

# Plastic Straws Suck!



Use Paper,  
Steel,  
Bamboo

# THE LAST STRAW?

**Regulations and ethical café owners are putting an end to plastic straws**

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**ON APRIL 13, CHICAGO'S BACKLOT** Coffee announced to patrons they would no longer be stocking plastic straws at their shops in Old Irving Park and Evanston. For Backlot customers choosing to dine in, cold drinks would be served in glassware with stainless-steel straws, while those taking beverages to go would have a choice of paper or commercially compostable straws. Backlot's decision to abandon plastic drinking tubes was inspired by #ShedtheStraw, an initiative of nearby Shedd Aquarium to "protect our waters and the animals that call them home" by "saying no to single-use plastic straws." Supporters also include the Chicago White Sox.

Backlot is one of a growing community of coffee shops and cafés across the country and around the world turning their backs on plastic straws, a group that includes both small, independent cafés like Red Buffalo Coffee in Silverthorne, Colo., and larger retailers like Joe Coffee Company, a collection of 18 coffee shops scattered across New York City and Philadelphia. Not all are making the move by choice. Some, like cafés in Culver City, are reacting to municipal ordinances limiting single-use plastics including straws, while others, aware of the mounting popularity of plastic bans, are getting ahead of the curve.

Here, we'll take a closer look at the motivations behind the move away from plastic straws, as well as some of the alternatives currently available on the market. But first, the backstory.

The straw is one of the oldest of human eating utensils. Drinking tubes made from silver, gold, and lapis lazuli have been recovered from Sumerian tombs. These early straws were used to bypass the debris of fermentation that floated on top of beer.

Marvin C. Stone is credited with inventing the modern straw. He disliked how straws made of rye stalk and wheat shaft left a gritty residue in, and altered the flavor of, his beloved mint julep. Marvin submitted a patent for a manila paper straw covered with paraffin, a petroleum-based wax, in 1888. Within the year, his Lafayette, La., factory was reportedly producing 2 million straws a day.

Straws became increasingly common in the early 20th century, in part for public health reasons; straws offered a way to avoid contact with potentially contaminated glassware. By 1924, 4 billion straws a year were being manufactured in the United States. Their popularity only grew in the 1950s with the rise of fast food and take-out culture.

Plastic straws began to replace paper drinking tubes in the 1960s. Plastic was valued for its durability; even with a coating, paper straws, like their organic predecessors, eventually disintegrated into drinks. Clear plastic straws also had a novelty appeal, allowing users to watch their beverage travel from glass to mouth. Early plastic straws were made from polystyrene. Today, plastic straws are typically made from food-grade plastics like polypropylene or polyethylene. All are petroleum or natural gas byproducts.

In the last decade, the plastic straw has come under fire from environmental organizations around the world. It is commonly reported that Americans use 500 million straws a year (though there are questions about the accuracy of this number). Most plastic straws are used only for a few minutes and then discarded. Straws are almost never recycled, so they live on both in and beyond landfills, outlasting their use and user many times over. This is to say nothing of the environmental cost of their production.

Much of the public focus has been on the consequences of plastic waste for aquatic ecosystems; a video of a straw being removed from the nose of a sea turtle went viral in 2015, galvanizing the anti-straw movement. What has received less attention and what is less well understood is how our passion for plastic is affecting terrestrial ecosystems.

The straw, to borrow from Martin Bourque, executive director of the Ecology Center in Berkeley, Calif., is "just the tip of the wasteberg." Straws represent about 0.02 percent of the plastic waste that ends up in the ocean each year. So why have they garnered such attention? Certainly the video of the sea turtle played a role, but equally important is the

belief that straws are an unnecessary convenience. And for many people they are—but not for everyone.

Straws, but especially bendable straws, are assistive devices for people with a variety of disabilities and health conditions, including Down syndrome, dementia, and neuromuscular disorders. Straw bans that don't make allowances for people with disabilities are discriminatory. They can be particularly harmful for people with invisible disabilities. If your shop is considering a straw-on-demand policy, it's important that staff be aware that, if requested, appropriate straws (see below) should be provided to patrons without question.

Inspired by snappy campaigns like #TheLastStraw and #StopSucking and a growing awareness of the realities and consequences of plastic waste, many coffee shops and cafés are taking steps to eliminate plastic straws. One of the reasons the anti-straw movement has gained so much traction is that there is a growing number of alternatives to conventional plastic. These include both reusable and single-use options.

Reusable straws are suitable for businesses with dine-in options. They are commonly made from metal, glass, silicone, and bamboo, or a combination thereof. Like plastic straws, reusable straws come in different lengths, diameters, and styles, so you'll have to consider the height of the drinking vessel, as well as the type of beverage being consumed. Because metal, glass, and bamboo options are inflexible, they can be difficult for people with disabilities to use, so if you choose to stock these, it's important to have other types of straws on hand. Paper isn't ideal either for those who need straws because of its short use life.

## Metal straws

The most durable of the reusable straw options are made with metal. Most are stainless steel, though some are made with titanium. They are designed to withstand years of use, while also being stain-free, rustproof, and scratchproof. Stainless-steel straws are dishwasher-safe. They can also be cleaned using a brush that resembles a pipe cleaner. Stainless straws are better suited to cold beverages because they retain the temperature of the liquid. Some users find they impart a metallic taste to drinks, but James Fairbrass, manager of Proud Mary Coffee in Portland, Ore., hasn't found that to be an issue. The renowned roaster and brunch spot—originally founded in Melbourne, Australia, and now operating a popular second brand of the concept in Portland—swapped stainless for plastic in late 2017. "It took some getting used to—having reusable steel straws added one more step to our daily cleaning routine," he says. The process consists of soaking all straws in Puro Caff at the end of the day, giving each a scrub with the pipe cleaner, and then rinsing. "But really, it's so simple and it takes hardly any time at all."

There is also the matter of environmental impact. The manufacturing process for stainless-steel products is energy-intensive and toxic. Look for straws that contain recycled steel to reduce your impact.

## Glass straws

Where stainless-steel straws tend to value function over aesthetics, glass straws often combine the two. They come in different colors and designs. Most glass straws are made with borosilicate (the same product used in Pyrex), which makes them shatter- and break-resistant. Glass straws are suitable for both hot and cold drinks. They are also dishwasher-safe and typically accompanied by a cleaning brush. By weight, the production of glass straws has lower environmental costs than steel. Though some users find them too fragile for their liking, glass straws offer a very clean drinking experience; users also appreciate being able to visually assess the cleanliness of the straw.

## Silicone straws

Food-grade silicone straws provide a more flexible and forgiving reusable straw option. There is no worry of chipping a tooth or breaking the straw. As with the other options, they can be used for hot and cold drinks. Unlike stainless steel, they do not transfer hot or cold. Silicone straws are dishwasher safe, though some users find them harder to clean than the other options. Most people associate straws with cold beverages, but Koffie Straws make a BPA-free silicone straw designed to fit the hole on a portable coffee lid.

## Bamboo straws

Bamboo straws are both reusable and biodegradable, though they have a shorter lifespan than the other reusable options. Provided they have not been treated, they can go straight into the compost when they are at the end of their life; they fray and splinter with time. The best bamboo straws are made from whole bamboo stalks, as opposed to processed or recompressed bamboo. They are better suited to cold drinks; some users report that bamboo leaves a woody taste in hot drinks. Bamboo straws are best cleaned by hand. They should be rinsed immediately after use, then soaked in a food-safe sanitizer before drying them as quickly as possible.

## Paper straws

There are also single-use alternatives to conventional plastic straws. Paper straws are the most environmentally friendly of the various alternatives in terms of their post-use lives. They decompose quickly under a variety of environmental conditions; Aardvark claims their straws break down in as few as 30 days. Not all paper straws are created equal, however. Only those made from 100-percent recycled paper have a small production footprint. Also, some manufacturers use harmful chemicals to prevent the straw from going soggy or the color from leaching into drinks. In some cases, paper straws are lined with the same food-safe film that prevents other paper products like coffee cups from being recyclable. The jury is out on paper straws from a use perspective. Some believe they are an acceptable alternative to plastic. Others find fault with their limited use life, as well as the texture and the taste.

## Bioplastic straws

Offering both durability and flexibility, bioplastic straws look and behave like conventional plastic drinking tubes (to the point that they are often disposed of inappropriately). Bioplastics are made from organic biomass, such as cornstarch or sugar cane, rather than petroleum-based polymers. Some bioplastic production has a smaller carbon footprint than plastic, though the cultivation of the renewable products from which they are made can be very energy-intensive. In a commercial composting facility, which can achieve the high temperatures required for the decomposition of bioplastics, these straws can break down in less than three months. However, if bioplastic straws end up in landfills or are left on the beach, as they are wont to do, they behave no differently than conventional plastic straws.

There are a number of other products being explored as alternatives to single-use plastic straws, including seaweed, grains, and even pasta, though none are as widely available as paper and bioplastic at present. The environmental costs of their production vary. Provided they haven't been treated, all have fairly short decomposition times.

## No straws

Of course, one alternative to the plastic straw is no straw at all. Making straws available by request is one way shops are asking customers to consider whether they actually need a straw. Going without, if you are able, is perhaps the best environmental decision of all—"reduce" being

the most important, if often overlooked, of the four Rs.

We're also starting to see the redesign of cup lids so that straws aren't needed. Starbucks' Nitro Cold Brew lid, which looks a bit like a sippy cup, is an early example of a strawless lid, but others are taking it a step further. At the recent Global Specialty Coffee Expo in Seattle, Ross Lillebo, business development manager and supplier relations with Beyond The Grind, a full-service coffeehouse distribution company in Anaheim, Calif., was presented with a prototype of a fully sealed universal lid made from a compostable, renewable resource. Ross wouldn't share the name of the company because the product is still in research and development, but he believes the lid, which will eliminate two extraneous items—drink stoppers and straws—is a game-changer. "This is a lid that works for both hot and cold cups, that is fully sealed, but also vented properly so you still get full aroma, and it is made from a recyclable material that doesn't have any odor to it, so it's not interfering with the aroma or the experience of having that drink," he says. "It's something the industry has been waiting for."

With an ever-expanding array of alternatives, it's easier than ever to abandon plastic straws, though it represents an added expense for shop owners. Paper straws cost about three times that of conventional plastic straws, while compostable alternatives are about four times the price. In other words, those that are making the move to alternatives are spending more money on products that aren't generating revenue. If reuseable or eco-friendly straws are used in tandem with a straw-on-demand policy, the decision can be less cost-prohibitive.

It's not all a matter of cost, though. Some shop owners aren't satisfied with the existing suite of straw alternatives for reasons of performance and experience. In my interviews for this piece, I heard this most frequently in relation to paper straws, which are simply not as durable as conventional plastic straws and can impart unwanted flavors on their drinks, though every alternative has its drawbacks.

Customers can also be a barrier. New Moon Café, which has locations in Augusta, Ga., and Aiken, S.C., signed onto Operation Clean City's "The Last Straw" challenge for the month of April. Participating businesses could only offer compostable straws on request. While some customers were supportive, more common were patrons who had no desire to go without straws. In some cases, baristas faced hostility from consumers. New Moon's media and special projects manager Elizabeth Cornelison notes, "We've trained consumers to think they need a straw. But for most people, it's a convenience thing."

Whether the goal is to wean consumers off straws or acclimate them to different products, education is an important part of this process. Ross Lillebo says, "One of the things we always talk to shop owners about is training your customers. If you don't offer something, explain why you don't. A lot of times, you find people becoming not just all right with that, but the next day you'll see them repeating what you told them the day before, sharing what they've learned with your other customers." Of course, change takes time.

At Backlot in Chicago, posters distributed as part of #SheddtheStraw were important conversation starters on the ills of single-use plastics. Backlot cofounders and owners John Kim and Isaac Bloom estimate that as a result of the decision, they will prevent 24,000 plastic straws a year from entering the waste stream. The response, to date, has been overwhelmingly positive, according to Isaac.

"The decision to remove plastic straws from our store was driven by our customers' personal commitment to sustainability and the environment, and their desire to see local businesses follow suit," Isaac says. "We are building better practices together, and the result has been mutually beneficial. It's a small step, with a big impact, and with so many options out there—reusable stainless, biodegradable paper, and compostable PLA, for example—it's really a no-brainer." **b**