

Foundation for Food and Agriculture Research Board Meeting
Nutrition Science Initiative Remarks
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Presented by Dr. Mark Friedman and Mr. Michael Brown

The Nutrition Science Initiative (NuSI) is a non-profit organization whose mission is to reduce the personal, social and economic costs of obesity, diabetes, and their related diseases by improving the quality of science in nutrition and obesity research. It is no secret that the prevalence of obesity in America has grown at an astounding rate over the last 40-50 years despite a drumbeat of advice to reduce calorie intake and increase physical activity. This increased prevalence, as well as that of numerous related metabolic diseases, has occurred despite innovations by the food industry intended to promote food choices that facilitate adherence to a recommended reduction in calorie consumption.

It is possible that the failure to stem the increase in obesity and associated disorders is due to the fact that people are unwilling or unable to follow the repeated health prescriptions or take advantage of healthy food choices. If this is the case, there seems little hope that repeating the same advice will result in much benefit. On the other hand, it is also possible that the failure to successfully combat obesity lies less in peoples' ability to follow this advice than in the science that was used to formulate it. Given what is at stake for the health of the nation, it is crucial that definitive science underlie dietary prescriptions to treat or prevent obesity. We believe that this is an area of work consistent with FFAR's stated goals, and one that would benefit greatly from its involvement moving forward.

NuSI is successfully recruiting top-level investigators from around the country to work together and conduct well-designed randomized clinical trials under the most operationally rigorous conditions possible to reevaluate fundamental assumptions about the nutritional triggers of obesity and associated disorders. A current focus is to examine the traditional advice to eat fewer calories, which is based on an assumption that the number of calories eaten, independent of whether they are from fat or carbohydrate, drives weight gain. Rigorously controlled, large scale studies to test this assumption are lacking. NuSI has initiated research that should definitively determine whether the critical factor is the amount of calories consumed or the type of calories consumed. This will, in turn, establish whether our country needs better strategies for implementing current nutritional advice or an altogether different approach to weight loss. Further, we intend to build on this work and examine the extent to which nutrition, and specifically the type and amount of calories consumed, affects the trajectory of serious diseases like non-alcoholic fatty liver disease.

These efficacy studies are resource intensive and have substantial budgets. Longer term, prevention trials based on the results of these efficacy studies will require even greater funding to study yet larger subject populations over a multi-year time span. NuSI is committed to advancing this critical work but it is apparent that a broader consortium of partners and collaboration between the public and private sectors will be needed for success.