

Cutting Boards

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Being a holistic kind of guy, when something natural is superior to something artificial, I get a kick out of it.

One of the most common avenues of food poisoning is cutting board contamination. This occurs when foods eaten raw (fruits and vegetables) are prepared on cutting boards previously used for uncooked animal products (such as fish, poultry, beef or pork).

University of Wisconsin researchers were trying to find ways to make wooden cutting boards safer. For years, food science experts have told us that plastic cutting boards are more sanitary than wooden ones. When preparing food, bacteria could theoretically "hide" in wood splinters or soak into wooden boards. The friendly environment of wood supposedly enabled bacteria to survive even after rinsing. This sets the stage for contamination of the next food to be in contact with the cutting board. Since plastic is nonporous and artificial, bacteria theoretically had nowhere to hide, making it an unfavorable environment.

The focus of the research was to find compounds to use on wood to make it a less favorable environment for bacteria. Researchers put live bacteria on wooden and plastic cutting boards. These included Salmonella, Listeria, and enterohemorrhagic Escherichia coli, all of which can cause food poisoning. They then examined the cutting boards after three minutes. They also examined boards that sat overnight, one at room temperature, two in the refrigerator, and three at high humidity. They tested four types of plastic cutting boards and seven types of wooden ones. The results were totally unexpected. They found that after only three minutes, 99.9 percent of the bacteria on wood cutting boards had died, while all the bacteria on plastic cutting boards survived. The overnight boards yielded even more interesting results. The numbers of bacteria on the plastic boards increased, while there were no bacteria at all on the wooden boards 24 hours later.

Their conclusion was that in some unknown way, wooden cutting boards are safer than plastic because bacteria dies much faster on wood. The researchers did recommend that people should continue to wash and rinse both wood and plastic cutting boards in hot water after each use. They plan on publishing their results in a peer-reviewed journal. I wonder if they will now focus their efforts on ways to make plastic cutting boards as safe as wood.

Reference:

1. Cliver DO: Food Research Institute, Department of Food, Microbiology, and Toxicology, University of Wisconsin-Madison. Personal fax communication on preliminary results of cutting board research.

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