

STAINLESS STEEL is a mix of iron with a high chromium content which creates shine, combats rust, and is and is lighter weight than cast iron. But like cast iron, stainless steel doesn't react well to acidic foods and can cause component minerals to leach into food.

CARBON STEEL has a heavier carbon mixture than stainless steel and is known for its lightweight feel. Like cast iron, carbon steel requires more care as it can't be left to soak and must be seasoned, but chefs love its ability to create a nonstick patina and its even heat distribution.

With proper care, both stainless and carbon steel products can last many years. Steel alloys are usually highly recyclable, with stainless being 100 percent recyclable and both steels regularly recycled and reused.

BOTTOM LINE: Stainless steel is affordable, long lasting, and recyclable. Carbon steel is fantastic for even heat distribution and a stellar material for woks.

Copper

Copper is both pricey and gorgeous, proving equally effective as high-quality cookware and a statement piece for any kitchen. Valued for its heat conductivity and even heat distribution, copper is more often available in cookware mixed with other metals, either as a core or bottom for aluminum or stainless steel pans (and to a lesser extent coated in tin or ceramics). The stainless steel combination is thought to make the most of copper's natural heating conductivity while minimizing the negative aspects: namely, discolouration and leaching into foods.

The concern that copper from cookware may leach into foods, potentially affecting the liver, kidneys, and even fetal development, has not been robustly validated and the exact mechanism and extent of exposure for this is unclear. Research indicates that our bodies are highly efficient at preventing overexposure to copper and it is not listed by the EPA as a known human carcinogen. Keep in mind, however, that there are known health risks associated with metals such as nickel and aluminum, both of which may be used in copper-hybrid cookware.

In the hierarchy of mining consequences, copper ranks as third least harmful behind cast iron and stainless steel and is highly recyclable. Recycling may be hindered, however, depending on hybrid metal composition. If choosing copper or copper hybrids, look for those manufactured in North America.

BOTTOM LINE: Copper is a fantastic tool for chefs, though pricey. Use copper to its heat-conducting advantage and look for stainless pots and pans with a copper core.

Glass

Glass can be used for both cooking and storage, and is generally durable, easy-to clean, and practical. It helps to cook foods faster, which means reduced energy consumption. On the downside, glass cooks unevenly and may crack under quick temperature changes (although the development of temperature-resistant glass has mitigated fear of exploding glass dishes!).

Because glass is impermeable, it doesn't absorb foods, flavours, germs, bacteria, mould, or cross-contaminants, making it great for those with food allergies and dietary restrictions. For food storage,

glass is preferable to plastic, especially for acidic or fatty foods, which can absorb hormone-disrupting chemicals.

The overall sustainability of glass is higher than many metals because its production relies on naturally occurring sand. The primary environmental concern is atmospheric pollution from manufacturing, although responsible companies are taking steps to curb this too. Interestingly, "The CO2 savings from glass recycling are as large, or larger, than the transportation emissions."²

BOTTOM LINE: Glass is a fantastic and affordable kitchen staple. Search for energy efficient manufacturers.

Bamboo

Bamboo's quick growth (it's actually a grass!), drought-tolerance, strength, and flexibility make it a great material for the kitchen. It's affordable, antimicrobial, and its versatility lends itself to everything from spatulas to cutting boards.

While considered quite safe, don't forget to review the manufacturing processes of bamboo products you bring into your home. It's important to know how it has been glued together as some adhesives have been discovered to contain formaldehyde.

Due to its extremely high growth rate, bamboo ranks as one of the most renewable materials around. Environmental risks increase if toxic finishes or adhesives are used. Bamboo can come from a variety of sources, and may grow in North America, but is more frequent in subtropical climates. Look for bamboo products created through non-toxic manufacturing techniques.

BOTTOM LINE: Bamboo great; toxic glues bad.

Wood

Like bamboo, wooden utensils are lightweight and less-abrasive on your expensive cookware, as well as inert and non-reactive. Wood is naturally biodegradable and can be sourced from artisans and crafters in your area, which is a great way to support local. While wood is considered quite safe, make sure to only purchase items treated with food-grade oils like walnut, coconut, and linseed oil, or beeswax or carnauba wax. Hardwoods like maple, walnut, oak, and cherry have antimicrobial properties. Decomposition of natural wood should have a limited environmental impact, but responsible harvesting of these materials must always be considered. Quality woods like hardwood maple grow naturally in the US and Canada—carbon footprint win!

BOTTOM LINE: Ethically harvested wood is a safe and sustainable kitchen option.

There is no single factor that will make your cookware both green and safe, as most types will have both benefits and drawbacks. It's important to arm yourself with a little knowledge and carefully choose the right tool for the cooking job you need, sourcing the most eco-friendly material from a reputable brand and manufacturer to get the safest and greenest cookware available. Your family, your kitchen, and your weeknight dinner will be all the better for it! •

For references visit ecoparent.ca/extras/SUM20