



The Ukita family—Sayo Ukita, 51, and her husband, Kazuo Ukita, 53, with children Maya, 14 (holding chips) and Mio, 17—in their dining room in Kodaira city, Japan, with one week's worth of food. Cooking methods: gas stove, rice cooker. Food preservation: small refrigerator-freezer. Favorite foods—Kazuo: sashimi. Sayo: fruit. Mio: cake. Maya: potato chips.

Vitamin Sea

ONE WEEK'S FOOD IN MAY

Grains & Other Starchy Foods: \$31.55

Koshihikari rice, 5.5 lb; potatoes, 5.3 lb; Danish white bread, sliced, 1 loaf; white flour, 1.3 lb; sato imo (Japanese yam), peeled, 1.1 lb; udon noodles, 1.1 lb; sōmen noodles, 1.4 oz; white sandwich bread, 12.4 oz; Nippn macaroni, 10.6 oz; soba noodles, 10.6 oz; FryStar bread crumbs, 8.1 oz.

Dairy: \$2.26

Whole milk, 25.4 fl oz; Haruna yogurt, 12 oz; butter, 8.8 oz.

Meat, Fish & Eggs: \$99.80

Rainbow trout, 2.6 lb; ham, 2.2 lb; eggs, 10; sardines, large, 1.3 lb; clams, 1.1 lb; octopus, 1.1 lb; Spanish mackerel, 1.1 lb; pork loin, 1 lb; tuna, sashimi, 15.5 oz; horse mackerel, 14.8 oz; saury (fish), 13.5 oz; Japanese smelt (fish), 13.1 oz; eel, 12.7 oz; albacore, sashimi, 11.9 oz; Hagoromo tuna, canned, 11.3 oz; pork, cubed, 11.3 oz; beef, 10.8 oz; pork, minced, 10.6 oz; pork, sliced, 10.6 oz; pork, thin sliced, 10.3 oz; bacon, 7.8 oz; beef korokke (beef and potato patties), frozen, 7.4 oz, used for children's lunch; sea bream, sashimi, 3.6 oz; Nozaki's new canned beef (mix of horse and beef meat), canned, 3.5 oz.

Fruits, Vegetables & Nuts: \$81.43

Watermelon, 9.9 lb; cantaloupe, 4.4 lb; yellow bananas, 2.8 lb; red apples, 2.4 lb; white grapefruit, 2.2 lb; strawberries, 1.7 lb; cherries, canned, 7 oz; yellow onions, 4.8 lb; green peppers, 4 lb; cucumbers, 3.5 lb; daikon, 3.3 lb; bitter melon, 2.8 lb; soft tofu, 2.2 lb; tomatoes, 2 lb; carrots, 1.2 lb; green peas, in pods, 1.1 lb; broccoli, 1 lb; lettuce, 1 head; spinach, fresh, 1 lb; edamame, frozen, 1.4 oz; asparagus, 10.6 oz; green beans, frozen, 10.6 oz; mixed vegetables, frozen, 10.6 oz; bamboo shoots, 8.8 oz; white asparagus, canned, 8.8 oz; scallions, 8 oz; daikon sprouts, 6 oz; shiitake mushrooms, 6 oz; wakame (seaweed), fresh, 5.6 oz; bean curd, fried, 1.8 oz; nori (seaweed), dried, 1.8 oz; wakame, 3 oz; dried, 1.8 oz.

Condiments: \$28.28

White sugar, 15.6 oz; Elbow BBQ sauce, 9.9 oz; white miso, 9.9 oz; margarine, 8.8 oz; Hosen salad oil, 8.5 fl oz; sesame oil, 7.1 oz; bean sauce, 6 fl oz; ginger, 6 oz; Tea Time Mate sugar, 28.2 oz; pils, Kiyuu mayonnaise, 5.6 oz; Hinode cooking sake, 4.7 fl oz; Hinode mirin (low alcohol rice wine for cooking), 4.7 fl oz; soy sauce, 4.7 fl oz; Sudo orange marmalade, 4.7 fl oz; Sudo strawberry jam, 4.7 fl oz; vinegar, 4.7 fl oz; Fuji oyster

sauce, 4.2 oz; Bull Dog tonkatsu sauce, 3.4 fl oz; Captain Cook coffee creamers, 20.2 fl oz; salt, 3.5 oz; Chinese spicy sauce, 2.9 oz, used on tofu; Kagome ketchup, 2.7 fl oz; sesame seeds, 2.6 oz; honey, 2.5 oz; Pokko Shokutaku lemon juice, 2.4 fl oz; Momoya kimchi paste, 2.2 fl oz; soy sauce salad dressing, 2 fl oz; Ajinomoto olive oil, 1.8 oz; S&B hot mustard, 1.5 oz; S&B wasabi, 1.5 oz; white sesame, ground, 1.4 oz; black pepper, 0.7 oz.

Snacks & Desserts: \$15.33

Small cakes, 4; coffee break cookies, 1 lb; cream buns, 10 oz; Kokeya potato chips, 8.8 oz; Pasco cream rings, 8.8 oz; chiffon chocolate cake, 5.3 oz.

Prepared Food: \$21.78

Nissin cup of noodles, instant, 1.5 lb; Sapporo Ichiban noodles, instant, 1.1 lb; Showa pancake mix, 12.4 oz; Mama pasta meat sauce, canned, 10.4 oz; Oh My pasta meat sauce, canned, 10.4 oz; seaweed salad, dehydrated, 8.8 oz, add water to reconstitute; S&B golden hayashi sauce mix (Japanese style beef bouillon cubes), 8.8 oz; Chinese dumplings, 8 frozen, 8.5 oz, used for the children's lunches; Ajinomoto hondashi soup base, bonito (fish) flavor, 5.3 oz; soup, instant, 2.7 oz; yaki fu (baked rolls of wheat gluten, wheat powder, and rice powder), 2.7 oz, eaten in soup; vegetable and seaweed rice ball mix, 1.3 oz; Riken seaweed rice ball mix, 1.2 oz; Kyowa egg drop soup, instant, 0.9 oz.

Beverages: \$28.40

Kirin beer, 6 12-fl-oz cans, Coca-Cola, 2.1 qt; Nishan orange soda, 2.1 qt; Suntory C.C. lemon joyful vitamin C soda, 2.1 qt; Ban Shoku sake, 1.8 qt; Coffee Break instant coffee, 2.5 oz; green tea, 2.1 oz; Alpha wheat tea, 2 oz; Afternoon Tea dandelion black tea, 1.8 oz; tap water for drinking and cooking.

Miscellaneous: \$8.42

Mild Seven super-light cigarettes, 4 pks, smoked by Kazuo.

‡ Not in Photo

Food Expenditure for One Week:

37,699 yen/\$317.25

The purchase of a single powdered chocolate truffle at a Japanese department store can cause an amazing flurry of activity. Behold the spectacle of a wrapping experience: with graceful precision, the clerk gently folds the chocolate into a square of tissue paper, tucks it into a tiny box, and ties it up with an elegant snippet of ribbon—exquisite entertainment for the price of a piece of candy. But this is no mere show. The belief that the presentation is as important as the food itself extends from the finest department store to the humblest home in Japan.

SAYO UKITA IS UP EARLY, SCRAMBLING EGGS and preparing small breakfast salads of artfully placed tomato, cucumber, and lettuce for her daughters Mio, 17, and Maya, 14. Ignoring the elegant array, her husband Kazuo grabs a cup of coffee and a cigarette, turns on the television, and immerses himself in the baseball scores and the weather report before walking to the train station. Though Kodaira City is a Tokyo suburb, Kazuo will have an hour-long commute into central Tokyo, and the book warehouse where he works. The Ukitas own a car, but it's impractical to drive into the city.

Both girls slouch over the low table in the living room, sipping cups of tea, as Sayo serves their breakfast and kneels to eat her own. She has already prepared Maya's two school-lunch bento boxes with food she cooked along with last night's dinner. In one, pieces of grilled fish and lightly steamed green beans flank a portion of white rice, all arranged with perfect symmetry. The second box holds four whole strawberries, two red cherries, and thin slices of Fuji apple spread out like a fan. Sayo covers the two bento boxes and slips them into Maya's backpack, along with her chopsticks. Mio will eat lunch with her friends at one of the many fast-food restaurants near her school—McDonald's, Mos Burger, Lotteria, KFC, DomDom, Wendy's, or Yoshinoya. Neither daughter is expected to pick up her breakfast dishes. "Their responsibility is to do well in school," says Sayo as she cleans up after them. The girls head to the train station for trips in opposite directions, and Sayo will soon follow to do the day's shopping. Japanese train stations serve as the nucleus of Tokyo's suburban cities, and are surrounded by shops and restaurants.

The streets are quiet. Sayo and the other housewives in her neighborhood silently ride their bikes toward the train station to buy the freshest food they can find.

FIELD NOTE

Japan is one of my favorite places to eat. Even the cheap udon and soba noodle places are terrific. And the revolving sushi bars and all-you-can-eat-in-45-minutes sushi restaurants are my idea of great fast food.

During my first stay with the Ukita family, Sayo spent an hour or more making each dinner, and that didn't count the shopping. Every day, she rode her bicycle to the neighborhood shopping street near the train station, where there was every type of fruit, fish, and vegetable known to Eastern man. All of it was incredibly fresh, incredibly elegantly displayed, and incredibly expensive. The drawbacks to eating with the Ukitas were the low table, which was hard on my knees (sitting cross-legged), the omnipresent blaring wide-screen TV, and Kazuo's habit, which he shares with millions of other Japanese salarymen, of quietly downing prodigious amounts of Jack Daniels, beer, and sake.

Nearly a decade later, when I visited them again, Kazuo was still at the Jack Daniels, despite a recent kidney operation. Their daughters had grown up: Mio was in college, majoring in biology, and shy Maya was finishing high school. Sayo still rode her bike to the shopping street (even if she wanted to drive, parking is impossible). She works so hard in the kitchen that this time we wanted to give her a break. So we took her out for sushi at a little place down the street, where we sat at little tables and were served by the little lady that owned the little business that featured completely ordinary—which is to say, extremely good—sushi. — Peter

Unlike the western fast-food companies where the food generally stays the same year-round, menus at Japanese chains change with the season. Eating seasonally is a longstanding Japanese tradition, both to get foods at their most flavorful and because foods that are out of season are even more expensive than the normally high prices in this island nation.



FAMILY RECIPE

Sayo Ukita's Sukiyaki

Approx. 3 cups *dashi* (Japanese fish broth)

2-3 T vegetable oil

1-2 lb beef, thinly sliced on the diagonal

3-5 T sugar

3 fl oz sake

1/4 head of baby bok choy (Chinese white cabbage), cut into 2" pieces

11 oz *konnyaku* (yam cake) cut in 1 x 4" pieces

2 *negi* (leeks), cut into 2-3" pieces

4-6 shiitake mushrooms, halved lengthwise

1 big bunch spinach (approx. 1-2 lb)

11 oz *tofu*, cut in 1" cubes

- Prepare a portable cooking facility, such as a fondue pot or an electric frying pan or wok, and place on dining table.
- Make *dashi*; either 1) simmer *dashi* "teabag" in 3 cups water for 10 minutes or 2) simmer 1 x 2 x 2" piece of *konbu* (dried kelp) in 3 cups of water for 10 minutes, remove from heat, add 1/2 cup bonito flakes, let mixture steep for 1 minute, then strain out *konbu* and bonito flakes.
- Set pan to medium-high and add vegetable oil. Heat until oil is hot.
- Add beef (lay flat, so pieces do not overlap), then add sugar and sake and cook for about 2-3 minutes.
- Add half the *dashi* and a portion of vegetables and *tofu* (fill pan, but do not overcrowd). Keep different items in their own part of pot. Simmer until meat and vegetables are cooked through. Adjust taste by adding soup stock, sugar, and/or soy sauce.
- Pluck out cooked vegetables and meat, adding new pieces at the same time, cooking as in previous step until all ingredients are used up.
- Note: Sukiyaki usually mixes soy sauce, sugar, sake, and *dashi* to create its sweet and salty taste. The Ukitas use less soy sauce and sugar than most Japanese families, although they use *dashi*.



JAPAN

- Population: 127,333,002
- Population of Metro Tokyo: 33,750,000
- Population of Kodaira City: 175,585
- Area in square miles: 145,844 (slightly smaller than California)
- Population density per square mile: 873
- Urban population: 66%
- Life expectancy, male/female: 78/85 years
- Fertility rate (births per woman): 1.3
- Caloric intake available daily per person: 2,761 calories
- Annual alcohol consumption per person (alcohol content only): 6.6 quarts
- Year in which beer-vending machines were voluntarily banned: 2000
- GDP per person in PPP \$ (Purchasing Power Parity: an adjustment for what equivalent local goods would cost in the U.S.): \$26,940
- Total annual health expenditure per person in \$ and as a percent of GDP: \$2,627/8
- Overweight population, male/female: 25/19%
- Obese population, male/female: 2/2%
- Percent of population age 20 and older with diabetes: 6.7%
- Meat consumption per person per year: 97 pounds
- Fish consumption per person per year: 146 pounds
- McDonald's restaurants: 3,891
- Big Mac price: \$2.50
- Cigarette consumption per person per year: 3,023

Exemplifying Japan's lively and adventurous food culture, Osaka's Dotomburi Street (*above left*) offers an all-squid eatery, an all-crab place, and a restaurant specializing in *fugu* (poisonous blowfish). In a more traditional setting, a couple shares a snack (*right*) in a teahouse at a Kyoto temple. Walking in Tokyo's hip Harajuku area, a girl (*bottom left*) clutches a *kurepu*—a crepe.



The Matsuda family in the kitchen of their home in Yomitan Village, Okinawa, with a week's worth of food. Takeo Matsuda, 88, and his wife Keiko, 75, stand behind Takeo's mother, Kama, 100. The couple's three grown children live a few miles away. Cooking methods: gas stove, microwave. Food preservation: small refrigerator-freezer.

Hara Hachi Bu

ONE WEEK'S FOOD IN OCTOBER

Grains & Other Starchy Foods: \$22.72

White rice, 6.6 lb; bread, 12.4 oz; macaroni salad, 3.5 oz; udon noodles, 2.8 oz.

Dairy: \$8.09

Milk, 1.1 qt; Meiji Bulgarian Style yogurt, 1.1 lb; Yukijirushi cheese, sliced, 5.4 oz; Yukijirushi cheese wheel, 5.3 oz; butter, 2.5 oz.

Meat, Fish & Eggs: \$32.32

Eggs, 20; Spam, 1.5 lb; fish paste, boiled, 1.2 lb; tuna, canned, 14.1 oz; red sea bream, sliced, 13.3 oz; bacon, sliced, 9.2 oz; mackerel, fresh, 8.8 oz; salmon, fresh, boneless, 8.4 oz; pork, sliced, 8 oz; round herring, dried, 6 oz.

Fruits, Vegetables & Nuts: \$67.99**

Apples, 2.2 lb; oranges, 2.2 lb; persimmons, seedless, 14 oz; hackberries, 7.1 oz; pumpkin, 5.3 lb; goya (bitter melon), 4 lb; often homegrown: yellow onion, 2.6 lb; cabbage, 1 head; tomato, 1.8 lb; avocados, 3; okra, 1.3 lb; bok choy, 1 lb; carrots, 1 lb; corn, canned, 15.2 oz; salad greens, 9.6 oz; taro, cooked, 8.1 oz; red kidney beans, 7.1 oz; oshiro natto (fermented bean curd), 7.1 oz; soybeans, 7.1 oz; yam leaf, 7 oz; Super Sweet corn, canned, 5.5 oz; bean sprouts, 5.3 oz; enoki mushrooms, fresh, shrink-wrapped, 3.5 oz; konbu (kelp) stock, 3.5 oz; wheat gluten, 3.9 oz; chili peppers, 2.8 oz; konbu (kelp), 2.1 oz; Aso wakame (seaweed), 5 oz. Purchased or picked wild: nigana (bitter greens),* 13.1 oz; yomogi (mugwort),* 9.6 oz; tsuru murasaki (Malabar spinach),* 2 oz.

Condiments: \$44.28

Red miso, 1.3 lb; Okinawan honey, 1.3 lb; salt, 1.3 lb; 5&B golden curry, 1.3 lb; Mitsukan apple vinegar, 16.9 fl oz; soy sauce, 12.2 fl oz; bonito shavings (dried fish), 10.6 oz; bitter orange juice, 10.2 fl oz; ketchup, 10.2 fl oz; Topvalu BBQ sauce, 10.2 fl oz; Econa salad oil, 8.8 oz; purple potato powder, 7.1 oz; jam, 4.9 oz; sesame dressing, 4.1 fl oz; pepper, 0.7 oz.

Snacks & Desserts: \$7.88

Werther's candy, 11 oz; Meiji pudding, 10.6 oz; ginger candy, 6.4 oz.

Prepared Food: \$3.15

May Fair beef stew, canned, 12 oz; gyoza (meat dumplings), 7.4 oz.

Beverages: \$27.83

Asahi beer, 6 12-fl-oz cans; Minute Maid fruity vegetable juice, 6 12-fl-oz cans; Seakuwasar citron juice, 1.6 qt; awamori (Okinawan rice liquor), 24 fl oz; Orion beer, 12 fl oz; UCC Mocha Blend coffee, 3.5 oz; tea bags, 50; tap water, for drinking and cooking.

* Homegrown

Food Expenditure for One Week:

22,958 yen/\$214.26

**Total value of homegrown foods, if purchased locally: \$7.25

TAKEO MATSUDA'S MOTHER KAMA danced at her own 100th birthday party six months ago, surrounded by her children, grandchildren, and great-grandchildren, in the home she shares with her son and his wife Keiko. Kama's whole family lives within a 15-minute drive of the home on Okinawa's main island, where she has lived since World War II.

It doesn't require a celebration to bring the family together. A surefire draw for even the youngest grandchildren is the traditional Okinawan food that Keiko, 75, cooks every weekend. "They crave the taste of their childhood," she says to us, as she rinses a special favorite—*tsuru murasaki* (Malabar spinach), which grows freely on the island. "Healthful grass," she calls it, though it's not really a grass at all. Although its leaves taste spinach, the plant is actually a relative of the sweet potato.

She chops the *tsuru murasaki*, then mixes in fresh Okinawan tofu, which is firmer than mainland Japanese tofu, and a little citrus-flavored vinegar. The uncooked greens have a slightly bitter flavor that blends deliciously with the vinegar and the creaminess of the tofu. She sets the mixture aside and assembles a dish of two other wild greens—*yomogi* (mugwort) and *nigana*, a long-leaved bitter lettuce. Next, she washes *goya* (bitter melon), "another long-life food we eat," she says. She'll stir-fry the *goya* with tofu, a little bit of pork, and egg. She has made us a healthful lunch—lots and lots of vegetables and very little fat.

During the rest of the week, the younger Matsudas, who live on their own, eat a wider variety of foods, including Western fast food. This troubles Keiko. Okinawan cities are teeming with McDonald's, KFCs, and A&Ws, and though she has never eaten at any of them, she's sure she doesn't want to: "I think it isn't very nutritious," she says. What exactly does she think Western food consists of? "A lot of bread, I think. We only see bread as a dessert or snack—not a main food." Her husband, Takeo, is quick to temper her comments with his own, and speaks fervently about the food that the Americans sent to Okinawans after World War II. "We weren't able to grow much at that time," he says. "America gave us many vegetables." America has given the Okinawans canned food as well: Spam and canned tuna are Matsuda grocery staples.

Okinawa, the main island of Japan's Okinawa Prefecture, was part of an archipelago that was the Ryukyu Kingdom before it was annexed by Japan in the late 1800s. The island, a curious mix of Ryukyuan, Japanese, Chinese, and American culture, has become a beachhead for Western fast food, largely because it has been the site of a large U.S. military contingent since the end of World War II. But fast food is an unlikely partner to the local cuisine, which is based on fresh local produce, and to a traditional culture in which moderation is the mantra.

Hara hachi bu—"eat only until 80 percent full"—say older Okinawans. The island has been the focus in recent years of researchers trying to discover why a disproportionately large number of Okinawans are living to age 100 or more. Some scientists attribute this longevity to the island's unique, unbeatable combination of healthy eating habits, exercise, and low stress, as well as a community commitment to ensuring the quality of its older citizens' lives.

At almost 101, Kama spends her days in a wheelchair, but still goes off several times a week to the senior daycare center to see friends. Okinawan nursing homes and daycare centers, both public and private, seem wondrous places—vibrant and lively—where friends gather for a foot massage, water volleyball, a haircut, or lunch. Indeed, the centers are an integral part of the community, and celebrations abound for its people's different stages of life. It's not nirvana for the elderly, but certainly accords dignity to the aging. Keiko takes in stride the age-related changes in her mother-in-law's health and disposition: "After [age] 97, it's like having a big friendly child to be with every day," she concludes.

Though she has always lived with her mother-in-law, Keiko wonders whether any of her children will live with her when she's too old to care for herself. "Life has changed," she says. "When I was in my twenties, people were still willing to [live] with their parents, but that's happening less now. I don't know what will happen when I'm older."

THE (REAL) SIMPLE LIFE

Not all of Okinawa is overrun by the modern world. Roughly half the island is rustic, traditional, and downright lush—especially in the north, after the four-lane toll road ends and the breathtaking ocean

views begin. It is here that we happen upon 90-year-old Haruko Maeda, sprawled comfortably in the front yard of her home in Ogimi Village, cutting the grass with a pair of hand shears. "I'm getting this done before it gets too hot," she explains, as she quickly straightens up to greet us. Her son arrives from his home in Naha city and heads into her house, waving hello, and obviously not finding it unusual to see his mother on her knees in the yard with a pair of clippers. "That's my oldest son," says Haruko, who has six children, half of whom live on Japan's main island. "Do they visit often?" I ask. "They always come back," says Haruko. "Every summer, they all come to swim in the ocean." Do you swim with them? "I'm the coach," she says, grinning. She's also the lifeguard—keeping tabs on the youngest great-grandchildren as they splash around in the surf.

We spy bitter melon in her garden; the cucumber-like, knobby green vegetable with its plump leafy vine is tied to a trellis. "How do you prepare your *goya*?" I ask. "I cut it thin," she says, "then sprinkle it with vinegar, and add tofu, and sometimes octopus." Do your children like it? "Oh yes," she says. "They took some of my seeds with them to the mainland and grow it in their gardens." She saves her own seeds and replants them from year to year. "They grow well, unless I lose them, during typhoon season." A friend walking by the gate stops to ask Haruko if she wants to go with her to pray at the nearby Shinto shrine. "Not now," she says, pointing at her house. "My son has come. I'll see you there later." We say our good-byes to Haruko, as we're late for lunch.

A MEAL WITH MATSU

We're heading for a small restaurant in Ogimi Village called Emi's Shop, where visitors can try traditional healthful food cooked in the Okinawan manner. The set menu is based on foods that promote longevity. A hand-worked sign points out that different foods are prepared daily, depending on what's in season. We've asked the owner, nutritionist Emiko Kinjo, to invite a friend to lunch with us, and she has—96-year-old Matsu Taira shows up and parks her walker by the door. Emiko invites her to take a seat. The meal, served in bento boxes, features fresh green seaweed "tofu" (no soybeans in this particular tofu—just seaweed), along with purple Okinawan sweet potatoes and local lime, bitter melon with fresh soybean tofu,

OKINAWA

- Population: 1,318,220
- Population of Yomitan Village: 36,000
- Area in square miles of Okinawa, main island and total prefecture: 454/871 (the main island is slightly less than one-third the size of Rhode Island)
- American military forces killed in The Battle of Okinawa during WWII: 12,000
- Japanese military forces killed in The Battle of Okinawa during WWII: 107,500
- Okinawan civilians killed in The Battle of Okinawa during WWII: 142,000
- American military forces now stationed on Okinawa: 25,000
- Land on the main island covered by U.S. military bases: 20%
- Urban population: 71%
- Life expectancy, male/female: 77/86 years
- Rank in the world of life expectancy on Okinawa: No. 1
- Number of centenarians per 100,000 people on Okinawa: 33.6
- Number of centenarians per 100,000 people in most industrialized countries: 10
- Percent of centenarians that are female on Okinawa: 85.7%
- In all of Japan, rank of Okinawans under 50 for levels of obesity and risk of liver disease, cardiovascular disease, and premature death: No. 1

FIELD NOTE

I work better with fuel in my tank and because we started early each morning I was dismayed to find the only restaurant open in our part of Okinawa before 10:00 a.m. was Mister Donut, a Japanese chain. Thinking that doughnuts would be better than nothing, we slinked in and were confronted by a display case that would have made any U.S. cop think he had died and gone to heaven. What was the least unhealthy thing we could order? Pondering our choices, I noticed a sign showing Mister Donut was on the same wavelength. "Pon de Ring" was the name of a soy-flour doughnut shaped like a ring of pop beads. Inside was a layer of either poppy seed or orange cream. They were incredibly good: slightly chewy, not too sweet, and theoretically good for you.

Another unexpected treat on this tropical island came from the sea. To a dedicated fish-lover like myself, the iced-down displays of rainbow-colored seafood in Naha city's largest traditional market looked like candy. After we learned that the top floor of the market consisted of restaurants that cook fish to order, we picked out half a dozen interesting-looking fish and took them up. The cooks cut up half of them and served them raw as sashimi; they steamed the others whole with ginger. Dipped in soy sauce that we had spiced up with a liberal amount of *wasabi*, the strips of raw fish were delicious. Disappointingly, the brilliant colors of the fish disappeared in the steam. In my opinion, when you cook a fish something invariably gets lost in translation. But the cooked fish in the top-floor market restaurant was bone-sucking good, too. — Peter

At a "longevity restaurant"—an eatery claiming to serve food that will make patrons live longer—in Ogimi, Okinawa, 96-year-old Matsu Taira (above right) finishes the long-life lunch with a jellied fruit dessert made from bright-red acerola berries.

Among the treats in the menu are (bottom right) silver sprat fish, bitter grass with creamy tofu, daikon, seaweed, tapioca with purple potato and potato leaves, and pork cooked in the juice of tiny Okinawan limes.



FAMILY RECIPE

Keiko Matsuda's *Hijiki Jyushi* (Rice Cooked with Brown Seaweed)

18 oz Japanese rice

1 oz dried *hijiki* (brown seaweed)

21 fl oz *dashi* (Japanese fish broth)

1 small carrot, julienned

6 oz pork, cut into thin strips

3 T soy sauce

salt

1 small leek, cut into slivers

- Wash rice and drain in sieve or colander.
- Wash *hijiki* and remoisturize in abundant water for 20 minutes. Drain in sieve or colander.
- Make *dashi*; either 1) simmer *dashi* "teabag" in 3 cups water for 10 minutes or 2) simmer 1 2 x 2" piece of *konbu* (dried kelp) in 3 cups of water for 10 minutes, remove from heat, add 1/2 cup bonito flakes, let mixture steep for 1 minute, then strain out *konbu* and bonito flakes.
- Place *hijiki*, carrot, and pork into electric rice cooker. Add enough *dashi* to cook rice (exact amount will vary by type of rice cooker). When that mixture comes to a boil, add rice, soy sauce, and salt to taste; continue cooking until rice is done.
- When rice is cooked, let it steam for 10 minutes; do not remove lid. Then stir ingredients together. Serve immediately, garnishing individual portions with leek.
- Variations: Almost limitless. Almost any leftovers can be chopped up and added into the rice.

pork with lime juice, pickled vegetables, and copious amounts of green tea. We're fortunate that Matsu can join us on short notice. Since the weather wasn't too steamy today, she might have been working in her field. She's happy to be here because she enjoys any opportunity to socialize: "It keeps me young," she says. "But," she adds, looking around, "it would be better if everyone here were old—the stories would be better." Laughter all around, even from passersby, as Matsu sips her tea. She picks up her chopsticks and tries the seaweed tofu. "You made this? It's good," she tells Emiko.

The seaweed sparks a memory of her youth: "You know, there used to be a lot of seaweed in the ocean, right out there," she says, pointing west toward the back of the restaurant. "When we were small, we used to pick it up from the shore and dry it. Maybe the breakwater killed it, or pollution," she guesses as she tries a piece of Emiko's bitter gourd—a food she prepares for herself every day when it's in season. "Do you ever dry it to have in the winter?" I ask. "No, we don't do that," she says, frowning. "We dry daikon and other vegetables, but not *goya*."

Matsu does not shop in a supermarket; there isn't one in Ogimi Village. She grows her own vegetables and gets everything else she needs from the local food cooperative. She has trouble comprehending that there are people who don't grow any of their own food, and she can't imagine actually buying vegetables herself. She's fascinated to learn that there are people who don't know anything about agriculture. She returns to that fact throughout lunch, and it worries her. "They don't know anything at all?" she asks several times.

Has Matsu ever had fast food? Everyone at the table, in fact everyone with any fast food experience at all, tries to explain the concept of fast food to her. A few moments later, she recollects eating some bread one time that had a kind of Japanese brown jam on it. "Was that fast food?" She asks. She never does truly understand the concept of a hamburger, and it's probably just as well.

Matsu takes a bite of ripe yellow papaya and says she likes the flavor very much. It's also served green, but she prefers the yellow. "Our ancestors said it was good for the heart," she says as she takes another bite. "You know," she says, "we didn't have doctors or medicine long ago, so we looked at all these vegetables that we had and tried to figure out what was good for this or that. There is a bitter grass we have that if you pull it up and eat the roots, it's good for an upset stomach.

This [knowledge] was handed down from generation to generation."

Matsu's husband was a fisherman after World War II. "Every man was," she says. "They would come in from the ocean and we [women] would gather on the beach, collect the fish, and take them to the market. We would sell them, and then buy rice and vegetables. At that time, we weren't able to farm much." What was her favorite fish? "Any fish," she says. "Sometimes, my husband would catch a big shark, and we would sell part of it and keep some to dry."

She recalls that potatoes were the principal food when she was young—*beni imo*, the purple sweet potatoes that Emi is serving today. "I still love them. I eat slices of it every day. It's very healthy," she says. "Tell people they should plant their potatoes after the rain, when the ground is soft," she advises us, still hopeful that everyone, everywhere will suddenly decide to plant a garden. We don't burst her bubble.

BITTER PILL

Though many of Okinawa's grandparents and great-grandparents live into their late nineties and beyond, some in the next generation may not. According to Okinawa Prefecture statistics, Okinawans under the age of 50 now have higher rates of obesity, and a greater risk of cardiovascular disease, liver disease, and premature death, than the overall Japanese population.

A decrease in physical and mental stimulation, along with the loss of the age-old human desire to be needed, could also be a factor. Many Okinawans used to work into their nineties, farming, and weaving *bashofu*, a fine fabric made from a local banana fiber. *Bashofu* weaving was a home-based craft, and highly valued, but there are few, if any, weavers producing the fabric at home anymore. The workshop of Toshiko Taira, 87, and her daughter, in the northern Okinawa village of Kijoka, is virtually all that is left of the art.

But perhaps the finest legacy of Okinawan longevity is that it's a sharing culture. There's even a word for it—*kari*. "When I was small," says Takeo Matsuda, "and the nation wasn't yet wealthy, it was just common sense that everyone shared. If a family grew more potatoes than they needed, they would share them. It was a very cooperative system." Though life has changed a lot in Okinawa since he was a boy, he's happy to see that quality in his children—whatever they're eating.

WHY SO OLD?

In 1976, medical researcher Makoto Suzuki was fascinated to learn that Okinawa had the world's highest life expectancy and the highest percentage of centenarians in the world. Reports of big centenarian populations in the Caucasus Mountains, in Pakistan's Hunza Valley, and in Ecuador's Vilcabamba have proven to be exaggerated. But in Okinawa, Suzuki discovered, the claims were verifiable—the government has maintained birth registers since 1879. In most industrialized countries, just ten out of every 100,000 people make it to 100. In Okinawa, the figure is 33.6—three times as high. Moreover, these very old people have very low rates of dementia, cancer, and cardiovascular disease. How do they do it? Suzuki wondered. Is there a lesson here for the rest of the planet?

The Okinawa Centenarian Study (OCS), begun by Suzuki, has examined 675 centenarians, looking for clues to their longevity and good health. The researchers knew from the beginning that they were unlikely to find definitive answers—war and migration have affected the island's population in ways that are impossible to completely account for. But Suzuki came to believe that the Okinawan miracle is due, at least in part, to the island's combination of a low-paced, stress-free life: regular exercise (mainly martial arts); and a good diet (lots of vegetables, fruits, tofu, and fish—little meat and dairy). In addition, many Okinawans believe in *hara hachi bu*—"eat only until 80 percent full." The body requires a long time to register satiety, so that Okinawans who live by the principle of *hara hachi bu* don't overeat.

These ideas aren't surprising. Yet they seem difficult for humankind to follow. Despite the living example of their parents, younger Okinawans are abandoning their forebears' healthy habits in the world of fast food and couch-potatodom. In consequence, researchers say, they may end up with shorter life expectancies than their parents. A demographic anomaly. —Charles Mann