

Wooden Cutting Board: Wood or Plastic? Science Reveals the Most Hygienic Option

For decades, it was believed that plastic cutting boards were safer than wooden ones thanks to their smooth, non-porous surface. However, recent scientific research has proven the opposite: **wood is more hygienic and safer than plastic**. In this article, you will discover why, based on scientific studies and the natural properties of wood, and learn where to find the best options at [Pacific Forest](#).

The Scientific Study That Changed Perception

The cornerstone of this revelation comes from a pioneering comparative study conducted in 1994 by Nese O. Ak, Dean O. Cliver, and Charles W. Kaspar at the University of Wisconsin–Madison. Published in the *Journal of Food Protection*, [this research](#) aimed to determine the survival of harmful bacteria on cutting boards made of both materials.

Researchers deliberately contaminated new and used boards of nine hardwood species and four plastic polymers (including rubber) with high concentrations of foodborne bacteria.

Study Methodology:

- New and used boards of nine hardwoods and four plastic polymers.
- Deliberate contamination with foodborne bacteria.
- Analysis of bacterial survival over different times and conditions.

Results: Wood Outperformed Plastic

- Microbiologist Dean O. Cliver demonstrated that **wood cutting boards kill and eliminate bacteria**, while plastic boards allow microbes to survive and even multiply.
- After just a few minutes, 99.9% of bacteria disappeared from wooden surfaces.
- In tests with raw meat juices, wood absorbed the contaminated liquid, and no live bacteria could be recovered after 3–10 minutes.
- The following day, no live bacteria were found on wooden boards, suggesting that wood almost “self-sterilizes.”
- In contrast, plastic boards retained abundant bacterial colonies even after washing with hot water and soap.

The authors concluded that their results *“do not support the common claim that plastic cutting boards are more sanitary than wooden ones.”*

Why Wood Is More Hygienic

Porosity and Hygroscopicity

Wood quickly absorbs contaminated liquids, trapping bacteria inside and isolating them from food. This natural process makes wood safer on the surface.

Discover more in our [Instagram infographic](#), which explains why wood outperforms plastic in hygiene and food safety.

Natural Antimicrobial Compounds

Species such as Radiata Pine, Cachimbo Blanco, or Aguano Masha contain oils, tannins, and phenols that naturally inhibit

bacterial growth.



You can also explore our [premium edge-glued boards](#) section for these species, and watch our [Instagram video](#) showcasing how we work with natural wood for unique and durable projects. We also invite you to check out [this beautiful curupaú and teak wood table](#), a perfect example of how combining fine woods can create unique, functional, and aesthetically impeccable pieces.

Plastic: A Haven for Microbes

- Knife grooves provide shelter for bacteria.
- Conventional washing does not fully remove microorganisms.
- Increased risk in both household and commercial kitchens.

Wood Is the Safer Choice

If you want a cutting board that is more hygienic, durable, and safe for food preparation, wood is the best choice. At Pacific Forest, we believe wood is not only a noble and sustainable material but also your best ally in the kitchen.

Practical Applications: Why Wood Wins in the Kitchen

At Pacific Forest, we believe kitchen surfaces should go beyond hygiene. They should also deliver durability, aesthetics, and sustainability. While wooden cutting boards protect your health, solid edge-glued panels add long-term value and strength to the entire kitchen.

What Is an Edge-Glued Board?

It is a solid wood panel made of strips joined with adhesives. Unlike industrial boards such as MDF, it resists humidity, heat, and daily wear. Learn more about its advantages here: <https://pacificforest.com/es/madera-para-muebles-cocina-comparativa-especies-formatos/>

Would you like to get a quote for a wooden chopping board?

Want a wooden cutting board quote? Contact us on [WhatsApp for quick answers.](#)

[Visit our website](#) to explore our catalog of high-value wood. [Follow us on Instagram](#) for more projects, applications, and wood trends.

Frequently Asked Questions

Which cutting board is more hygienic: wood or plastic?

According to scientific studies, wood is more hygienic. Its ability to absorb liquids and trap bacteria inside reduces microbial presence. Plastic, however, retains bacteria in cut grooves, even after washing.

What wood is best for cutting boards?

Hardwoods with antimicrobial properties such as oak, walnut, maple, [Aguano Masha](#), or [Cachimbo Blanco](#) (used in Pacific Forest edge-glued panels) are excellent options for resistance, density, and durability.

Are edge-glued panels suitable for kitchen surfaces?

Yes. They are ideal for countertops, islands, cabinets, and cladding. They resist heat, humidity, cuts, and wear, while their natural look adds warmth and beauty. Check it out [Pacific forest Edge-blue Board](#)

How do you maintain wooden cutting boards or surfaces?

Apply natural oils like [OSMO TopOil](#), which protect wood fibers while allowing them to breathe and repel liquids. Clean with a damp cloth and mild soap, avoiding abrasive products.

Is light-colored wood a good option for kitchens?

Yes. [Radiata Pine AA](#) is a light-colored wood ideal for Nordic-inspired, bright, and natural designs. Cachimbo Blanco is also a great choice for uniform light tones.

What is the difference between MDF and edge-glued panels?

MDF is affordable but weak against moisture, impacts, and wear. Edge-glued panels, on the other hand, are kiln-dried [solid wood](#), highly durable, and perfect for active kitchens.