HEALTH SCIENCE

Effects of Water Content on Textural Characteristics of Fish Sausages Prepared from Deboned Silver Carp Meat. Changzheng Wang and Lingyu Huang, College of Agriculture, Communities and the Sciences, Kentucky State University, Frankfort, KY 40601.

Harvesting Asian carp for human consumption is one approach to eliminate this invasive species from Kentucky waters. Deboned Asian carp meat can be made into sausages. The objective of this project was to determine the effect of water content on the textural characteristics fish sausages prepared from deboned silver carp meat. Silver carp captured from the Mississippi River were deboned and ground through a 3-mm screen. Deboned silver carp meat was blended for 30 minutes in a blender (KSM75WH, KitchenAid, Benton Harbor, MI) with 2% salt and 10% cornstarch with 0%, 5%, 10%, 20% or 30% of water added. The resulting meat paste was stuffed into synthetic casing and heated in a water bath at 90°C for 30 minutes. Sausage samples (length: 2.5 cm) were evaluated for texture profile with a texture analyzer (TA.XT Plus, Texture Technologies Corp., Hamilton, MA). Increasing water content decreased the hardness of sausage linearly. Adhesiveness was lowest when 10% of water was added. These results suggest that 10% of water may be added into the meat paste to improve the textural quality of fish sausage by making it less tough and adhesive.