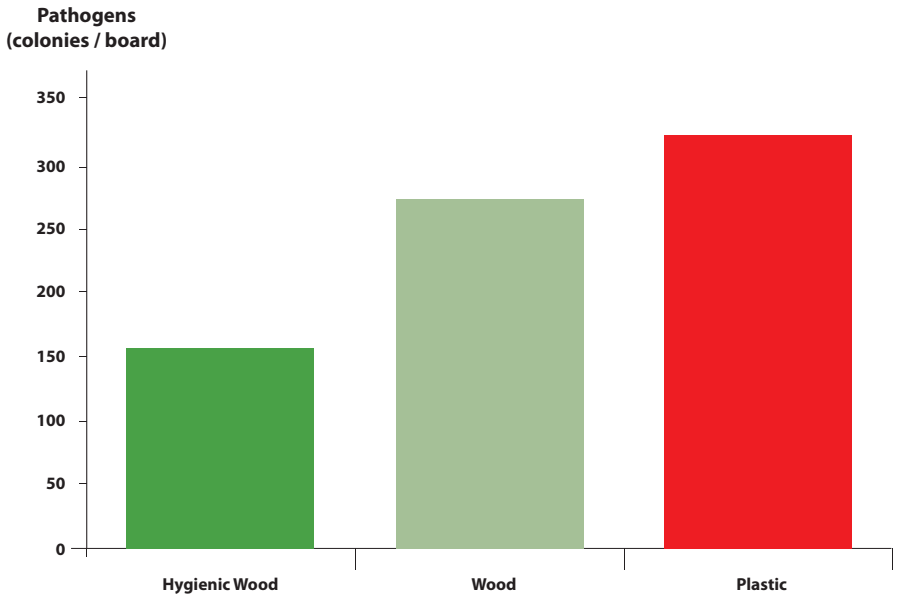
Hygienic Wood Pallets in the Food Industry

Objective

To determine the microbial quality of wooden and plastic surfaces under operational conditions in the food industry. The study was funded by the Lower Saxony Ministry for Economics, Technology and Transport.

Procedure

500 pallets – made of Hygienic Wood, traditional wood and plastic – were used over a six month period in 14 food establishments. They were used as a transportation tool and their hygienic condition was regularly reviewed. Overall, throughout the experimental period, 15,000 samples were taken. Test germs were: *Staphylococcus aureus* (methicillin-resistant), *Enterococcus faecium* (vancomycin-resistant), *Escherichia coli* (multi-resistant), *Pseudomonas aeruginosa* (multi-resistant), *Candida albicans*, *Mykobacterium terrae* and *Penicillium camenbertii*.



Bacteria level on various sufaces. *

Results

The research shows that there is significantly lower growth of microorganisms on Hygienic Wood pallets as compared to the surfaces of the commercially available wood and plastic pallets measured.
Wilms Hygienic Wood, under the same experimental conditions, always had fewer pathogens than the materials made of plastic or plastic-coated surfaces.

Conclusion

This study shows that the use of Hygienic Wood in the food industry is harmless if not beneficial. Hygienic Wood is naturally antibacterial and can eliminate dangerous pathogens faster than conventional materials.
Food regulations have now been amended accordingly: Wood is re-authorized for the food industry.

Implementation

DIL

German Institute of Food Technologies,
Professor-von-Klitzing-Str. 7, 49610 Quakenbrück, 2001.

* *Data: Steinkamp, Heinz (2001): Investigations on the introduction of Hygienic Wood pallets for use in the food industry, P. 11, Graphic Composition: Wilms GmbH*