Paper C5-1	***The UK Approach to Determining Nutrient Composition of Meat*** *Susan Church, Ministry of Agriculture, Fisheries and Food, London, UK*

THE UK APPROACH TO DETERMINING NUTRIENT COMPOSITION OF MEAT

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ABSTRACT

A major study of the composition of carcase meat in the UK was undertaken in the early 1970s. Since then, changes in breed of animals and in husbandry techniques have led to leaner animals, while changes in butchering techniques and in cooking procedures may have resulted in other variations in composition. In addition, there have been improvements in the methods for determining many nutrients. The Ministry of Agriculture, Fisheries and Food therefore designed and commissioned a programme to determine the nutrient composition of retail cuts of carcase meats in the UK. The aim was to provide up-to-date nutritional information on a much wider range of cuts, both raw and cooked, by newer as well as more traditional cooking methods. This presentation will outline the approach taken to ensure that the available resources were effectively used to obtain representative data on the composition of meat. The design of the analytical studies will be described together with the interpolation of analytical data to provide a full set of nutrient values. Finally, some of the changes in composition between the 1970s and the 1990s will be highlighted.

Paper C5-2	***Analytical Methods for the Analysis of Mycocaster Coypus (Nutria)*** *Fatemeh Ramezanzadeh, Pennington Biomedical Research Center, LSU*

ANALYTICAL METHODS FOR THE ANALYSIS OF *MYOCASTER COYPUS* (NUTRIA)

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ABSTRACT

Nutria is an animal which belongs to the same order as the squirrel and is herbivorous in its feeding habits. Compared with domestic animals, they are sanitary in their feeding and living habits. The nutria is utilized as food not only in South America, its native home, but also in European and Asiatic countries. Nutria have devoured large areas of marshlands in South Louisiana leading to Coastal erosion. In investigating ways to reduce the nutria population, wildlife officials are exploring the use of nutria as an inexpensive alternative meat source for human consumption. T he present investigation was designed to determine the nutritional content of nutria and compare the results with other meat sources. A total of 63 nutria were captured, placed in individual holding cages and transported for processing. Nutria were weighted, sacrificed, sexed and tagged. The carcass was deboned and the resulting meat was weighed, packed in labeled ziplock bags, and delivered to the Food Analysis Laboratory. Samples were arranged into four groups based on age and sex (>4000 grams as "adult", <4000 grams as "young"). A total of 14 composites representing 42 animals were made. The eat samples were homogenized, aliquoted, and frozen at -20° C. To analyze the samples the following methods were used: fat (AOAC 945.167A), protein(AOAC 992.15), ash (AOAC 920.153,900.02, 923.03), moisture (AOAC 985.14), fatty acids (AOCS Ce 1b-89), cholesterol (Thompson et al, 1993), vitamin A (Panfili, et al, 1994), vitamin C (Tulley, 1993), sodium and iron (AOAC 990.08). Data describing the contents per group will be presented.

Paper C5-3	***Comparison of the Nutritional Value of Mycocaster Coypus (Nutria) with Other Food Sources Utilizing the MENu Database***
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COMPARISON OF THE NUTRITIONAL VALUE OF *MYOCASTER COYPUS* (NUTRIA) WITH OTHER FOOD SOURCES UTILIZING THE MENu DATABASE

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ABSTRACT

With the widespread availability of common meat sources, nutria have not been well utilized. Recently, there has been renewed interest in Louisiana because of the detriment nutria poses to the environment and also because of its potential to provide the public with an inexpensive alternative meat source. The nutritional quality of nutria meat has been previously unreported. Therefore, the purpose of this study was to determine the nutritional content of nutria meat and compare it to other meat sources. A total of 63 nutria, captured in the wild, were analyzed for total fat, protein, ash, moisture, fatty acids, cholesterol, iron, sodium, vitamin A, and vitamin C. Most notable are the analyses for cholesterol, total fat, and protein. The data show that fat is lower than in chicken, ground beef, squirrel, deer, rabbit, port and turkey. Of the sources tested, only cod has lower levels of fat. protein content compares favorably with all the meats compared in the MENu database. it is concluded that nutria is a meat source of excellent nutritional value, high in protein and low in fat and cholesterol. The future acceptance of nutria as a major meat source remains to be determined. There may be more interest in nutria in international datasets due to the fact that its consumption has been noted in tropical areas in regions other than North America.

Paper C5-4	***Lower Mississippi Delta Nutrition Intervention Research Initiative*** *Frankie Schwenk, USDA/ARS* *David Harsha, Pennington Biomedical Research Center, LSU* *Bernestine McGee, Southern University, Baton Rouge, LA* *Margaret Bogle, Arkansas Children's Hospital, Little Rock, AR* *Sungchan Kim, University of Arkansas, Pine Bluff, AR* *Carol Connell, University of Southern Mississippi, Hattiesburg, MS* *Ed Parmer, Alcorn A & M, Alcorn, MS*

LOWER MISSISSIPPI DELTA NUTRITION INTERVENTION RESEARCH INITIATIVE

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ABSTRACT

The initiative is a research effort to design, carry out and evaluate nutrition interventions directed at improving the health and well-being of the people residing in the Lower Delta region of Arkansas, Louisiana, and Mississippi. The Consortium is composed of the Agricultural Research Service, US Department of Agriculture; Alcorn State University, Lorman, MS; Arkansas Children's Hospital Research Institute, Little Rock, AR; Pennington Biomedical Research Center, Baton Rouge, LA; Southern University, Baton Rouge, LA; University of Arkansas at Pine Bluff, Pine Bluff, AR; University of Southern Mississippi, Hattiesburg, MS. This consortium met for the first time at a visioning conference in April, 1995. During the past year, some consortium members have added to their faculty and built their capacity to conduct nutrition intervention research. An organization structure has been developed. Three conferences, with well-known leaders in the field, have been conducted. Existing data have been collected, analyzed, and are being published in a monograph. Currently, plans are being made for community assessments.