52nd Annual Meeting of the
American College of Nutrition
"Emergence of Nutrition as Core Medicine"
November 16–19, 2011

Malcolm Forbes Conference Center Morristown Medical Center
100 Madison Avenue Morristown, NJ 07960

ACN WEBSITE: www.americancollegeofnutrition.org
PROGRAM CHAIR: Michael Rothkopf, MD, FACN
PROGRAM DIRECTOR: Corinne Bush, MS, CNS
PROGRAM COORDINATOR: Santa Henriquez

MEETING OBJECTIVES

Complex chronic disease has grown to become a serious problem worldwide, affecting quality of life and contributing to escalating health care costs. State-of-the-art preventive and therapeutic medicine has nutrition science at its core, a fact that is not adequately addressed by medical training. The goal of this groundbreaking conference is to provide physicians, nutritionists, dietitians, and healthcare team members with valuable tools to incorporate nutrition as core treatment for a variety of chronic health issues.

SPONSOR

The American College of Nutrition is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

CME CREDIT

MD and DO: The American College of Nutrition designates this live activity for a maximum of 19.5 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

CNS and RD: The Certification Board for Nutrition Specialists authorizes up to 19.5 CNE credit hours for Certified Nutrition Specialists. Continuing education (CE) credit hours, up to 19.5 hours, will be authorized by the Commission on Dietetic Registration for Registered Dietitians.

EDUCATIONAL DISCLAIMER

The primary purpose of this conference is education. Information, research, publications, technologies, products and/or services discussed, are intended to inform the attendees about the knowledge, techniques, research and experiences of speakers who are willing to share such information with their colleagues. The faculty's views neither represent those of the American College of Nutrition nor constitute endorsement by the organization. The American College of Nutrition denies any and all liability for damages to any individual attending this conference and for all claims, which may result from the use of information, publications, technologies, products, and/or services of the meeting. Faculty disclosure statements are required from the speakers and will be presented in the conference materials.

AMERICAN COLLEGE OF NUTRITION CME MISSION STATEMENT

The mission of the American College of Nutrition (ACN) is to improve the quality of nutrition care by enhancing nutrition education for physicians. An integral part of ACN's education activities is providing opportunities to fill in the gaps in the current medical school curriculum as well as ongoing post-graduate training. The goal of this training is to enhance nutrition and metabolism knowledge and to promote the application of such knowledge in clinical practice for the prevention and treatment of disease.

The program's scope includes, but is not limited to, the following types of activities:

- Educational conferences, webinars, and other related activities
- Forums for the exchange of views, professional and educational experiences, and research results in the general field of nutrition
- Work with educators to encourage the incorporation of a strong, clearly defined nutrition teaching module in the curriculum of all medical schools

The target audience for these activities includes physicians, medical students, nutritionists, nutrition researchers, and nutrition educators.

The desired result of these activities is improvement in physician understanding, knowledge, and competence in the practice of nutrition in the treatment and prevention of disease.

EVENTS PRIOR TO SCIENTIFIC SYMPOSIA

WEDNESDAY, NOVEMBER 16, 2011

Time	Event	Abstract #
12:00 N–4:00 PM	**ACN BOARD OF DIRECTORS MEETING**	
3:00 PM–7:00 PM	ON SITE MEETING REGISTRATION—Hyatt Morristown Hotel	
6:30 PM–9:00 PM	**RECEPTION WITH DEAN ORNISH, MD**	
	The conference will begin with a special presentation by Dean Ornish, MD, the nation's leading example of how to utilize nutrition as core medicine	
8:00 PM–9:00 PM	STANLEY WALLACH AWARD LECTURE	1
	Hyatt Morristown Hotel	
	THE POWER OF NUTRITION & LIFESTYLE CHANGES	
	Dean Ornish, MD, Preventive Medicine Research Institute and School of Medicine, University of California, San Francisco, California	

THURSDAY MORNING, NOVEMBER 17, 2011

7:00 AM–8:00 AM	SHUTTLE BUSES TO MORRISTOWN MEDICAL CENTER	
	Leave from the Main Lobby of the Hyatt Hotel	
7:00 AM (all day)	ON SITE MEETING REGISTRATION—COFFEE AND TEA	
	Malcolm Forbes Amphitheater Lobby	
7:00 AM–8:00 AM	**VIEWING OF SCIENTIFIC POSTERS/ EXHIBITS**	
8:00 AM–8:15 AM	**President's Convocation**	
	Malcolm Forbes Amphitheater	
8:15 AM–9:00 AM	**KEYNOTE PRESENTATION**	2
	Malcolm Forbes Amphitheater	
	VITAMIN D: A D-LIGHTFUL SOLUTION FOR GOOD HEALTH	
	Michael Holick, MD, PhD, FACN, Professor of Medicine, Boston University Medical Center, Boston, Massachusetts	

SYMPOSIUM I

Malcolm Forbes Amphitheater

CARDIOMETABOLIC SYNDROME, DIABETES PREVENTION, AND DYSLIPIDEMIA

Joint Session with the European Chapter of the ACN

Moderators: Amalia Gastaldelli, PhD, FACN, National Research Council, Institute of Clinical Physiology, Pisa, Italy, **and Michael Rothkopf, MD, FACN**, Director of Metabolic Medicine, Morristown Medical Center, Morristown, New Jersey

LEARNING OBJECTIVES

- Understand the historical development of the concepts regarding the identification and diagnosis of cardiometabolic syndrome
- Understand the role of intra-abdominal adiposity in the pathogenesis of insulin resistance.
- Recognize the role of insulin resistance in the early stages of impaired glucose and dyslipidemia and address it with nutritional therapies.

- Recognize the role of cardiometabolic syndrome on the development of disease states including: diabetes, heart disease, stroke, vascular disease and non-alcoholic fatty liver disease (NAFLD) and address its management with nutritional therapies.

9-05–9:35	**INSULIN RESISTANCE SYNDROME: A HISTORICAL OVERVIEW**	3
	Gerald Reaven, MD, Division of Cardiovascular Medicine. Stanford University, Stanford, California.	
9:35–10:05	**THE RISK RELATIONSHIP BETWEEN INSULIN RESISTANCE, DIABETES AND ATHEROSCLEROTIC CARDIOVASCULAR DISEASE**	4
	Amalia Gastaldelli, PhD, FACN, National Research Council, Institute of Clinical Physiology, Pisa, Italy; University of Texas Health Science Center, San Antonio, Texas	
10:05–10:35	**THE REDUCED OBESE STATE: THE CHALLENGE OF WEIGHT MAINTENANCE**	5
	Robert Eckel, MD, Professor of Medicine, Professor of Physiology and Biophysics, University of Colorado Anschutz Medical Campus, Aurora, Colorado	
10:35–10:45	**BREAK**	
10:45–11:15	**ABDOMINAL ADIPOSITY, METABOLIC RISK AND THE ENDOCANNABINOID SYSTEM**	6
	Richard N. Bergman, PhD, Director, Cedars-Sinai and Obesity Diabetes Research Institute, Los Angeles, California	
11:15–11:45	**CLINICAL IMPLICATIONS OF INSULIN RESISTANCE IN NONALCOHOLIC FATTY LIVER DISEASE (NAFLD)**	7
	Kenneth Cusi, MD, Division of Endocrinology and Diabetes, The University of Florida at Gainesville, Gainesville, Florida	
11-45–12:15	**PANEL DISCUSSION / PRACTICAL APPLICATIONS**	

SESSION A

Auditorium A

OPEN SESSION / SCIENTIFIC ABSTRACTS: BASIC SCIENCE AND NUTRITION

This session is not eligible for CME

Moderators: Adrianne Bendich, PhD, FACN, CNS, Morristown, New Jersey, **and Gerald Moss, MD, PhD, FACN**, Rensselaer Polytechnic Institute, White Plains, New York

9:05–9:20	**REVERSIBLE SEVERE ACQUIRED HIGH-DENSITY LIPOPROTEIN (HDL) DEFICIENCY**	8
	Elion J. Krok, MD, Neil Lyman, MD, Michael Rothkopf, MD, FACP, FACN. St. Barnabas Medical Center, Livingston, New Jersey	
9:20–9:35	**METABOLIC MONITORING OF PREGNANCY IN A PATIENT WITH X-LINKED HEREDITARY HYPOPHOSPHATEMIC RICKETS (XLHHR)**	9
	Elion J. Krok, MD, Michael Rothkopf, MD, Robert Zennenberg, MD, Richard Miller, MD. Morristown Medical Center, Morristown, New Jersey	
9:35–9:50	**CLINICAL EVALUATION OF A NOVEL BOTANICAL FORMULATION FOR WEIGHT MANAGEMENT: A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY**	10
	Francis C. Lau[1], Trimurtulu Golakoti[2], Alluru V. Krishnaraju[2], Krishanu Sengupta[2] [1]InterHealth Nutraceuticals, Benicia, California; [2]Laila Nutraceuticals, Vijayawada, India	
9:50–10:05	**LOW GLYCEMIC INDEX DIET AND OXIDATIVE DAMAGE IN DIABETES**	11
	A Mirrahimi[1,2], L Chiavaroli[1,2], K Srichaikul[1], S Nishi[1], Balachandran B[1], JL Sievenpiper[1,3], CWC Kendall[1,2,4], DJA Jenkins[1,2] [1]Risk Factor Modification Centre, St. Michael's Hospital, Toronto, Ontario, Canada; [2]Department of Nutritional Sciences, University of Toronto, Toronto, Ontario, Canada; [3]Department of Pathology and Molecular Medicine, Faculty of Health Sciences, McMaster University, Hamilton, Ontario, Canada; [4]College of Pharmacy and Nutrition, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.	
10:05–10:20	**CURRENT APPROACHES TO ENTERAL FEEDING**	12
	Moss, G, Biomedical Engineering Department, Rensselaer Polytechnic Institute, Troy, New York	
10:20-10:30	**BREAK**	
10:30–10:45	**THE TIME COURSE OF RESULTS IN PEDIATRIC CARBOHYDRATE BREATH HYDROGEN (BH2) TESTING**	13

	Pettei MJ, Levine JJ. Cohen Children's Medical Center of New York, NSLIJ Health System, New Hyde Park, New York	
10:45–11:00	**TREATMENT OF WEIGHT LOSS PLATEAU (WLP) IN A LEPTIN RESISTANT OBESE FEMALE**	14
	Diana Scanlan, Michael Rothkopf, Lisa Haverstick. Morristown Medical Center, Morristown, New Jersey	
11:00–11:15	**SAFETY EVALUATION OF BITTER ORANGE EXTRACT (P-SYNEPHRINE) IN HEALTHY VOLUNTEERS**	15
	[1]Shara M., [2]Stohs S. [1]Clinical Pharmacy Department, Jordan University of Science and Technology, Irbid, Jordan. [2]Department of Pharmacy Science, Creighton University, Omaha, Nebraska	
11:15–11:30	**NUTS IN TYPE 2 DIABETES, GLYCEMIC CONTROL AND CHD RISK**	16
	Srichaikul K., Mirrahimi A., Nishi SK, de Souza R., Kendall CWC., Jenkins DJA. Department of Nutritional Sciences, University of Toronto, Toronto, Ontario Canada	
11:30–11:50	**NUTRITIONAL SUPPLEMENTS IN THE SURGICAL PATIENT**	17
	Sidney J. Stohs[1], and Stanley J. Dudrick[2] [1]Creighton University Medical Center, Omaha, NE, [2]St Mary's Hospital and Yale University Medical School, New Haven, Connecticut	
11:50–12:05	**EFFECTS OF BROWN SEAWEED FUCOXANTHIN AND LICORICE GLABRIDIN ON BLOOD GLUCOSE AND WEIGHT LOSS IN MODERATELY OVERWEIGHT SUBJECTS**	18
	S. Talbott, T. Talbott, E. Dingller, J. Talbott. SupplementWatch, Draper, Utah	
12:05–12:20	**ARTERIAL DAMAGE AND PULSE CONSUMPTION IN DIABETES**	19
	A Mirrahimi[1,2], L Chiavaroli[1,2], L Koh[3], CWC Kendall[1,2,4], JL Sievenpiper[1,5], JMW Wong[1,6,7], AR Moody[3,8], DJA Jenkins[1,2] [1]Risk Factor Modification Centre, St. Michael's Hospital, Toronto, Ontario, Canada; [2]Department of Nutritional Sciences, University of Toronto, Toronto, Ontario, Canada; [3]Department of Medical Imaging, Sunnybrook Health Sciences Center, Toronto, Ontario, Canada; [4]College of Pharmacy and Nutrition, University of Saskatchewan, Saskatoon, Saskatchewan, Canada; [5]Departments of Pathology and Molecular Medicine, Faculty of Health Sciences, McMaster University, Hamilton, Ontario, Canada; [6]Division of	

	Endocrinology, Children's Hospital Boston, Boston, Massachusetts, [7]Department of Pediatrics, Harvard Medical School, Boston, Massachusetts, [8]Department of Medical Imaging and Institute of Medical Sciences, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada	
12:20–12:35	**THE IMPACT OF THIAMINE TREATMENT ON GENERALIZED ANXIETY DISORDER**	20
	Khanh V.Q. Luong, Lan Thi Hoang Nguyen. Vietnamese American Medical Research Foundation, Westminster, California	

THURSDAY AFTERNOON, NOVEMBER 17, 2011

12:15–1:15	**BOX LUNCHES**	
	SCIENTIFIC POSTERS AND COMMERCIAL EXHIBITS	
12:25 PM -1 PM	**OVERVIEW OF METABOLIC CENTER**	
	Meet with clinical team members of the Metabolic Center to discuss program components and patient pathways	
1:15 PM–2:00 PM	ACN AWARD LECTURE	21
	Malcolm Forbes Amphitheater	
	DISSECTING THE "METABOLIC SYNDROME"	
	Gerald Reaven, MD, Division of Cardiovascular Medicine, Stanford University, Stanford, California	

SYMPOSIUM II

Malcolm Forbes Amphitheater

METABOLIC MEDICINE / METABOLIC SURGERY

Moderators: Dr. Michael Nusbaum and Michael Rothkopf, MD, FACN,
Morristown Medical Center, Morristown, New Jersey

LEARNING OBJECTIVES

- Implement the following options for the management of medical obesity: nutritional therapy, exercise, behavior modification, metabolically active medicines.
- Implement the following options for the management of surgical obesity: restrictive and malabsorptive procedures.
- Demonstrate strategies for nutritional therapy and weight management in the treatment of diabetes.
- Understand the options for metabolic surgical therapies in diabetes.

2:05–2:30	**NEUROENDOCRINE WEIGHT CONTROL MECHANISMS.**	22
	Judith Korner, MD, Florence Irving Assistant Professor of Clinical Medicine, Columbia University College of Physicians & Surgeons, New York, New York	
2:30–2:55	**MEDICAL OBESITY MANAGEMENT**	23
	Lisa DeRosimo, MD, Lowcountry Weight and Wellness Center, Charleston, South Carolina	
2:55–3:20	**SURGICAL OBESITY MANAGEMENT**	24
	Geltrude Mingrone, MD, PhD, MACN, Universita' Cattolica del S. Cuore, Rome, Italy	
3:20–3:30	**BREAK**	
3:30–3:55	**MEDICATION RELATED WEIGHT GAIN**	25
	Ayaz Virji, MD, Medical Director, Highmark Health Center @ Hand, Camp Hill, Pennsylvania	
3:55–4:20	**THE ROLE OF WEIGHT CONTROL IN DIABETES MANAGEMENT**	26
	Osama Hamdy, MD, PhD, Medical Director, Obesity Clinical Program, Joslin Diabetes Center, Harvard Medical School, Boston, Massachusetts	
4:20–4:45	**BARIATRIC SURGERY FOR T2DM RESOLUTION**	27
	William Inabnet, MD, Chief, Division of Metabolic, Endocrine & Minimally Invasive Surgery, Mount Sinai School of Medicine, New York, New York	
4:45–5:15	**PANEL DISCUSSION / PRACTICAL APPLICATIONS**	
	Special Guests: Blandine Laferrère, MD, Associate Professor of Medicine, Columbia University College of Physician and Surgeons, New York Obesity Nutrition Research Center, New York, NY; **and John B. Cleek, MD**, Medical Director, Carolinas Weight Management & Wellness Center, Bariatric Surgery–Weight Management–Nutrition & Wellness, Charlotte, North Carolina	

SYMPOSIUM III

Auditorium A

IMPORTANT DEVELOPMENTS WITH TRACE ELEMENTS—ZINC AND COPPER

Moderators: George J. Brewer, MD, MACN, Emeritus Professor, Ann Arbor, Michigan, **and Ananda S. Prasad, MD, PhD, MACN**, Professor of Medicine, Wayne State University, Detroit, Michigan

LEARNING OBJECTIVES

- Understand the 50-year historical development of zinc research.
- Recognize the role of zinc deficiency on morbidity and mortality
- Understand the hypothesis for a role of zinc deficiency and copper toxicity in Alzheimer's disease (AD).
- Utilize nutritional therapy with zinc to decrease the severity of the common cold, reduce mortality from diarrheal diseases, reduce infection in the elderly, slow the progression of macular degeneration, and as the treatment of choice for most phases of Wilson's disease

50 YEARS OF ZINC RESEARCH AFTER DISCOVERY OF ZINC DEFICIENCY

2:05–2:30	**DISCOVERY OF HUMAN ZINC DEFICIENCY: IMMUNE EFFECTS, PREVENTION OF INFECTION, AND TREATMENT OF COLDS BY ZINC THERAPY**	28
	Ananda S. Prasad, MD, PhD, MACN, Department of Oncology, Wayne State University, School of Medicine, Detroit, Michigan	
2:30–3:00	**THE ROLE OF ORAL SUPPLEMENT WITH ZINC AND ANTIOXIDANT VITAMINS FOR THE THERAPY OF AGE-RELATED MACULAR DEGENERATION**	29
	Emily Y. Chew, MD, Deputy Director of Division of Epidemiology and Clinical Applications, National Eye Institute/National Institutes of Health, Bethesda, Maryland	
3:00–3:15	**BREAK**	
3:15– 3:45	**TREATMENT OF WILSON'S DISEASE WITH ZINC**	30
	Fred Askari, MD, PhD, Associate Professor of Medicine, University of Michigan, Ann Arbor, Michigan	
3:45– 4:15	**EFFICACY OF ZINC THERAPY IN ALZHEIMER'S DISEASE**	31
	Dianna Pollock, MD, Steve Kanzer, George J. Brewer, Madonna Ptak Alzheimer's Research Center, Morton Plant Mease Neuroscience Institute, Clearwater, Florida	

NEW FINDINGS RELATED TO COPPER TOXICITY

4:15– 4:45	**TOXICITY OF INORGANIC COPPER FROM DRINKING WATER IN THE CASUSATION OF ALZHIEMER'S DISEASE**	32
	George J. Brewer, MD, MACN, Department of Human Genetics, University of Michigan, Ann Arbor, Michigan	
4:45– 5:15	**PANEL DISCUSSION/PRACTICAL APPLICATIONS**	
5:15 PM–6:15 PM	**VIEWING OF SCIENTIFIC POSTERS/ EXHIBITS**	
6:15 PM	**DINNER ON YOUR OWN**	
	We will have a list of restaurants and amenities/activities available at the Hyatt	

FRIDAY MORNING, NOVEMBER 18, 2011

7:00 AM–8:00 AM	**VIEWING OF SCIENTIFIC POSTERS/ EXHIBITS**	
8:15 AM–9:00 AM	SEELIG MAGNESIUM AWARD LECTURE	33
	Malcolm Forbes Amphitheater	
	MAGNESIUM, STRESS AND NEUROMUSCULAR HYPEREXCITABILITY	
	Leo Galland, MD, FACN, The Foundation for Integrated Medicine, New York, New York	

SYMPOSIUM IV

Malcolm Forbes Amphitheater

NUTRITIONAL THERAPEUTICS FOR CANCER AND INFLAMMATORY RESPONSES

Moderators: Harry G. Preuss, MD, MACN, CNS, Department of Physiology, Georgetown University Medical Center, Washington, D.C.; **and Debasis Bagchi, PhD, MACN, CNS**, Department of Pharmaceutical and Pharmacological Sciences, University of Houston College of Pharmacy, Houston, Texas

LEARNING OBJECTIVES

- Understand the molecular mechanisms of carcinogenesis and the role of nutritional therapies in disease prevention of cancer and degenerative diseases.

- Utilize nutritional therapies for reducing angiogenesis in cancer.
- Utilize nutritional therapies for reducing inflammation in cancer and degenerative diseases.
- Evaluate the controversies related to the nutritional intake of soya and soy-based nutritional supplements in women's health.

9:05–9:30	**PHYTOPHARMACEUTICALS IN CANCER CHEMOPREVENTION**	34
	Debasis Bagchi, PhD, MACN, CNS, Iovate Health Sciences Research Inc., Oakville, Ontario, Canada; University of Houston College of Pharmacy, Houston, Texas	
9:30–10:00	**CANCER, INSULIN AND DIETARY GLYCEMIC INDEX**	35
	David J.A. Jenkins, PhD, MD, MACN, Srichaikul, K, Mirrahimi, A, Augustine, L, Chiavaroli, L, Kendall, CWC, Risk Factor Modification Center and Li Ka Shing Institute, St. Michael's Hospital, Toronto, Ontario; Department of Nutritional Sciences, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada	
10:00–10:30	**NUTRITION IN INFLAMMATION**	36
	Robert I-San Lin, PhD, FACN, CNS, Nutrition International, Irvine, California	
10:30–10:45	**BREAK**	
10:45–11:15	**INFLAMMATION AND CANCER, THE ROLE OF DIET**	37
	Leo Galland, MD, FACN, The Foundation for Integrated Medicine, New York, New York	
11:15–11:45	**SOYA, PHYTOESTROGEN AND WOMEN'S HEALTH**	38
	Manashi Bagchi, PhD, FACN, Research & Development Department, Dr. Herbs LLC, Concord, California.	
11:45-12:15	**NUTRITIONAL INTERVENTIONS TO REDUCE CARDIOMETABOLIC RISK**	39
	Stephen Sinatra, MD, FACN, CNS, Department of Medicine, University of Connecticut School of Medicine, Farmington, Connecticut	
12:15-12:30	**PANEL DISCUSSION / PRACTICAL APPLICATIONS**	

SYMPOSIUM V

Auditorium A

NUTRIENTS IN CLINICAL PRACTICE: REGULATORY AND QUALITY ISSUES

Moderators: A. Wallace Hayes, PhD, DABT, CNS, Harvard School of Public Health, Editor-in-Chief, Food and Chemical Toxicology, Spherix Health Science Consulting, Andover, Massachusetts; **and Sidney J. Stohs, PhD FACN, CNS**, Frisco, Texas

LEARNING OBJECTIVES

- Understand the requirements for regulatory approval of nutritional therapies in clinical practice.
- Recognize what scientific evidence is expected for nutritional therapies to receive regulatory approval.
- Understand the role of legal & regulatory pathways in the application of scientific principles for nutritional therapies in clinical practice.
- Understand the concepts relating to food safety for the consumer.

9:05–9:30	**OVERVIEW OF REGULATORY APPROVAL FOR INGREDIENTS IN THE US AND EU; DISCUSSION OF THE SCIENCE INVOLVED IN EVALUATING FUNCTIONAL INGREDIENTS AND THE STRATEGY FOR EFFECTIVELY COMMUNICATING THE PROCESS TO CONSUMERS**	40
	Claire L. Kruger, PhD, DABT, Chief Executive Officer, Spherix Consulting, Inc., Bethesda, Maryland	
9:30–10:00	**PRINCIPLES OF SAFETY ASSESSMENT: INTEGRATING THE SCIENCES OF NUTRITION, CHEMISTRY, TOXICOLOGY AND PHARMACOGNOSY INTO FOOD INGREDIENT EVALUATIONS**	41
	Nancy Booth, PhD, Senior Science Consultant, Spherix Consulting, Inc., Bethesda, Maryland	
10:00–10:30	**BREAK**	
10:30–11:00	**ROUTES TO MARKET FOR FUNCTIONAL INGREDIENTS IN TRADITIONAL FOODS, MEDICAL FOODS AND DIETARY SUPPLEMENTS**	42
	Diane B McColl, RPh, JD, Principal and Director, Hyman, Phelps & McNamara, PC, Washington, DC	
11:00–11:30	**SAFETY ASSURANCE AND TRACEABILITY OF MATERIALS THROUGH THE SUPPLY CHAIN**	43
	Roger Clemens, PhD, FACN, CNS, Chief Scientific Officer, E.T. Horn Company, La Mirada, California	
11:30–12:00	**PANEL DISCUSSION / PRACTICAL APPLICATIONS**	

FRIDAY AFTERNOON, NOVEMBER 18, 2011

12:00 N–1:30 PM	**OPPORTUNITIES FOR VOLUNTEERING AT THE ACN**	
	Join us for an informal brainstorming session during lunch	
	BOX LUNCH	
	VIEWING OF SCIENTIFIC POSTERS/ EXHIBITS	
12:00-1:30	**PRIVATE PRACTICE PHYSICIAN SUPPORT SESSION**	
	Tour of Integrative Center	

SYMPOSIUM VI

Malcolm Forbes Amphitheater

NUTRITION, PAIN MANAGEMENT AND THE NERVOUS SYSTEM

Moderator: Nancy Cotter, MD, Medical Director, Atlantic Integrative Medicine, Morristown, New Jersey

LEARNING OBJECTIVES

- Understand nutritional influences on pain and inflammation.
- Utilize diet and nutritional supplements as adjuvant therapy for pain and inflammation.
- Utilize recent developments for nutritional therapy in the treatment of epilepsy.
- Utilize nutritional therapy in the treatment of multiple sclerosis.
- Utilize diet and nutritional supplements in the treatment of neuroplasticity and recovery from neurologic diseases.

1:30–2:00	**ANTI–INFLAMMATORY DIET AND SUPPLEMENTS IN PAIN MANAGEMENT: REVIEW AND UPDATE**	44
	Nancy Cotter, MD, Medical Director, Atlantic Integrative Medicine, Morristown, New Jersey	
2:00–3:00	**THE ANTI-EPILEPTIC DIET**	45
	Jeffrey Politsky, MD, Atlantic Neuroscience Institute Epilepsy Center, Overlook Medical Center, Summit, New Jersey	
3:00–3:15	**BREAK**	
3:15–3:45	**SUPPLEMENTS AND DIETARY INTERVENTIONS IN MULTIPLE SCLEROSIS: FROM DISEASE PREVENTION TO HINDER DISEASE PROGRESSION**	46
	Bianca Weinstock-Guttman, MD, Associate Professor of Neurology, SUNY Buffalo, Director of the Baird MS, Center at The Jacobs Neurological	

	Institute, Buffalo, New York	
3:45–4:15	**DIET AND EXERCISE THERAPY FOR ENHANCING BRAIN FUNCTION AND COGNITIVE DEVELOPMENT DIET, NUTRIENTS AND NEUROPLASTICITY**	47
	F**ernando Gomez-Pinilla, PhD**, Professor of Neurosurgery, Integrative Biology and Physiology, University of California at Los Angeles, Los Angeles, California	
4:15–4:45	**MEDIUM CHAIN FATTY ACIDS FOR ALZHEIMER'S DISEASE: KETONES AS AN ALTERNATIVE FUEL FOR THE BRAIN**	48
	Mary T. Newport, MD, FAAP, Medical Director, Neonatal Intensive Care Unit, Spring Hill Regional Hospital, Spring Hill, Florida. All Children's Specialty Physicians, St. Petersburg, FL	
4:45–5:00	**PANEL DISCUSSION/PRACTICAL APPLICATIONS**	
5:00–6:00	**POSTERS SELECTION PRESENTATIONS**	
	Malcolm Forbes Amphitheater	

FRIDAY EVENING, NOVEMBER 18, 2011

6:00 PM-7:00 PM	**CNS MEET AND GREET**
7:00 PM–9:00 PM	**PRESIDENT'S DINNER**
	Hyatt Morristown Hotel
	STANLEY WALLACH MEMORIAL Tribute by Arthur Chausmer, MD PhD, F.A.C.P., F.A.C.E., F.A.C.N., C.N.S.
	AWARDS PRESENTATIONS
	HUMANITATIAN AWARD **ZINC SAVES KIDS/ UNICEF** **Presented by Ananda S. Prasad, MD, PhD, MACN**
	AMERICAN COLLEGE OF NUTRITION MASTERSHIP Dr. Beverly Teter

SATURDAY MORNING, NOVEMBER 19, 2011

8:00 AM–8:45 AM	GRACE GOLDSMITH AWARD LECTURE	49
	Malcolm Forbes Amphitheater	
	NUTRITIONAL MODULATION OF INFLAMMATORY BOWEL DISEASE	
	Gerald Mullin, MD, FACN, Associate Professor of Medicine, Johns Hopkins Hospital, Baltimore, Maryland	

SYMPOSIUM VII

Malcolm Forbes Amphitheater

UPDATE ON NUTRITIONAL SUPPORT

Moderators: Michael Rothkopf, MD, FACN, and **Rolando Rolandelli, MD**, Morristown Medical Center, Morristown, New Jersey

LEARNING OBJECTIVES

- Identify the specific subsets of patients who will most benefit from nutritional support therapy.
- Evaluate efficacy of parenteral or enteral nutrition for high-risk medical and surgical patient populations.
- Demonstrate appropriate use of fish oils, arginine and glutamine in the treatment of patients at nutritional risk.
- Evaluate areas of controversy regarding specific nutritional approaches for patients at nutritional risk.

8:45–9:15	**ROLE OF ARGININE IN THE CARE OF CRITICALLY ILL PATIENTS**	50
	Adrian Barbul, MD Chairman of Surgery, Hackensack University Medical Center, Hackensack, New Jersey	
9:15–9:45	**THE ERIC A. NEWSHOLME MEMORIAL LECTURE—GLUTAMINE AND IMMUNE MODULATION**	51
	Lindy M. Castell, PhD, Senior Research Associate, University of Oxford, Green Templeton College, Oxford, UK	
9:45–10:15	**NUTRITION AND GUT IMMUNITY**	52
	Kenneth A. Kudsk, MD, Professor, University of Wisconsin, Madison, Wisconsin	

10:15–10:45	**OMEGA-3 FATTY ACIDS IN CRITICAL ILLNESS: MECHANISMS AND CLINICAL APPLICATIONS: WHEN DISEASE IS PREVENTED, TREATMENT COSTS ARE NOT NEEDED**	53
	William Lands, MD, College Park, Maryland	
10:45–11:15	**GLUCOSE DELIVERY AND GLUCOSE CONTROL WITH TPN AND ENTERAL NUTRITION**	54
	Ken Storch, MD, PhD, Florham Park, New Jersey	
11:15–11:45	**PANEL DISCUSSION / PRACTICAL APPLICATIONS**	

SYMPOSIUM VIII

Auditorium A

SPORTS NUTRITION: OPTIMIZING ATHLETE NUTRITION

Moderator: William Kraemer, PhD, FACN, Professor, Department of Kinesiology, University of Connecticut, Human Performance Laboratory, Storrs, Connecticut

LEARNING OBJECTIVES

- Utilize whey protein nutritional supplementation for optimal health and athletic performance.
- Utilize specific nutrients to fuel desired effects of metabolic exercise.
- Review the scientific concepts of carbohydrate and fat metabolism during exercise—from acute changes to chronic adaptations—in order to outline most effective diets.
- Identify nutritional needs in the post-workout period and utilize diet to optimize adaptations.
- Utilize nutritional therapy for optimizing muscle growth during training and in competition.

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	William Kraemer PhD, FACN, Professor, Department of Kinesiology, University of Connecticut, Human Performance Laboratory, Storrs, Connecticut	
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	Richard Wood, PhD, ATC, CSCS, Department of Exercise Science and Sport Studies, Springfield College, Springfield, Massachusetts	
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