

## All You Ever Wanted to Know About Bananas

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#### STORY AT-A-GLANCE

- > Bananas are one of the most common and popular fruits, and are nutritious due to high amounts of vitamin B6, potassium, dietary fiber, manganese, vitamin C, biotin and copper
- > The United Fruit Company (UFCO), founded in 1899, based in Costa Rica with offices in Boston, was very instrumental in bringing bananas into the American consciousness
- > Banana plantations in Central America were essentially destroyed by a fungus that caused Panama disease, causing rot to the plant's roots, which cut off the water supply and did devastating damage to banana production

## Editor's Note: This article is a reprint. It was originally published August 21, 2017.

The humble banana is one of the most popular fruits in the world. Tasty, inexpensive and with its own clean and protective carrying case, it's the perfect nutritious snack, even for busy people, and kids love it.

Although they're picked while still green, bananas continue to ripen, but to speed up the process at home, putting them in a brown paper bag for a few days does the trick. Bananas should be stored at room temperature, not refrigerated or left in an area where the temperature drops to refrigerator-like temperature, as bananas will turn an unappetizing black shade and become mushy.

Bananas are an excellent source of vitamin B6, with plenty of dietary fiber and potassium, manganese, vitamin C, biotin and copper. They're pretty high in carbs and sugars, though, so anyone watching their weight and sugar intake, or with signs of

insulin resistance, should limit their banana intake. One little-known fact is that bananas are on the short list of foods that help fight stress.

Bananas, especially when they're green, can be as much as 80% starch. However, unripe bananas have been used to successfully treat diarrhea as they're a digestive-resistant starch. One study notes:

"Bananas have been reported to contain a significant amount of RS [resistant starch], with levels decreasing throughout ripening, and RS is considered dietary fiber according to the current definition."

## A Little Background on the Banana and the United Fruit Co.

The United Fruit Company (UFCO) was founded in 1899, with its tropical growing operations based in San Jose, Costa Rica, and business offices in Boston. Bananas had been a relatively unfamiliar crop in America, but with the involvement of several enterprising businessmen, that changed. Curriculum from the University of Maryland explains that UFCO:

"... An extremely successful American-owned and run company, profited greatly from investments it made in Guatemala. The business of United Fruit was bananas, and from bananas it had built a business empire in the Central American nations of Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama."<sup>2</sup>

Within a few decades, shipping operations to the U.S. began, until the crop was being sold within hours of docking on the east coast, still on the stalk. At about the same time, the U.S. government became interested in the nutritional value of bananas and began sponsoring programs to get more of them into the American diet, which fueled sales.

UFCO did its best to make bananas an "everyman" type of food, but was nonetheless considered a ruthless corporation. A New York Times review on Peter Chapman's book "Bananas: How the United Fruit Company Shaped the World" describes the company's monopoly:

"Abroad, it coddled dictators while using a mix of paternalism and violence to control its workers. As for repressive regimes, they were United Fruit's best friends, with coups d'état among its specialties,' Chapman writes. 'United Fruit had possibly launched more exercises in 'regime change' on the banana's behalf than had even been carried out in the name of oil."

UFCO's domination encompassed several countries in the Western Hemisphere, especially due to its diversification to other produce such as pineapples, tomatoes and cantaloupes, which helped it to create what became known as a dangerous and widespread "banana republic."

In the early days, banana crates shipped from Panama and other tropical countries often included crickets, cockroaches, spiders and snakes, and the occasional human stowaways, who sometimes jumped up and disappeared down the block before they could be stopped.<sup>4</sup>

# Disease, Monopolies and Politics Affect Banana Distribution

But in 1903, a United Fruit timeline<sup>5</sup> notes, banana trees were attacked by a fungus that caused a condition known as Panama disease, devastating United Fruit's plantations in Panama, essentially causing rot to the plant's roots, which cut off the water supply. The use of tools in the soil, they finally realized, spread the disease. By 1960, thousands of acres of banana plantations were eventually abandoned.

When Panama disease struck, a banana variety known as the Gros Michel was basically wiped out, but the Cavendish, a variety that became its replacement, seemed immune. After relinquishing what had become about 90% of the total banana market when it went under in 1970, UFCO morphed into the present-day Chiquita Brands International.

Details regarding the company's history would not be complete without mention of the fact, as the Times' "Bananas: How the United Fruit Company Shaped the World" book review divulges, that Chiquita "has admitted to paying nearly \$2 million to right-wing death squads in Colombia."

Serious banana distribution in New York City began with an Italian immigrant, Antonio Cuneo, known as the "Banana King," who was renowned for getting rich off New York's banana market in the late 19th century before his death in 1896.

New York is now supplied with bananas trucked in from out-of-state ports, such as one in Wilmington, Delaware, where Dole and Chiquita set up their operations years ago. Twenty million bananas are distributed around New York City and outlying burgs every week, according to The New York Times.

The 40 container loads shipped from Ecuador and around the Panama Canal constitutes about a fifth of that total. Wherever the bananas come from, their arrival in the city is just the first leg of the journey; the next leg is a wide loop for distribution around the city. As the Times notes:

"They may be handled by customs officials in Brooklyn, blasted with a ripening gas in New Jersey, haggled over at an enormous produce market in the Bronx and finally taken in an unmarked truck, at night, to a fruit stand near you ...

In most of the country, the unseen, nocturnal business of ripening and distributing bananas is performed by grocery chains like Safeway. In New York, though things may be headed in that direction, much of the work still falls to local banana purveyors."

Today, small, family-owned businesses make around a dollar per box, even though they supply every grocery store, fruit stand, airport and hospital within a wide radius. The city still has banana boats, often delivering cargo from Ecuador with such unfamiliar varieties as Belinda, Bonita and Selvatica.

But no matter where they come from, they go through a "radiation portal" at the terminal, because the fruit is "slightly radioactive" due to their potassium content. For the sake of assurances, Forbes notes that you'd have to eat 274 bananas a day for seven years to be killed from banana-related radiation poisoning. Bananas shipped to port arrive, as the Times quips, "not taxi yellow, but greener than an outer-borough cab and as hard as hammers."

### **Cavendish - The Most Common Banana**

Cavendish, categorized as a "dessert" banana, is the cultivar seen most often for sale in U.S. grocery stores, and it's been the market giant since the 1970s. Their taste and texture have been described as mild and mushy, respectively, and not necessarily the tastiest, according to banana historian and author Dan Koeppel.<sup>9</sup> Other varieties offer a few options, however, according to Saveur, <sup>10</sup> The Spruce<sup>11</sup> and The Straits Times: <sup>12</sup>

**Cooking bananas** — Sold green, these are almost considered potato-like and can be roasted or steamed like a starchy vegetable.

**Red** — This one wins the "most delicious" prize most often in the U.S. and is similar to a Philippine staple variety known as Lacatan. Sweet and creamy, they're a dark magenta shade with dark streaks, and bruise easily.

**Churro** — Like a squatty version of the Cavendish, these are sometimes marketed as "chunky bananas." Grown in Mexico and found in Latin American markets in the U.S., they taste best very ripe for sweetness with a hint of sour.

**Pisang Raja** — Also known as Musa Belle bananas, these are popular in Indonesia and often used to make banana fritters.

**Plantain** — Dryer and not as sweet as the Cavendish, these are often used as an entrée food rather than a dessert.<sup>13</sup>

**Manzano** — Native to Central and South America, it's often sold in Asian specialty stores and is actually a subspecies of apple bananas; it's firmer than a Cavendish with a strong tart apple aroma that quickly turns sweet.

**Lady Fingers** — Smaller and sweeter than the longer, milder Cavendish, these 5- to 6-inch treats are good for portion control, especially for kids. They can even be grown in a pot.

**Baby** — A small variety, these are marketed with different names; Chiquita markets it as the Pisang Mas, from Malaysia. Dole has two types — Orito and Ladyfinger, the latter being the sweetest. The skins are brown with dark streaks when ripe.

**Pisang lemak manis** — Aka 40-day bananas, they mature quickly, have green, tapered tips when they're unripe and are suitable both fresh and cooked.

**Pisang rastali or kesat** — This variety is just 4 to 6 inches long and sturdy, with reddish black mottled skin, jelly-like flesh and an apple-like acidity.

**Ae Ae** — One of the most visually interesting varieties, their peels are green, white and variegated; they can be eaten raw or cooked, and are usually more expensive.

**Praying hands** — This is one of the oddest-looking types, especially in a bunch. It's very fat with a creamy texture; the flavor is very sweet-tart and fruit-like.

**Pitogo** — Definitely an odd-looking variety, these look more like a fig than a banana, grow on 10- to 12-foot high plants in tight clusters, and are more flavorful and nutritious than the Cavendish.

**Pisang merah** — Plump and rather small, these are mild and creamy, blacken only slightly and are quite soft when ripe.

### **How Bananas Go From Green to Yellow — A Controlled Process**

As noted, bananas take weeks to ripen on the tree, but they're chopped down, still quite green, so they'll be less prone to damage in their respective shipping containers. Upon arrival, cardboard boxes of bananas are taken to dark, cool ripening rooms and stacked, floor to ceiling.

Kept at 56 to 66 degrees Fahrenheit, each ripening room contains a thermometer to monitor the ripening process, and an ethylene generator — using a synthetic version of the hormone that naturally ripens them — to both speed up and control the process. It

wasn't always this organized, and, as the Times notes, there were some accidents along the way:

"Ethylene is combustible, and in 1936, the Pittsburgh Banana Company building exploded, causing it to rain bananas in the city's Strip District. Today ripening can be slowed or sped up by tapping a touch-screen ... The ripening rooms are kept between 56 and 66 degrees [F]. Too cool, and the bananas get chilled, turning gray and bark-like ... Too warm, and though they might look fine, they would be mushy inside."14

Digital controls allow a three-degree difference both up and down, depending on whether sales are up or down; cool if sales are down and warmer if sales are good. The entire ripening process takes about four days, but that's just for in-city or near-city delivery to restaurant suppliers, groceries and wholesalers. Everyone refers to a ripeness chart from one through seven — green on one end to yellow with brown spots, denoting "too ripe," on the other.

# **Unripe Banana Options**

Bananas' nutritional content changes depending on their ripeness, and they're at their healthiest in their unripened state. This is when they contain higher amounts of digestive-resistant starch, which is important for optimal gut health.

Most people don't like the taste and texture of unripe banana, but when prepared properly and combined with other foods it can be quite tasty.

### Sources and References

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