all of tsukemono, this one, said to be among the oldest, would certainly be it. How can I begin to describe my love for umeboshi? Their flavor is truly like nothing else on earth—tart, puckery, salty—and when I have them, I eat them every day. They just make me feel good, and I swear that nothing is more effective for an upset stomach. I apologize in advance for asking you to find such an obscure ingredient as [ume](#) or mature but unripened apricots. If you can find them, though, you should absolutely make this. **Makes about 18 ounces of umeboshi (3 pints) and 3 cups of umezu**

TIME: ABOUT 7 WEEKS

2½ pounds ume or mature but unripened apricots, washed

1 cup kosher salt

15 to 20 red [shiso leaves](#), either fresh or preserved in salt (optional)

Place the plums in a 1- to 2-gallon vessel made of ceramic, glass, or food-grade plastic and cover them with water by 2 inches. Cover with a weighted plate or a plastic bag filled with water to keep them submerged. Let them soak 8 hours or overnight.

Drain the plums and return to the container, sprinkle over half the salt, and toss to combine. Sprinkle the remaining salt evenly over the tops of the plums. Cover the plums with a [drop lid](#)—a pot lid, plate, or plastic container lid the right size to fit inside the picking

vessel without touching the sides. Place 2½ pounds of weight (cans, rocks, or whatever is suitable and handy) on top of the drop lid. Cover the top of the container loosely with a clean cloth to let air flow in but keep out insects and debris. Store at cool room temperature in a dark place.

Check the plums after two days. Liquid will have started to form in the bottom; this is umezu (plum “vinegar”), a very desirable substance for seasoning, pickling vegetables, and marinating. Leave it where it is for now—the ume need this precious liquid. Stir the plums every couple of days for about 2 to 3 weeks, replacing the drop lid and weights each time, until they are completely covered in liquid. If tiny spots of mold form on the surface, remove them with your clean finger or a paper towel and discard.

If you’re using the shiso (which will color the plums and lend them its flavor), lay the cleaned shiso leaves evenly over the top of the plums to cover completely and press down firmly. Either way, replace the lid and weights and leave in the cool and the dark for a couple more days.

Once the plums are covered completely in their own brine, remove the drop lid and the weight and cover the plums loosely with a lid or kitchen towel, allowing for some air flow. Return the vessel to its cool, dark place and allow the plums to continue to brine for an additional 1 to 4 weeks, tasting once a week until they have reached the level of puckery tartness that you desire.

When the umeboshi are fermented to your satisfaction, drain and reserve the umezu and store it in a pouring bottle at room temperature. Use anywhere you’d normally use vinegar (being mindful that additional salt won’t usually be necessary) or soy sauce. The umezu will last almost indefinitely. If you like, you can add more red shiso to the umezu to enhance its color and flavor.

Spoon the plums and the shiso leaves into clean jars with secure lids; cover and refrigerate. Share with your friends. Kept refrigerated, these plums will last at least a year—until the next ume crop!

Note

Mashed up with sugar and seltzer water in the bottom of a tall, icy glass, umeboshi make a wicked “lemonade.”

Pickled Ginger (Gari)

This is the ubiquitous Japanese pickle served beside your sashimi and wasabi wad at your local sushi joint. Sliced thin, this piquant pickle has almost as much sweetness as fire. When you make it at home, the color won't be the same as the store-bought stuff (not quite so pink), but it's equally delicious. Use it alongside homemade sushi or in the [ginger and shiso pickle](#); splash a little of the juice into cocktails. A little pickled ginger flavor goes a long way. **Makes about 1 ¼ cups**

TIME: ABOUT 1 MONTH

6 ounces fresh ginger

¼ cup plus 1 tablespoon sugar

1 tablespoon kosher salt

6 tablespoons unseasoned rice vinegar

Peel the ginger (scrape it with a spoon instead of a vegetable peeler—it works better). Slice it crosswise on the thinnest possible setting on a mandoline or in a food processor if you have a slicing blade that will slice things paper thin, or try shaving it on the large slots on the side of a box grater. The ginger should be thin enough to nearly see through.

Toss the ginger with 1 tablespoon of the sugar and the salt and let it sit for 30 minutes. Ten minutes or so before the ginger's rest time is through, bring a small, nonreactive saucepan of water to a boil and ready a fine-mesh strainer.

After the 30 minutes, toss the coated ginger into the boiling water and stir for 45 seconds. Drain immediately and transfer the hot ginger to a 10-ounce (or larger) jar.

Now combine the remaining $\frac{1}{4}$ cup of sugar and the vinegar in the saucepan and bring to a boil. Pour the boiling brine over the ginger and press down on the ginger to ensure it is completely submerged. Cover the jar and let the ginger sit at room temperature for 24 hours before moving it to the fridge. You can eat the gari after 1 week, but it will mellow and be at its best after a month. Kept covered and refrigerated, this pickle will last at least 6 months.

Red Pickled Ginger (Beni Shoga)

This is not tangy-sweet, pink [gari](#), the sushi roll's faithful companion. It's a different way to preserve fresh ginger and to vamp it up with the powerful color and flavor of red [umezu](#). On the Japanese table, a little pinch of this pickle is ubiquitous alongside stir-fried noodles, fried pork, or hearty beef and onion stews atop rice—in short, any heavy food that needs a little brightening and lightening from a pungent, presenceful pickle. A little goes a long way: this small jar is a mighty flavor giant that will last nearly indefinitely. **Makes 1 cup**

TIME: ABOUT 1 WEEK

1 pound fresh ginger

¼ cup sugar

2 tablespoons kosher salt

½ to ¾ cup red [umezu](#)

Peel the ginger (use the edge of a spoon—it's much easier) and chop it coarsely into 1-inch chunks. Working in batches, add the ginger to a food processor fitted with the metal blade (filling no more than halfway) and pulse until it's about the size of lentils. Transfer the ginger to a large nonreactive bowl. Add the sugar and salt and mix thoroughly to combine, then place on a [drop lid](#), and weight with a 1-pound weight. Allow the ginger to sit at least 4 hours (leaving it overnight is fine).

Preheat the oven to 200°F.

Drain the liquid from the ginger (there should be a good amount) and squeeze the ginger very firmly to get out as much liquid as possible. (Feel free to save this juice to use as a flavoring agent in other foods, or as a drink with more sugar and sparkling water.)

Transfer the ginger to a nonstick baking sheet or baking sheet lined with parchment paper in a single layer and place in the oven; prop the door slightly open with a wooden spoon left in the door. Allow the ginger to dry for 2 to 3 hours, stirring every hour, until it's dry to the touch.

Pack the ginger into a half-pint jar and pour enough umezu over it to cover it completely. Cover, and allow it to sit on the countertop for about 3 hours, then top off with more umezu as necessary to keep the liquid level above the ginger. Let the ginger sit, covered, at room temperature for 1 day, then move it to the refrigerator. The beni shoga will be ready to eat in about a week, and, kept refrigerated with a tight lid, it will last for at least a year.



"Thousand Slices" Turnips

“Thousand Slices” Turnips (Senmaizuke)

Tokyo turnips? Small. Kyoto turnips? Gargantuan. This pickle is the pride of Kyoto, as it’s customarily made from the massive orbs found in the region. That said, you needn’t pack your passport to make this; just go with the largest turnips you can find. If the skin is tough or bitter, peel it off. Note that the turnips will be sliced very thin, so a mandoline or some serious knife skills are necessary for this recipe. The pickle’s crisp texture, ghostly beauty, and tangy, light sweetness will repay the time investment one thousand fold. **Makes about 1 ½ cups**

TIME: ABOUT 4 HOURS

¼ ounce dried kombu

12 to 14 ounces turnip, peeled if the skin is bitter or tough

2 teaspoons kosher salt

2 tablespoons sugar

3 tablespoons unseasoned rice vinegar

1 tablespoon mirin

1 tablespoon lemon juice

Cover the kombu in water by 2 inches, and let soak for 1 hour.

Using a mandoline, slice the turnip very, very thinly—no more than ⅛ of an inch. Toss the turnip with half of the salt in a wide shallow dish or pie plate, smooth the slices flat, and then sprinkle the

remaining salt evenly over the top. Cover with a [drop lid](#) and a 14-ounce weight and let sit for 2 hours.

Meanwhile, in a medium mixing bowl, stir together the sugar, vinegar, mirin, and lemon juice to make a brine. Once the kombu is tender enough to handle (don't worry, it will tenderize more later), drain it and pat it dry. Chop it into 2-inch-long slivers and add it to the brine. Let this sit while waiting for the turnip to macerate.

Once the turnip is sweating liquid on its surface, remove the weight and lid. Pick up handfuls of the turnip slices and squeeze them very firmly, until nothing more drips from it when squeezed. Discard the liquid. Add the turnip to the brine and seaweed and stir well to combine. Cover with a [drop lid](#) and a 1-pound weight, and let sit for 2 hours.

Your senmaizuke is now ready to eat. Kept covered in a jar or other airtight container, this pickle will last in the refrigerator for at least a month.

Preserved Seaweed (Kombu no Tsukudani)

Technically, this is not tsukemono but tsukudani, another family of Japanese preserved food—usually seaweed or seafood that has been simmered in a generous amount of soy sauce and sweetener (either sugar or mirin, or both). High salt and sugar content makes for long-lasting food, and when refrigerated, this will keep for a very, very long while. Enjoy it on top of rice or in a bento, either as is, or topped with chile flakes, toasted white sesame seeds, a drizzle of sesame oil, or minced fresh shiso leaf. Brown sugar is not traditional, but I prefer it to white here because of its added flavor depth. **Makes about 1 cup**

TIME: ABOUT 2½ HOURS

3 ounces kombu

½ cup Japanese soy sauce

6 tablespoons mirin

6 tablespoons brown sugar

¼ cup unseasoned rice vinegar

Juice of ½ lemon

Using kitchen shears, cut the kombu into 2 by 1½-inch squares. Cover with water by 2 inches and let soak for 1 hour.

Drain the seaweed, reserving ¾ cup of the soaking liquid. It's okay if the seaweed has a slimy, viscous texture—there's no need to rinse it away. In a heavy-bottomed nonreactive pot, combine the kombu,

soy sauce, mirin, sugar, vinegar, and soaking liquid, and stir. Make sure the kombu is submerged in the liquid. Cover, place over high heat, and bring to a boil. Reduce heat to medium-low and simmer, covered, for 15 minutes, stirring twice.

Remove the lid and adjust the heat so the liquid maintains a low simmer; you want some persistent bubbles, but no foam. Simmer for about 1 hour, stirring often, and as the liquid reduces, lower the heat to keep it from splattering.

The liquid will thicken to a syrup that streaks across the bottom of the pot, disappearing nearly entirely. As it nears this point, stir more frequently to prevent scorching, and add the lemon juice. Taste the kombu. It should be very tender; if it's not, stir in another $\frac{1}{4}$ cup of water, cover, and cook on low heat for 10 minutes before removing the lid and letting the liquid reduce until dry once again.

At this point, your kombu no tsukudani is ready to eat. It can be stored, covered, in the refrigerator, for at least a year.

Note

If you make your own dashi—a soup of katsuo bushi (bonito fish flakes), kombu, and sometimes niboshi (dried baby anchovies)—you can freeze the discarded solids and, when you have enough, use them in this recipe instead of the kombu (skipping the part about presoaking the seaweed).

Pickled Mustard Greens (Takanazuke)

Where do Japanese culture and the American South meet? Well, they both love fried food (remove the bones from fried chicken and you've got karaage). There's the shared appetite for pickled watermelon rind. And then there's this pickle, at home on both tables. And while garlic isn't a traditional supporting flavor in takanazuke, I think it's a worthy addition (though you may certainly omit it, if you wish). If mustard greens aren't your thing, this also works beautifully with any kind of radish green. This pickle kicks butt with fried rice or noodles, fried chicken, or pork in almost any form. **Makes 2 cups**

TIME: 2 DAYS

12 ounces curly mustard greens, either whole or stems removed for less bite

2 tablespoons kosher salt

1 cup unseasoned rice vinegar

3 tablespoons sugar

1 teaspoon dried red pepper flakes

1 clove garlic, finely minced

Chop the greens into $\frac{1}{3}$ -inch strips and, in a large bowl, toss them with the salt. Cover with a [drop lid](#) and add a 1-pound weight. Let the greens sit for 1 hour.

Wash the greens well to rinse off some of the salt and remove dirt. Squeeze them very, very dry—put some muscle into it!—and stuff them into a very clean 1-pint jar.

Meanwhile, in a small saucepan over medium heat, combine the rice vinegar, sugar, red pepper flakes, and garlic and stir just until sugar dissolves, 2 to 3 minutes.

Pour the brine over the greens until they are submerged completely. Wait until the brine settles, then pour in as much brine as you can (you're not canning this, so filling to the brim is fine). Cover with the lid, and let the greens sit on the countertop for 1 day. Move to the refrigerator, and let sit for 1 more day. Enjoy! Kept chilled, these greens will last at least a month.

INSPIRED PICKLES

Mixed Ginger and Shiso Pickle

By no means is this a traditional tsukemono, but it combines two of my favorite flavors with the firm, squeaky crunch of napa cabbage into one slaw-like pickle. This is also a great way to show off your homemade [gari](#) and your homemade [pickled shiso leaves](#), but don't sweat it if you don't have either. **Makes about 2 cups**

TIME: ABOUT 1 HOUR

10 ounces napa cabbage leaves (about 10 big leaves)

1 tablespoon kosher salt

5 ounces carrots (about 1 to 1½), peeled, trimmed, and julienned

2 tablespoons pickled ginger, minced

2 tablespoons chopped green onion, white and tender green parts only

15 fresh, salted, or pickled shiso leaves, finely chopped

1 tablespoon mirin

2 tablespoons Japanese soy sauce

Cut the cabbage leaves in half lengthwise, then chop into ½-inch pieces. Toss with half of the salt in a large mixing bowl, and cover with a [drop lid](#) and 10 ounces of weight. In a smaller bowl, toss the carrots with the remaining salt, then cover with a drop lid and 5 ounces of weight. Allow both to sit for 30 minutes. Remove the weight and lid from the cabbage and squeeze it very firmly until it

rains out its water. Discard the cabbage liquid and return the cabbage to the bowl. Discard any liquid from the carrots and add them to the cabbage. Add the ginger, green onion, shiso, mirin, and soy sauce and toss to combine. Eat immediately, or store airtight and refrigerated for up to to 1 week.

“Sitting Fee” Cabbage Pickles

This one pickles up so fast and with so few ingredients, it will likely be on your regular pickle rotation (it's on mine). Why the name? When I would go to bars in Japan in the 1990s, sometimes tiny dishes of this sort of tsukemono were placed before patrons as they were seated. It would often be stale, and not taste very good, but it didn't really matter. The point was not to eat it—it was just there to represent the fact that you were going to be charged a “sitting fee” (usually the equivalent of \$5 to \$15) for your seat in the bar. When it's fresh and homemade, however, you need not fear: it is a delicious, quick, and nicely textured pickle. **Makes about 4½ cups**

TIME: ABOUT 45 MINUTES

1½ pounds head green cabbage

2 tablespoons kosher salt

Juice of 1 lemon

2 tablespoons freshly toasted black sesame seeds

Discard the tough outer leaves of the cabbage. Cut the cabbage into quarters lengthwise. Cut out and discard the core from one quarter, chop the quarter in half lengthwise again, and slice into 1-inch pieces. Cut the remainder of the cabbage this same way, separating the leaves as necessary.

Place the cabbage in a large mixing bowl and sprinkle with the salt; toss gently. Allow the cabbage to sit for 30 minutes, stirring occasionally. Using your hands, squeeze the cabbage very tightly to

make it rain. It can take a full minute to really extract the juices. Discard the liquid and return the cabbage to the bowl. Squeeze in the lemon juice and add the sesame, and the cabbage is ready to eat. It will keep refrigerated in an airtight container for 1 week.



Pickled Shiso Leaves and Shiso Vinegar

Pickled Shiso Leaves and Shiso Vinegar

Shiso is remarkable. The green variety has the most alluring shape. And the red turns everything it touches the most lovely purple hue. The flavor is remarkable; while many compare it to mint, thyme, or basil, I think it stands all on its own. This simple preparation makes the most of this herb, which can be challenging to find fresh (though it's easy to grow). This recipe also yields two wonderful kitchen staples: shiso vinegar and pickled shiso leaves. The vinegar is excellent on fresh vegetables, particularly cucumbers. The pickled leaf is an unusual aromatic that plays nicely with chicken, in salads, on sandwiches, or with rice. **Makes about 1½ ounces pickled shiso leaves and 1½ cups shiso vinegar**

TIME: ABOUT 2 WEEKS

2 ounces fresh red or green shiso leaves

1½ cups unseasoned rice vinegar

Pack the leaves into a clean, odor-free jar with a tight-fitting lid. Pour the vinegar over the herb and push down on it to make sure the leaves are completely submerged in the liquid. Store in a cool, dark place for 2 weeks, gently shaking the jar every couple of days.

After 2 weeks, drain the vinegar and store it in a pouring bottle on the shelf; the flavor will be at its best for about 2 months. Lay the leaves out on a sheet of wax paper, cover with another sheet of wax

paper, and stored in an airtight container. These will last, refrigerated, for at least a month.

Cucumber Arame Pickles

Quick + Pickle = Quickle! And this is one of my fave quickles. Clean, crisp, salty, yeah. I know you may be tempted to chop the cukes a little smaller, but here's why you shouldn't: they will take on too much of the soy sauce and become unbearably salty. Arame brings a nice briny flavor and a complementary color and texture to the cucumbers. **Makes about 3 cups**

TIME: ABOUT 30 MINUTES

1 pound Persian, Kirby, or other small pickling cucumbers

¼ cup Japanese soy sauce

¼ ounce dried arame seaweed

½ teaspoon toasted sesame oil

Wash the cucumbers, then trim the ends and discard. Cut the cucumbers into 1½-inch-long pieces. In a bowl, toss the cucumbers with the soy sauce and let sit 30 minutes, stirring occasionally.

Meanwhile, in a separate bowl, cover the arame in water and soak for 15 minutes (or follow the preparation instructions on the package). Do not oversoak. Drain the seaweed and squeeze it firmly to release as much moisture as possible.

Add the seaweed and the sesame oil to the cucumbers and stir to combine. Serve immediately, chopping the cucumbers into smaller, bite-sized pieces if you wish. This pickle will keep refrigerated in an airtight container for at least 1 week.



Asian Pear

Pickled Asian Pear (Nashi) with Lemon

This pickle is not traditional, but this fruit always makes me think of Japan. It was the first place I'd ever seen a nashi—they grow like weeds there. Have you never had the pleasure? Asian pears are worth seeking out! Imagine the texture of jicama with the juiciness of an apple and the really light sweetness of a pear. Look for them in Asian markets in the fall—even if you're not stickin' 'em in a pickle, these beige orbs are excellent eating. However, if nashi aren't on your local menu, any kind of pear will suffice here; just look for specimens that are on the small side and rather firm. Eat this pickle on its own, on a sandwich, in a salad, or paired with blue cheese. **Makes 4 cups**

TIME: 3 DAYS

2 pounds Asian pears, or any other sweet, firm pear

4 (2-inch) pieces of lemon zest

Juice of 1 lemon

4 slices pickled ginger

1½ cups sugar

1½ teaspoons kosher salt

1 cup white wine vinegar

2 tablespoons mirin

Select pears that are firm and on the small side. Peel them, cut them into quarters, and core them. Combine the lemon zest, lemon juice,

ginger, sugar, salt, vinegar, and mirin in a medium nonreactive saucepan off-heat; don't worry that the sugar is not yet dissolved. Add the cut pears to the pan to coat them in the acidic brine.

Meanwhile, fill a second medium saucepan with water and bring it to a simmer. Using a slotted spoon, transfer the pears to the simmering water, leaving behind as much of the brine as possible. Simmer the pears until they turn white and are just cooked through but still quite firm, about 6 minutes. The pears should be pierced easily with a fork, but you don't want them to overcook and get mushy. Drain the pears and transfer them to 2 clean pint jars, packing them tightly and tucking them under the curved "shoulders" of the jar.

Bring the brine pot to a boil, uncovered, stirring to dissolve the sugar, about 2 minutes. Once it's boiling, turn off the heat. Divide the ginger and lemon zest between the two jars. Pour the brine over the pears in the jars to cover completely (reserve the leftover brine). Tighten the lids on the jars immediately and let them rest on the countertop for 1 day before moving them to the refrigerator. The pears are ready to eat in 3 days, but taste even better after 5. They will keep their flavor for about a month in the refrigerator, but the color will begin to change after 2 weeks.

I know, I know ... leftover brine. Let it cool, pour it into a shaker bottle, and combine with your favorite salad oil. It makes a wonderful salad dressing.

Note

This pickle can be canned. Just start with sterilized pint jars and lids, and hot water bath process the sealed jars for 10 minutes. The pickle will keep unopened for a year; refrigerate after opening and use within a month.



"Wasabi" Pickled Carrots

“Wasabi” Pickled Carrots

Why am I using “quotes?” Because while this is bursting with wasabi flavor, there is no actual wasabi in it. Real wasabi is hard to come by. And the stuff you and I have access to in the grocery store—the green-tinged powder, or that gunk in the tube—is just dreadful; it’s full of artificial color, preservatives, and mysterious chemicals, and the flavor shows it. Instead, I hereby direct you to buy yourself a fresh bottle of prepared horseradish, close your eyes, and tell yourself it’s wasabi for this recipe and for any sushi you make at home. If you must, add a little green food coloring or spirulina powder for color. Leftover horseradish can be smeared on your roast beef sandwich, or saved for the gefilte fish on Passover. **Makes about 2¼ cups**

TIME: ABOUT 1 HOUR

- 1 pound carrots, preferable a mix of colors, peeled**
- 4 teaspoons prepared horseradish**
- 1 tablespoon kosher salt**
- 4 teaspoons sugar**
- 1 teaspoon dried red pepper flakes**
- 1½ teaspoons very finely minced or grated fresh ginger (use a Microplane grater if you have one)**

Using a vegetable peeler, peel the carrots into ribbons, getting as much out of each carrot as you can; discard (or eat) the nubs. Combine the carrots with the horseradish, salt, sugar, red pepper flakes, and ginger and toss very well, using a fork (or two, if

necessary) to really work the seasoning into the carrot ribbons. Cover with a [drop lid](#) and 1 pound of weight and let sit for 30 minutes, retaining any liquid that falls to the bottom of the bowl. After a quick toss, the pickle is ready to eat; covered and refrigerated, it keeps at least 6 weeks.

Puckery Eggplant in Mustard Pickles

I know I'm not alone in this opinion: eggplant is rarely delicious. It is often too bitter, or too greasy, or too mushy, or just ... too eggplanty. But this version is none of those things. The eggplant is firm and flavorful, bold and puckery. When umeboshi meets with mustard, taste buds have been known to explode. And a bonus for the lazy: you don't even have to peel. I love to eat this over steamed rice or in onigiri (rice balls), and it's also mighty fine beside pork belly. **Makes about 1 cup**

TIME: 3 DAYS

10 ounces long and slim Japanese eggplant

1 tablespoon kosher salt

2 umeboshi

¼ cup umezu

2 tablespoons sugar

1 tablespoon prepared yellow mustard

2 teaspoons mirin

Wash and dry the eggplant; trim and discard the ends. Leave on the peel, and chop the eggplant into ¼-inch-thick rounds. In a bowl, toss the eggplant with the salt, cover with a [drop lid](#) and 1 pound of weight and allow it to sit for one hour. Drain and rinse the salt off the eggplant and squeeze it dry in a clean kitchen towel.

Meanwhile, make the brine. In a mixing bowl, mash the umeboshi with a fork and discard the pits. Mix in the umezu, sugar, mustard, and mirin. Add the eggplant and turn it to coat it in the brine. Cover with a [drop lid](#) and a 1-pound weight and allow the pickle to sit for 1½ hours.

Transfer the pickle and its brine into a glass jar with a tight lid. Place in the refrigerator for 3 days before eating. Kept covered and refrigerated, this pickle will last at least 1 month.

Measurement Conversion Charts

Volume

U.S.: 1 tablespoon
Imperial: $\frac{1}{2}$ fl oz
Metric: 15 ml

U.S.: 2 tablespoons
Imperial: 1 fl oz
Metric: 30 ml

U.S.: $\frac{1}{4}$ cup
Imperial: 2 fl oz
Metric: 60 ml

U.S.: $\frac{1}{3}$ cup
Imperial: 3 fl oz
Metric: 90 ml

U.S.: $\frac{1}{2}$ cup
Imperial: 4 fl oz
Metric: 120 ml

U.S.: $\frac{2}{3}$ cup
Imperial: 5 fl oz ($\frac{1}{4}$ pint)
Metric: 150 ml

U.S.: $\frac{3}{4}$ cup
Imperial: 6 fl oz
Metric: 180 ml

U.S.: 1 cup
Imperial: 8 fl oz ($\frac{1}{2}$ pint)
Metric: 240 ml

U.S.: $1\frac{1}{4}$ cups
Imperial: 10 fl oz ($\frac{1}{2}$ pint)
Metric: 300 ml

U.S.: 2 cups (1 pint)
Imperial: 16 fl oz ($\frac{2}{3}$ pint)
Metric: 480 ml

U.S.: $2\frac{1}{2}$ cups
Imperial: 20 fl oz (1 pint)
Metric: 600 ml

U.S.: 1 quart
Imperial: 32 fl oz ($1\frac{2}{3}$ pint)
Metric: 1 liter

Temperature

Fahrenheit: 250°F
Celsius / Gas Mark: 120°C / gas mark $\frac{1}{2}$

Fahrenheit: 275°F
Celsius / Gas Mark: 135°C / gas mark 1

Fahrenheit: 300°F
Celsius / Gas Mark: 150°C / gas mark 2

Fahrenheit: 325°F
Celsius / Gas Mark: 160°C / gas mark 3

Fahrenheit: 350°F
Celsius / Gas Mark: 180°C or 175°C / gas mark 4

Fahrenheit: 375°F
Celsius / Gas Mark: 190°C / gas mark 5

Fahrenheit: 400°F
Celsius / Gas Mark: 200°C / gas mark 6

Fahrenheit: 425°F
Celsius / Gas Mark: 220°C / gas mark 7

Fahrenheit: 450°F
Celsius / Gas Mark: 230°C / gas mark 8

Fahrenheit: 475°F
Celsius / Gas Mark: 245°C / gas mark 9

Fahrenheit: 500°F
Celsius / Gas Mark: 260°C

Length

Inch: $\frac{1}{4}$ inch
Metric: 6 mm

Inch: $\frac{1}{2}$ inch
Metric: 1.25 cm

Inch: $\frac{3}{4}$ inch
Metric: 2 cm

Inch: 1 inch
Metric: 2.5 cm

Inch: 6 inches ($\frac{1}{2}$ foot)
Metric: 15 cm

Inch: 12 inches (1 foot)
Metric: 30 cm

Weight

U.S. / Imperial: $\frac{1}{2}$ oz
Metric: 15 g

U.S. / Imperial: 1 oz
Metric: 30 g

U.S. / Imperial: 2 oz
Metric: 60 g

U.S. / Imperial: $\frac{1}{4}$ lb
Metric: 115 g

U.S. / Imperial: $\frac{1}{3}$ lb
Metric: 150 g

U.S. / Imperial: $\frac{1}{2}$ lb
Metric: 225 g

U.S. / Imperial: $\frac{3}{4}$ lb
Metric: 350 g

U.S. / Imperial: 1 lb
Metric: 450 g

About the Author

Karen Solomon is the author of *Jam It, Pickle It, Cure It; Can It, Bottle It, Smoke It; The Cheap Bastard's Guide to San Francisco*; and was a contributing author to *Chow! San Francisco Bay Area: 300 Affordable Places for Great Meals & Good Deals*; and a former contributing editor to *Zagat Survey: San Francisco Bay Area Restaurants*. Her edible musings on the restaurant scene, sustainable food programs, culinary trends, food history, and recipe development have appeared in *Fine Cooking*, *Prevention*, *Yoga Journal*, *Organic Style*, the *San Francisco Chronicle*, *San Francisco Magazine*, the *San Francisco Bay Guardian*, and elsewhere. She's currently a guest blogger for The Blender, the Williams-Sonoma blog, and the Bay Area Bites KQED Food Blog. Visit www.ksolomon.com for more.