News from Intercollegiate Faculty of Nutrition

(http://nutr.tamu.edu)

Greetings from the Chair

It is hard to believe that the Fall semester '02 is drawing to an end. This has been a very productive year for our Faculty and graduate students. As we head into the new year, I wanted to take this opportunity to remind you about our Human Nutrition Conference, Friday, February 7, 2003. This year's conference will focus on "Nutritional defenses against a common enemy: Cancer." The conference committee, chaired by Dr. David McMurray, has worked tirelessly to select world-renowned speakers for the purpose of updating our faculty, students, staff, and the A&M community on the latest in cancer chemoprevention. This year's speakers include:

Dr. Joanne R. Lupton, Texas A&M University, "Dietary Fiber and Colon Cancer: What's the Real Story?"

Dr. Gary Williamson, Nestle Research Center, Switzerland, "Food Biotechnology and Cancer Prevention"

Dr. Rebecca B. Costello, National Institutes of Health, "Alternative Therapies (Dietary Supplements) for Cancer"

Dr. Elizabeth Platz, The Johns Hopkins University, "Nutritional Epidemiology of Cancer"

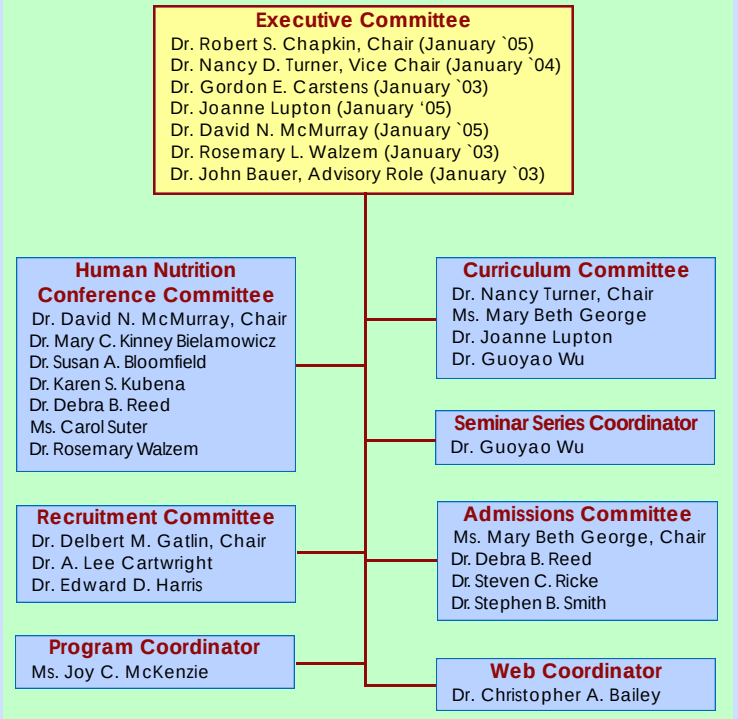
Dr. John A. Milner, National Cancer Institute, "Nutrigenomics – The Future of Nutrition and Cancer Prevention"

Dr. I-Min Lee, Harvard Medical School, "Does Physical Activity Play Any Role in the Prevention of Cancer?"

For registration information, please contact Mrs. Joy McKenzie at nutr-sec@tamu.edu, phone: 979-845-1735; fax: 979-862-2378.

I have also listed the overall organization of the IFN. I am indebted to all those members of our faculty who have agreed to serve on these important committees. We couldn't make it work without you!

Faculty Committees



Organization Chart of Intercollegiate Faculty of Nutrition at Texas A&M

Faculty News

2002 National Academy Report, Chaired by **Dr. Joanne R. Lupton**, Offers New Eating and Physical Activity Targets To Reduce Chronic Disease Risk

To meet the body's daily energy and nutritional needs while minimizing risk for chronic disease, adults should get 45 percent to 65 percent of their calories from carbohydrates, 20 percent to 35 percent from fat, and 10 percent to 35 percent from protein, says the newest report on recommendations for healthy eating from the National Academies' Institute of Medicine. To maintain cardiovascular health at a maximal level, regardless of weight, adults and children also should spend a total of at least one hour each day in moderately intense physical activity, which is double the daily minimum goal set by the 1996 Surgeon General's report.

Because carbohydrates, fat, and protein all serve as energy sources and can substitute for one another to some extent to meet caloric needs, the recommended ranges for consuming these nutrients should be useful and flexible for dietary planning. Earlier guidelines called for diets with 50 percent or more of carbohydrate

and 30 percent or less of fat; protein intake recommendations are the same. The new acceptable ranges for children are similar to those for adults, except that infants and younger children need a slightly higher proportion of fat -- 25 percent to 40 percent of their caloric intake, said the panel that wrote the report.

"We established ranges for fat, carbohydrates, and protein because they must be considered together," said panel chair Dr. Joanne Lupton, Professor of Nutrition, Texas A&M University. "Studies show that when people eat very low levels of fat combined with very high levels of carbohydrates, high-density lipoprotein concentration, or "good" cholesterol," decreases. Conversely, high-fat diets can lead to obesity and its complications if caloric intake is increased as well, which is often the case. We believe these ranges will help people make healthy and more realistic choices based on their own food preferences."

The report stresses the importance of balancing diet with physical activity, recommending total calories to be consumed by individuals of given heights, weights, and genders for each of four different levels of physical activity. For example, a 30-year-old woman who is 5 feet 5 inches tall and weighs 111 to 150 pounds should consume between 1,800 and 2,000 calories daily if she lives a sedentary lifestyle. However, if she is a very active person, her recommended total caloric intake increases to 2,500 to 2,800 calories per day. If her lifestyle fits the moderately active category as defined in the report, which is the minimum level of activity to decrease risk of chronic disease, she should eat between 2,200 and 2,500 calories daily. Using grams for the recommended ranges of intake, she should consume 55 to 97 grams of fat and 285 to 375 grams of carbohydrates per day.

The new one-hour-a-day-total activity goal stems from studies of how much energy is expended on average each day by individuals who maintain a healthy weight. Energy expenditure is cumulative, including both low-intensity activities of daily life, such as stair climbing and housecleaning, and more vigorous exercise like swimming and cycling. Someone in a largely sedentary occupation can achieve the new exercise goal by engaging in a moderate-intensity activity, such as walking at 4 miles per hour, for a total of 60 minutes every day, or engaging in a high-intensity activity, such as jogging for 20 to 30 minutes four to seven days per week. For more information, contact Dr. Joanne R. Lupton at gail-goolsby@ansc.tamu.edu.

Dr. E. D. Harris gave an invited lecture on the "Biological Functions of Copper" to a conference on "Neurological Aspects of Wilson's Disease", organized by the Movement Disorder Society and Office of Rare Diseases, NIH, November 14-15.

Dr. Stephen Smith presented "CLA, Unsaturation, and Omega-3 Fatty Acids: What Matters for Health? The Path from Opinion to Soft Science to Hard Science to Belief" at the American Wagyu Association Field Day on October 26.

Graduate Student News

Kirsten Switzer received an Institute of Food Science and Engineering (IFSE) Graduate Tuition Scholarship. The award was received through the Center for Nutrition, Health and Food Genomics, a center of excellence of the IFSE. Kirsten's research focuses on the effect of dietary n-3 polyunsaturated fatty acids (PUFA) on T lymphocyte subset activation induced cell death. Her experimental findings may contribute to the establishment of dietary guidelines designed to promote a balanced immune system, so that protective host responses (e.g., to infectious agents) can be maintained, while potentially detrimental host responses (e.g. chronic inflammation and hypersensitivity) can be controlled appropriately.

A Note from the Program Coordinator, Mrs. Joy McKenzie

It gives me great pleasure to serve as Program Coordinator for the Faculty of Nutrition. I enjoy working with the faculty and students, share the enthusiasm of the program, and embrace the challenges and excitement in my new position. My hours are 8 AM to 1 PM, Monday through Thursday, and I invite you to stop by Room 218 in the Kleberg Center to say hello.

I have been working at Texas A&M University for the past 13 years in a variety of positions. If I haven't yet met you, I'm hoping to have the opportunity to do so. I look forward to hearing from you!

Intercollegiate Faculty of Nutrition
November, 2002