

# Nutrition:

*Good for your health and good for the economy*



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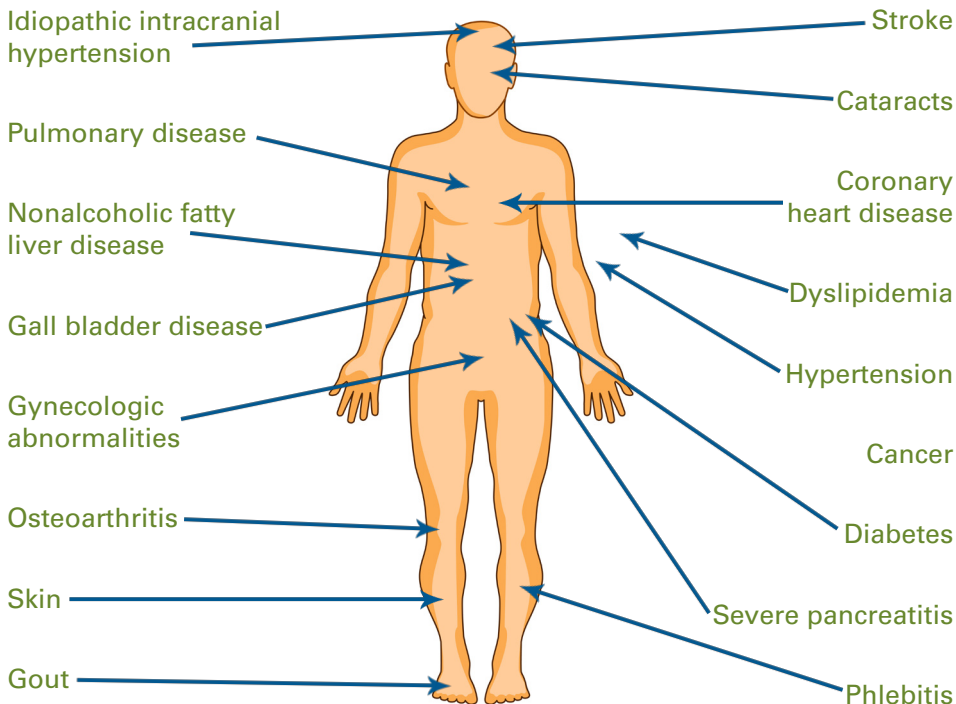


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## THE OBESITY EPIDEMIC >>

*In the U.S., 60% of the adult population is overweight or obese [30% obese, 30% overweight].*

### Medical Complications of Obesity



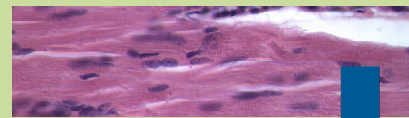
**Genes X Environment = Weight Gain**

## UNDERSTANDING NUTRITION ON ALL LEVELS

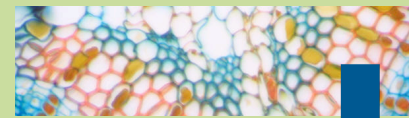
Human/Animal



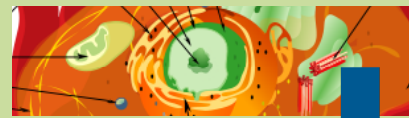
Tissue



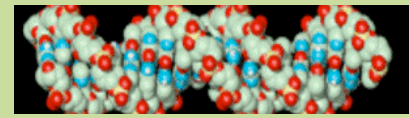
Cell



Sub-cell



Gene



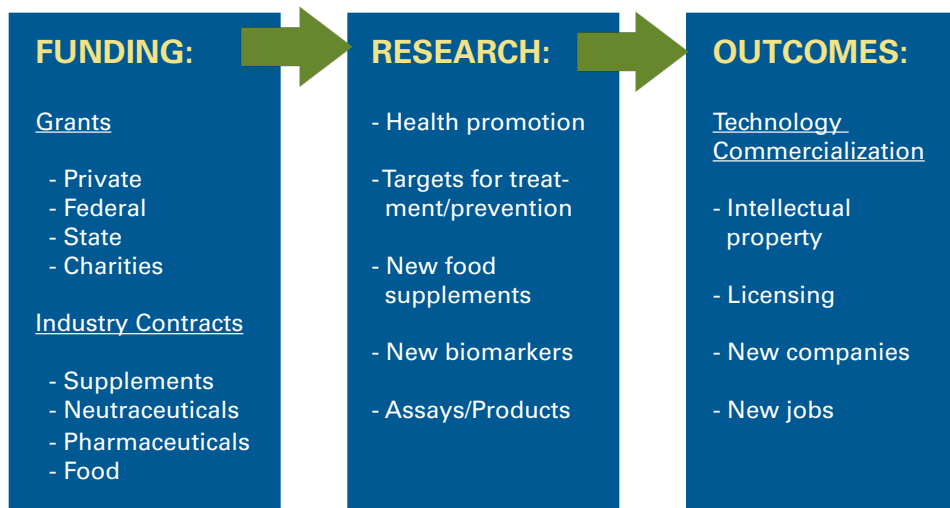
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## USU CENTER FOR ADVANCED NUTRITION >>

### What does the Center do?

- Understands the mechanisms of nutritional effects that contribute to disease and/or promote health. (Obesity, Type II diabetes and cardiovascular disease)
- Identifies biomarkers that will predict an individual's response to a specific nutritional intervention
- Uses this information to personalize nutrition and medicine by selecting the most appropriate nutritional or pharmacological intervention for a specific individual.
- Identifies bioactives (compounds or extracts that have beneficial health properties) and understand their mechanisms of action.
- Promotes economic opportunities :
  - New products (eg. Bioactives/supplements)
  - New assays (eg. Biomarkers for a specific nutritional response)
  - New targets for nutritional or pharmaceutical approaches.
  - Technology transfer/New start-up companies

### THE PLAN >>



### THE RESEARCH: BIOACTIVES >>

