

# Energy Balance, Obesity and Physical Activity: Emerging Concepts and Strategies for Intervention

AICR 2016 Research Conference on Food, Nutrition, Physical Activity and Cancer

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# Obesity and Cancer Risk and Progression

- Associated with an increased risk of developing many cancers: postmenopausal breast, endometrial, ovarian, advanced prostate, colorectal, renal, pancreatic, liver, and gallbladder cancers and esophageal adenocarcinoma
- May also be associated with an increased risk of liver, cervix, non-Hodgkin lymphoma, and multiple myeloma

# Obesity and Cancer Risk and Progression

- Current patterns of overweight and obesity in the U.S. could account for 14% of all deaths from cancer in men and 20% of those in women
- Cancer-related biomarkers respond to even a modest degree of intentional weight loss, suggesting a reduction in cancer risk even with latencies as short as a few years



# Obesity and Cancer Risk and Progression

- Pre-diagnosis obesity is associated with greater mortality in cancer survivors, especially all-cause and cancer-specific mortality in breast cancer
- Excess obesity also is associated with adverse metabolic and cardiovascular disease risk factors and co-morbidities (e.g., type 2 diabetes, hypertension, cardiovascular disease)
- Contributes to enduring psychosocial problems, physical impairments, lower quality of life, and treatment-related side effects in survivors

# Obesity and Healthy Weight Management

- Challenges, issues, and strategies to promote healthy weight management and the treatment of obesity: the state of the science
  - The challenge of achieving and maintaining weight loss, the biology of body weight regulation
  - Finding strategies to effectively manage the effects of portion size, the challenge of sustainable changes in eating behavior
  - Role of exercise in weight loss and maintenance, challenges of achieving recommended levels of exercise, strategies to optimize effects of exercise interventions



# Session Topics and Speakers

The challenge of weight loss maintenance, energy homeostasis following weight loss, and the biology of body weight regulation

*Michael Rosenbaum, MD, Columbia University, New York, NY*

The role of portion control in weight management

*Barbara J. Rolls, PhD, The Pennsylvania State University, University Park, PA*

How to optimize the effect of exercise in promoting weight loss and weight loss maintenance, evidence for modifying time and intensity, strategies such as high-intensity interval training

*John Jakicic, PhD, University of Pittsburgh, Pittsburgh, PA*

# Schedule Changes

- 1:25 The challenge of weight loss maintenance,  
*Michael Rosenbaum, MD*
- 2:10 The role of portion control in weight management,  
*Barbara J. Rolls, PhD*
- 2:55 Break
- 3:20 How to optimize the effect of exercise in promoting  
weight loss and weight loss maintenance,  
*John Jakicic, PhD*
- 4:05 Panel Discussion