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AUBURN UNIVERSITY
DEPARTMENT OF POULTRY SCIENCE



WORTHWHILE OPERATIONAL GUIDELINES & SUGGESTIONS

Options for Use of Woody Breast Fillets

Woody breast is a muscle myopathy seen worldwide in broiler chickens. It presents with abnormal hardness within the fillet and can range from relatively minor to severe. Efforts towards understanding what it is, why it happens, and how to minimize or eliminate woody breast are currently underway. Progress towards eliminating this meat quality issue takes time and decisions on what to do with broiler breast fillets already exhibiting the woody breast myopathy need to be made. These fillets are generally downgraded and used in further processed products. However, the altered functional properties of hard texture and decreased water holding capacity can also carry over into further processed products. Hopefully, the issue of woody breast will be solved in the near future, but until then currently affected fillets need to be used to their greatest potential.



Options for woody breast fillet use can include:

1. Grinding product - Addition of other ingredients such as egg, salt, or phosphates helps to minimize the impact of the altered functional properties.
2. Trimming product – Separation of woody from normal tissue in mildly affected fillets can help partially salvage some fillets.
3. Cooking product – Some research suggests that woody breast is less noticeable in ready-to-eat products.
4. Extending deboning time – Extended time holding on the frame can decrease shear force, but will not eliminate woody breast.
5. Proteolytic enzymes – Addition of enzymes such as collagenase can decrease insoluble collagen in ground product. Use in whole fillets is still under investigation.



D. V. BOURASSA, PHD
PHONE: (334) 844-2610
E-MAIL : DVBOO06@AUBURN.EDU

DEPARTMENT OF POULTRY SCIENCE
260 LEM MORRISON DRIVE
AUBURN, AL 36849

