



Taking Root

It's time cassava claimed its place on the American table

BY DOROTHY IRWIN

A CASSAVA IS AN ugly-beautiful thing. Formidable. For years I saw the gnarly brown root vegetable at different markets in New York City, where I live, and I'll confess I was a little intimidated. Surely it would take some special tool, one I didn't have in my kitchen, to remove the bark-like peel, which, on most cassavas I've seen, has been coated in a disconcerting layer of wax.

I was fascinated to discover that I'd actually been eating this vegetable all my life, in the form of tapioca—the pure starch filtered out of juice extracted from the cassava, and further processed into a fine powder, coarser granules, or the round pearls found in tapioca pudding. The gap between the pearls in the pudding I'd grown up with and the vegetable I saw at the market seemed too vast to comprehend. So, I decided to connect the dots by cooking.

First I determined what cassava is, exactly: a starchy, tuberous root native to Central and South America, typically sold at a size of six to ten inches in length and two to three

inches in diameter. I'd seen it referred to as yuca and manioc, and I learned that its many other aliases—*aipim*, *mandioca*, and *macaxeira* in Brazil alone; *mihogo* in Swahili-speaking Africa; *kappa* in South India; *singkong* in parts of Indonesia—reflect its distribution across a vast portion of the globe. The plant that produces the tuber, *Manihot esculenta*, is a woody shrub that grows quickly and vigorously—a sort of miracle plant, really. In tropical conditions with natural rainfall, it requires no irrigation, and its roots can be harvested year-round; unharvested, they can remain underground for an astonishing three years without spoiling. For all those reasons, cassava is ubiquitous throughout the tropics and a staple food for, by some estimates, 15 percent of the world's population.

The cookbook *Tasting Brazil* (Macmillan, 1992), by the historian Jessica B. Harris, provided me a richer picture in its recipes and descriptions of the many ways that cassava is used in Brazil—one of the homelands of cassava and therefore, I reasoned, as good a place to start as any. Take *farinha de mandioca*, a coarse meal made from cassava that's been soaked, dried, ground, pressed, and (sometimes) toasted. Brazilian cooks further toast this cassava meal in butter or palm oil to make *farofa*, a crunchy condiment found on tables throughout Brazil. On the country's northeastern coast, there is also *vatapá*, a creamy, polenta-like dish of coconut milk and palm oil

thickened with *farinha de mandioca* and studded with shrimp, fish, or chicken. In the same region, fresh cassava is boiled and mashed, shaped into fritters around a filling of spiced ground beef, and deep-fried to make *bolinhos de macaxeira recheado*. Farther south, Brazilians use two kinds of powdered tapioca starch—a sour, fermented kind called *polvilho azedo*, and an unfermented kind, *polvilho doce*—to make a *gougère*-like pastry, *pão de queijo*, enriched with grated hard cheese. In *Tasting Brazil*, Harris notes that cassava even “turns up batter-fried in São Paulo's Japanese tempuras.”

As I collected recipes from other parts of the world, I learned that cassava has been a staple crop in some places for thousands of years—though its distant history is somewhat difficult to trace. Four years ago, Payson Sheets, an anthropology professor at the University of Colorado at Boulder, led the excavation of a field of cultivated cassava at the ancient Maya village Cerén, in El Salvador. He called the finding “a jackpot” because it revealed, as no other ancient site has, what the Maya ate besides corn, beans, and squash—all of which require fertile soil and are sensitive to drought. Those more finicky crops figured in Maya religious practices—and the artifacts associated with them—while dependable cassava was used strictly as food; the evidence was consumed,

A farmer with a newly harvested cassava crop in Betioky, Madagascar.

and so cassava has remained largely invisible to history. “I like to think of cassava as an old Chevy gathering dust in the garage,” Sheets said. “It doesn’t get much attention but starts right up every time when the need arises.”

IN MY OWN KITCHEN, I embraced cassava in stages. *Farinha de mandioca* was, for me, the gateway cassava: already processed and ready to add to all kinds of dishes. After finding a bag in Manhattan’s Little Brazil, I couldn’t wait to make *farofa* at home. The cassava meal, similar in texture to cornmeal, was labeled *torrada*, which means it had already been lightly toasted. To begin I simply melted butter in a cast-iron skillet, lightly sautéed some diced onion, then added a handful of *farinha de mandioca* and cooked it, stirring constantly, for just a couple of minutes, until it took on a pale brown color and a lovely, nutty flavor. I served it as one of the garnishes for a big pot of *feijoada*, the hearty Brazilian black bean and pork stew, along with wilted collard greens, orange segments, and white rice. The final flourish, a showering of *farofa* over top, added to the dish a wonderful crunchy texture.

Now I was eager to cook with the tuber itself, though one fact I learned did give me a moment of pause: in its pulled-from-the-ground state, cassava is actually poisonous. Like bitter almonds and raw bamboo shoots, raw cassava contains hydrogen cyanide, a colorless, toxic gas. I was assured, however, by written sources and produce vendors alike, that it took nothing more than cooking it until tender to dissipate the gas and make the vegetable completely safe for eating. In any case, two kinds of cassava grow in the tropics: the bitter, more toxic kind, and the sweet kind, which contains very little of the toxin, concentrated in the peel. In New York City, or anywhere else in North America, I would find only sweet cassava for sale. And even the toxin in bitter cassava is easily extracted by soaking, grinding, pounding, or just cooking the root thoroughly.

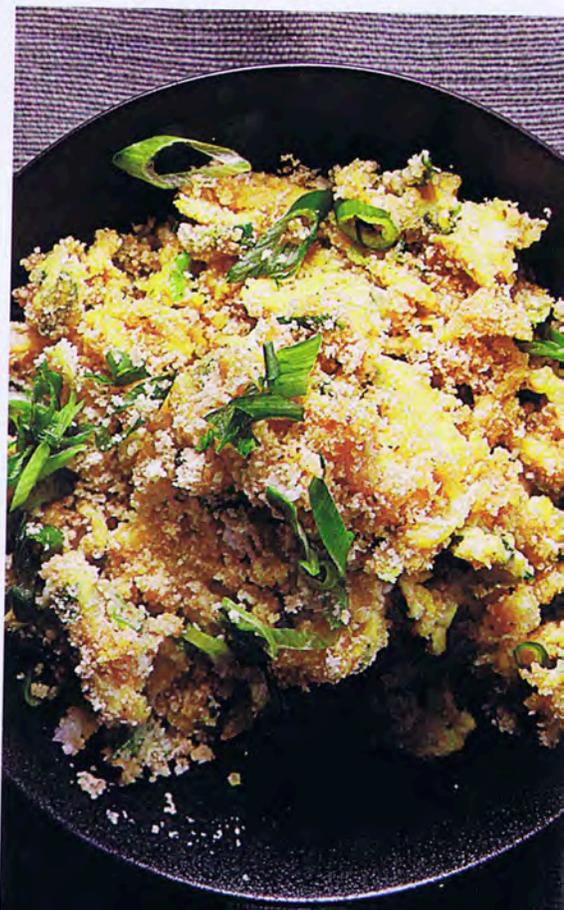
I started with frozen cassava, which has the advantage over the fresh vegetable of coming already peeled. In the supermarket freezer case I found a bag of three whole roots, peeled and pristine. At home I used a butcher’s knife to cut one of the frozen roots into smaller hunks, added it to a pot of water, and let the cassava simmer on the stovetop for about 30 minutes, until it was very tender. Drenched in a Cuban-style *mojo* made with bitter orange juice, lime juice, cilantro, and crushed garlic, the starchy, silky cassava offset the sharpness of the raw garlic and citrus beautifully.

I loved the subtle, nutty flavor of both the

cassava meal and the vegetable itself, but what I came to appreciate above all was the way that cassava in its various forms makes it possible to modulate texture in a dish. There was the crunchy aspect of *farinha de mandioca*, and then there was the viscosity—a distinctive velvety plushness—that the starch from the vegetable could bring to a soup or stew. I wanted to explore that further, and so I overcame my trepidation and brought one of those knobbly, bark-covered fresh cassavas home to my kitchen. Based on advice I found in the book *Uncommon Fruits and Vegetables* (William Morrow, 1998) by the produce expert Elizabeth Schneider, I was careful to select one with no soft or dark spots, no creasing or withering. This one was, like many of those I’d seen, covered in wax; apparently the root that keeps for years underground doesn’t hold up nearly as well once it’s been picked and so requires a little protection. But in the end, both skin and wax were easily removed with an ordinary vegetable peeler. It was on the smaller side—about eight inches long, roughly the size of a big sweet potato—and when I sliced it lengthwise to remove the woody core I’d been told I’d find running down the center, there was actually very little to cut away.

In the *African Cooking* volume of the wonderful *Time-Life Foods of the World* series (Time Life, Inc.; 1970), I’d found a recipe that sounded irresistible, for an East African beef and cassava stew called *muhogo tamu*. I began by chopping the peeled cassava, which I boiled for a half hour and then set aside to drain. I browned some cubed boneless chuck in a Dutch oven and then removed the meat and added onions and turmeric to the flavorful fat in the pot. Once the onions had softened I put the beef back in, added some fresh tomatoes and water, and left the whole thing to simmer for an hour. Near the end of cooking, I added coconut milk, chopped jalapeños, and fresh cilantro. The cassava went in last of all. It absorbed some of the rich coconut milk, and, just as I’d hoped, it released some of its starch into the casserole, giving it body and a luscious consistency. And its mild, creamy flavor was the perfect foil for the fiery chiles. Delicious. With each forkful, I quietly thanked the ancient cooks who first cracked the code of this potentially perilous but endlessly rewarding food. 🐦

Clockwise from top left: eggs and scallions with toasted cassava flour; pork, beef, and chicken soup; cassava custard; tapioca pudding; Brazilian cheese bread; cassava with garlic and citrus. (See page 30 for recipes.)





Bibingka

(Cassava Custard)

Serves 12

In this dessert from the Philippines, grated cassava and coconut milk make a rich custard, best served warm with coffee or tea.

- 1½ cups sugar
- 2 tbsp. unsalted butter, melted
- 2 tsp. kosher salt
- 2 eggs
- 1 14-oz. can coconut milk
- 1½ lbs. peeled cassava (fresh or frozen), cut into large chunks
- ½ cup heavy cream

Heat oven to 350°. In a bowl, whisk sugar, butter, salt, eggs, and coconut milk until smooth. Process cassava in a food processor until finely shredded. Whisk cassava into egg mixture. Pour into a 9" x 13" baking dish; bake until just set, about 40 minutes. Using a brush, quickly brush cream evenly over custard; continue baking until browned, about 40 minutes more. Let cool for 15 minutes.

Farofa de Ovo e Cebolinha

(Eggs and Scallions with Toasted Cassava Flour)

Serves 4

Brazilians often toast cassava flour in butter to crisp it and deepen its color and flavor; sometimes they combine the resulting buttery farofa with eggs and onions, too. This recipe is based on one in Leticia Moreinos Schwartz's *The Brazilian Kitchen* (Kyle Books, 2010).

- 2 tbsp. unsalted butter
- ½ cup cassava flour
- 2 tbsp. olive oil
- 4 scallions, thinly sliced
- 5 eggs, lightly beaten
- Kosher salt and freshly ground black pepper, to taste

1. Heat butter in a 2-qt. saucepan over medium-low heat. Add cassava flour and cook, stirring often, until lightly browned, about 10 minutes. Transfer flour to a small bowl and set aside.

2. Heat oil in a 10" nonstick skillet over medium heat. Add 3 scallions and cook, stirring, until soft, about 5 minutes. Add eggs and cook, stirring, until soft and creamy, about 2–3 minutes. Remove from heat and stir in half the toasted flour; season with salt and pepper. Divide between 4 plates; sprinkle with remaining toasted flour and scallions.

Pão de Queijo

(Brazilian Cheese Bread)

Makes 16 rolls

If you can't find sour tapioca starch, sweet tapioca starch will yield equally delicious results.

- 1 cup sour tapioca starch (see page 100)
- 1 cup finely grated Parmesan

- ½ cup plus 2 tbsp. flour
- 1 tsp. kosher salt
- ½ tsp. active dry yeast
- ¾ cup milk
- 4 tbsp. unsalted butter, cubed
- 2 eggs

Heat oven to 350°. In a large bowl, whisk together tapioca starch, Parmesan, flour, salt, and yeast. Heat milk and butter in a small saucepan over medium-high heat until butter melts. Pour mixture into dry ingredients along with 1 egg and stir until dough forms; cover and let sit for 30 minutes. Using a tablespoon, portion out dough and roll each into a ball. Place on parchment paper-lined baking sheets, spaced 2" apart; beat remaining egg in a small bowl and brush balls with egg. Bake until browned, 25–30 minutes.

Puchero

(Pork, Beef, and Chicken Soup)

Serves 12

This recipe for a hearty soup made with cassava, beef, chicken, and pork is based on one in *Secrets of Colombian Cooking* by Patricia McCausland-Gallo (Hippocrene, 2004).

- 2 tbsp. olive oil
- ¾ cup thinly sliced scallions, plus 3 whole
- ½ cup peeled and chopped tomatoes
- 3¼ tsp. kosher salt, plus more to taste
- ¼ tsp. freshly ground black pepper, plus more to taste
- ¼ tsp. ground cumin
- ¼ tsp. saffron
- 3 cloves garlic, roughly chopped
- 6 tbsp. minced cilantro, plus 5 sprigs
- 1½ lbs. pork spareribs, cut into riblets
- 1 lb. beef brisket, cut into 2" cubes
- 1 3–4-lb. chicken
- 2 lbs. cassava, peeled and cut into 2" pieces
- 2 lbs. medium potatoes, peeled, quartered
- ½ small head cabbage, thinly sliced
- 3 avocados, peeled, pitted, and quartered, for serving
- Cooked white rice, for serving

1. Heat oil in an 8" skillet over medium heat. Add sliced scallions, tomatoes, ¼ tsp. salt, pepper, cumin, saffron, and 2 cloves garlic; cook, stirring often, until soft, about 5 minutes. Add 2 tbsp. minced cilantro, reduce heat to low, and cook, stirring occasionally, until very soft, 20 minutes. Transfer to a small bowl and set aside.

2. Place remaining salt and garlic, whole scallions and cilantro sprigs, spareribs, brisket, and chicken in a 12-qt. pot and cover with water by 1". Bring to a boil, reduce heat to medium-low, and cook until chicken is cooked through, about 1 hour and 15 minutes.

3. Remove chicken, cut into 10 serving pieces, and discard skin and carcass. Place chicken on a plate, cover, and set aside. Add cassava and potatoes to pot and cook for 10 minutes. Add cabbage, cover loosely, and cook until vegetables

are tender, 20–25 minutes. Return chicken to pot, stir in reserved scallion–tomato sauce, and season with salt and pepper; cook for 5 minutes. Ladle stew into large serving bowls and sprinkle with remaining minced cilantro. Serve with avocado and rice on the side.

Tapioca Pudding

Serves 8

Meringue adds lightness and body to this classic tapioca pudding.

- 4 cups milk
- ½ cup large pearl tapioca
- ¼ tsp. kosher salt
- 1 vanilla bean, seeds scraped and reserved
- 1 cup heavy cream
- 1 cup sugar
- 4 eggs, separated
- Ground cinnamon, to garnish

Bring milk, tapioca, salt, and vanilla seeds to a boil in a 4-qt. saucepan over medium-high heat; reduce heat to medium-low and cook, stirring, until tapioca is tender, 25–30 minutes. Whisk together cream, ¾ cup sugar, and egg yolks in a medium bowl. Whisking constantly, add egg yolk mixture to tapioca; cook, stirring, until mixture thickens and just begins to boil, 8–10 minutes. Remove from heat and transfer to a large bowl; let cool to room temperature. Meanwhile, whisk egg whites until frothy. While whisking, sprinkle in remaining sugar; whip to stiff peaks. Fold whites into pudding and divide between 8 bowls; chill. Sprinkle with cinnamon.

Yuca con Mojo

(Cassava with Garlic and Citrus)

Serves 4–6

Starchy cassava, boiled until tender and brightened with a citrusy marinade, makes a great side dish for grilled or roasted meats. For step-by-step instructions on how to peel and cut cassava, see page 96.

- 3 lbs. cassava, peeled
- Kosher salt, to taste
- ½ cup olive oil
- 16 cloves garlic, finely chopped
- ⅓ cup sour orange or lime juice
- 2 tbsp. roughly chopped oregano
- Freshly ground black pepper, to taste

1. Cut cassava into 3" lengths, then lengthwise into 6 sections; using a knife, cut away inner core of each. Place cassava in a 4-qt. saucepan and cover with cold water; season with salt and bring to a boil. Cook until cassava is tender, 8–10 minutes. Drain and set aside.

2. While cassava is cooking, make sauce: Heat oil in a small saucepan over medium heat; add garlic and cook, stirring occasionally, until garlic is fragrant and sizzling but not browned, 3–4 minutes. Transfer to a bowl; whisk in juice and oregano; add cassava, season with salt and pepper, and toss. Let sit for 10 minutes to marry flavors.