

Extracts from pecan shells may be effective at protecting meats

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The majority of consumers that eat or buy organic products do not want synthetic antimicrobials or antioxidants added to their foods and prefer a "clean label". A study in the *Journal of Food Science* published by the Institute of Food Technologists (IFT) showed that extracts from pecan shells may be effective at protecting meats, such as chicken from listeria growth.

Unroasted and roasted organic pecan shells were subjected to organic extraction processes to produce antimicrobials that were tested against Listeria spp. and L. monocytogenes bacteria. The effectiveness of pecan shell extracts were further tested using poultry skin to see how much these extracts inhibited bacterial growth of Listeria.

When this all-natural antimicrobial was tested on raw chicken skin it decreased the levels of pathogens by 100 times and at the same time reduced the levels of spoilage organisms by more than 1,000 times, thus greatly increasing the shelf life of the chicken. The researchers concluded that the natural <u>pecan</u> shell extracts may prove to be an effective alternative antimicrobial against food pathogens and supplement the demand for organic <u>antimicrobials</u>.

More information: Babu, D., Crandall, P. G., Johnson, C. L., O'Bryan, C. A. and Ricke, S. C. (2013), Efficacy of Antimicrobials Extracted from Organic Pecan Shell for Inhibiting the Growth of Listeria spp. *Journal of Food Science*, 78: M1899–M1903. DOI: 10.1111/1750-3841.12311



Provided by Institute of Food Technologists

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