



Therapeutic Diets for Cardiometabolic Disorders: What is the Evidence?

**Wednesday - April 21, 2010
AACE 19th Annual Meeting and Clinical
Congress
Boston, MA**

Table of Contents

Needs Assessment

Target Audience

Educational Objective

AACE Copyright

Learner Bill of Rights

Program Agenda

Faculty

Disclosure Information

Accreditation Statement

Low Carb-High Protein Diets for Obesity

Jeffrey Mechanick, MD, FACP, FACE, FACN

Antioxidants and Vascular Inflammation

Mohsen Meydani, DVM, PhD, FAAA, FAHA

Diets for Heart Disease Prevention and Treatment

Jun Dai, MD, MSc, PhD

Diet and Exercise for Sarcopenia and Cachexia

Ronenn Roubenoff, MD, MHS

Probiotics and Obesity

Caroline Apovian, MD, FACP, FACN

Dietary Restrictions and Aging

Susan Roberts, PhD

Needs Assessment

The science of Nutrition is rapidly growing with respect to scientific discovery. There exists in the field of Endocrinology multiple disease states which are directly affected by diet and nutrition. This course will address the need for expertise in diet, and nutritional support to improve patient care for those with cardiometabolic disorders through understanding of nutritional principles and disease process. To better standardize the fund of knowledge, a curriculum dedicated to exposure of nutritional demands in various cardiometabolic disorders is very much needed.

Target Audience

The target audience for this meeting is the Physicians and interested Allied Health Professionals in attendance at the AACE Annual Meeting – Boston MA, April 21-25, 2010.

Overall Learning Objective

Improve care of patients with cardiometabolic disorders through better understanding of nutritional principles and the effect on disease process.

AACE Copyright Statement

Copyright 2010, AACE. All rights reserved. No part of this publication may be reproduced or transmitted in any other form or by any other means, electronic or mechanical, without first obtaining written permission from AACE.



LEARNER BILL OF RIGHTS

The American Association of Clinical Endocrinologists (AACE) recognizes that you are a life-long learner who has chosen to engage in continuing medical education to identify or fill a gap in knowledge, skill or performance. As part of AACE's duty to you as a learner, you have the right to expect that your continuing medical education experience with AACE includes:

CONTENT that:

- Promotes improvements or quality in healthcare;
- Is Valid, reliable and accurate;
- Offers balanced presentations that are free of commercial bias for or against a product/service;
- Is vetted through a process that resolves any conflicts of interests of planners, teachers or authors;
- Is driven and based on learning needs, not commercial interests;
- Addresses the stated objectives or purpose; and
- Is evaluated for its effectiveness in meeting the identified educational need.

A LEARNING ENVIRONMENT that:

- Supports learners' ability to meet their individual needs;
- Respects and attends to any special needs of the learners;
- Respects the diversity of groups of learners; and
- Is free of promotional, commercial and/or sales activities.

DISCLOSURE of:

- Relevant financial relationships planners, teachers and authors have with commercial interests related to the content of the activity; and
- Commercial support (funding or in-kind resources) of the activity.

AACE/ASN Joint Meeting on Nutrition

Wednesday - April 21, 2010

Boston, MA

Therapeutic Diets for Cardiometabolic Disorders: What is the Evidence?

7:30-8:00 a.m. Registration/Continental Breakfast

8:00-8:05 a.m. Introduction by co-chairs (Drs. Roubenoff and Mechanick)

Session 1. Moderator – Ronenn Roubenoff, MD, MHS

8:05-8:30 a.m. **Low Carb-High Protein Diets for Obesity**

Jeffrey Mechanick, MD, FACP, FACE, FACN

- Be able to discuss these diets with your patients based on the scientific evidence
- Understand the clear and not-so-clear differences among the various high carb - low protein diets in the management of obesity
- Appreciate the knowledge gaps in research in the field of low carb – high protein diets for obesity

8:30-8:35 a.m. Q&A

8:35-9:00 a.m. **Antioxidants and Vascular Inflammation**

Mohsen Meydani, DVM, PhD, FAHA, FACN

- Define vascular inflammation and its contribution to the development of cardiovascular diseases including arteriosclerosis.
- Define and present the rate of oxidative stress associated with inflammation of the vascular system.
- Address current concepts and evidence about the role of dietary antioxidants on vascular inflammation and their potential health benefits.

9:00-9:05 a.m. Q&A

9:05-9:30 a.m. **Diets for Heart Disease Prevention and Treatment**

Jun Dai, MD, PhD

- Review the role of dietary fat in the prevention and treatment of heart disease
- Describe the use of fish oil supplements in the prevention and treatment of heart disease
- Discuss potential mechanisms underlying the role of dietary fat in heart disease

9:30-9:35 a.m. Q&A

9:35-9:50 a.m. Panel Discussion

9:50-10:05 a.m. Break

Session 2. Moderator – Dr. Jeff Mechanick

10:05-10:30 a.m. **Diet and Exercise for Sarcopenia and Cachexia**

Ronenn Roubenoff, MD, MHS

- Participants should be able to identify the difference between cachexia, sarcopenia, and wasting in terms of populations at risk, pathophysiology, and goals of therapy.
- Participants should be able to prescribe specific levels of dietary intake, micronutrient needs, and exercise prescription for sarcopenia and for cachexia.
- Participants should be able to develop a differential diagnosis for reduced physical performance in the setting of sarcopenia and cachexia.

10:30-10:35 a.m. Q&A

10:35-11:00 a.m. **Probiotics and Obesity**

Caroline Apovian, MD, FACP, FACN

- Understand the interest in the gut microbiome and possible association with obesity.
- Understand what probiotics are and how they protect immune function
- Broaden understanding of the various possible causes of obesity.

11:00-11:05 a.m. Q&A

11:05-11:30 a.m. **Dietary Restrictions and Aging**

Susan Roberts, PhD

- Understand the benefits of calorie restriction in animal species including rodents and non human primates
- Understand the state of human research on calorie restriction
- Consideration of whether calories restriction may be a feasible lifestyle intervention for humans

11:30-11:35 a.m. Q&A

11:35-11:50 a.m. Panel Discussion

11:50 a.m. – 12 Noon Closing Remarks

**AACE/ ASN Joint Meeting on Nutrition
April 21, 2010
Boston, MA**

Faculty

Caroline Apovian, MD
Director, Nutrition and Weight Management
Boston Medical Center
Boston, MA

Jun Dai, MD, PhD
Assistant Professor
Indiana University
Bloomington, IN

Jeffrey I. Mechanick, MD, FACP, FACE, FACN
Clinical Professor of Medicine
Director of Metabolic Support
Mount Sinai School of Medicine

Mohsen Meydani, DVM, PhD, FAAA, FAHA
Professor of Nutrition,
Senior Scientist and Director Vascular Biology Laboratory
Jean Mayer USDA Human Nutrition Research Center on Aging
Tufts University
Boston, MA

Susan Roberts, PhD
Professor of Nutrition
Director of Energy Metabolism Laboratory
USDA Human Nutrition Research Center on Aging
Tufts University
Boston, MA

Ronenn Roubenoff, M.D., M.H.S.
VP & Translational Medicine Head, Musculoskeletal Diseases
Novartis Institutes for Biomedical Research
Adjunct Professor of Nutrition and Associate Professor of Medicine
Tufts University
Boston, MA

DISCLOSURE INFORMATION

Declaration of Disclosure and Conflicts of Interest

It is the policy of AACE to ensure balance, independence, objectivity and scientific rigor in all of its CME activities. Presentation content may include discussion of an unlabeled or an investigational use of a product. AACE requires that participating faculty disclose to the audience any product(s) and its use(s) discussed in the educational activity that are unapproved/unlabeled for the use by the FDA or still considered investigational in nature.

Everyone who is in a position to control the content of an educational activity must disclose all relevant financial relationships. "Relevant financial relationships" are financial relationships in any amount occurring within the past 12 months that create a conflict of interest. AACE requires speakers, faculty, CME Committee and other individuals who are in a position to control the content of this educational activity to disclose any real or apparent conflict of interest they may have as related to the content of this activity. All identified conflicts of interest are thoroughly evaluated by AACE for fair balance, scientific objectivity of studies mentioned in the presentation and educational materials used as basis for content, and appropriateness of patient care recommendations.

The intent of this disclosure is not to prevent a speaker with commercial affiliations from presenting, but rather to provide learners with information from which they may make their own judgments. Informed learners are the final safeguards in assuring that a CME activity is independent from commercial influence.

CME Accreditation Committee Disclosures

Dr. Felice A. Caldarella reports that he has received research grant support from Eli Lilly and Company and sanofi-aventis U.S. LLC and speaker honoraria from Bristol-Myers Squibb and Novo Nordisk A/S. Dr. Caldarella has no identified conflicts of interest.

Dr. David M. Cook reports that he has received speaker honoraria from Eli Lilly and Company, Genentech, Inc., Novartis AG, and Tercica and research grant support for his role in clinical trials from Pfizer Inc. Dr. Cook has no identified conflicts of interest.

Dr. Michael S. Irwig reports that he has received speaker honoraria from Bayer Healthcare AG (Bayer-Schering, Mexico). Dr. Irwig has no identified conflicts of interest.

Dr. Stephanie Lee reports that she has received consultant honoraria from Abbott Laboratories and Onyx. Dr. Lee has no identified conflicts of interest.

Dr. Virginia A. LiVolsi reports that she has received consultant honoraria from Veracyte, Inc. Dr. LiVolsi has no identified conflicts of interest.

Dr. Alan Malabanan reports that he has received speaker honoraria from Novartis AG, Procter & Gamble and sanofi-aventis U.S. LLC. Dr. Malabanan has no identified conflicts of interest.

Dr. Manubai Nagamani reports that she does not have any relevant financial relationships with any commercial interests. Dr. Nagamani has no identified conflicts of interest.

Dr. Dace L. Trence reports that she has received research grant support for her role as Principal Investigator from Bayer AG, and is a stock shareholder of Medtronic, Inc. and sanofi-aventis U.S. LLC. Dr. Trence has no identified conflicts of interest.

Dr. Surendra K. Varma reports that he does not have any relevant financial relationships with any commercial interests. Dr. Varma has no identified conflicts of interest.

Dr. Sydney A. Westphal reports that she does not have any relevant financial relationships with any commercial interests. Dr. Westphal has no identified conflicts of interest.

Program Committee Disclosures

***Dr. Jeffrey I. Mechanick** reports that he does not have any relevant financial relationships with any commercial interests. He also reports that his presentation will not include discussion of any investigational or unlabeled use(s) of a product. Dr. Mechanick has no identified conflicts of interest.

***Dr. Ronenn Roubenoff** reports that he receives an employee salary from Novartis AG. He also reports that his presentation will not include discussion of any investigational or unlabeled use(s) of a product. Dr. Roubenoff has an identified conflict of interest and it has been resolved accordingly. He has been advised by the AACE CME Accreditation Committee to base his presentation and recommendations on the best available, preferably published evidence/information.

** denotes individual is both a member of the Program Committee and the Faculty*

Faculty Disclosures

Dr. Caroline Apovian reports that she has received consultant honoraria and research grant support for her role as a Principal Investigator from Amylin Pharmaceuticals, Inc., Arena Pharmaceuticals, Inc., Merck & Co., Inc., Orexigen Therapeutics, Inc., Pfizer, Inc., and sanofi-aventis U.S. LLC.; consultant honoraria from GI Dynamics, Johnson & Johnson Services, Inc., and Novo Nordisk A/S; and research grant support for her role as a Principal Investigator from Atkins® and Metaproteomics. She also reports that her presentation will not include discussion of any investigational or unlabeled use(s) of a product. Dr. Apovian has an identified conflict of interest and it has been resolved accordingly. She has been advised by the AACE CME Accreditation Committee to base her presentation and recommendations on the best available, preferably published evidence/information.

Dr. Jun Dai reports that she does not have any relevant financial relationships with any commercial interests. She also reports that her presentation will not include

discussion of any investigational or unlabeled use(s) of a product. Dr. Dai has no identified conflicts of interest.

Dr. Mohsen Meydani reports that he does not have any relevant financial relationships with any commercial interests. He also reports that his presentation will not include discussion of any investigational or unlabeled use(s) of a product. Dr. Meydani has no identified conflicts of interest.

Dr. Susan Roberts reports that she does not have any relevant financial relationships with any commercial interests. She also reports that her presentation will not include discussion of any investigational or unlabeled use(s) of a product. Dr. Roberts has no identified conflicts of interest.

Accreditation Statement

The American Association of Clinical Endocrinologists (AACE) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The American Association of Clinical Endocrinologists (AACE) designates this educational activity for a maximum of 3.5 *AMA PRA Category 1 Credit(s)*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.