

GLYCEMIC INDEX (GI), GLYCEMIC LOAD (GL) AND GLYCEMIC RESPONSE (GR):

an International Scientific Consensus Summit

*Organized by the Nutrition Foundation of Italy and Oldways
Under the auspices of the Italian Ministry of Health*

Stresa, Italy
June 6-7, 2013

Thursday, June 6, 2013

Morning sessions:

9:00 **Introduction**

Andrea Poli, MD, Scientific Director, Nutrition Foundation of Italy (Milan, Italy)

Livia Augustin, PhD, Research Fellow, Risk Factor Modification Centre, St. Michael's Hospital (Toronto, Canada)

Sara Baer-Sinnott, President, Oldways (Boston, USA)

Session 1: GI/GL/GR - Historical Perspective, Analytical Issues and Relevance

Session Chairs: Cyril W.C. Kendall, PhD, Research Associate, Department of Nutritional Sciences, Faculty of Medicine, University of Toronto (Toronto, Canada) and Adj. Professor College of Pharmacy and Nutrition, University of Saskatchewan (Saskatoon, Canada) **Cesare Sirtori, MD, PhD**, Professor of Pharmacology, University of Milan (Milan, Italy)

9:10 GI: History and Clinical Implications

David J.A. Jenkins, MD, PhD, DSc, University Professor and Canada Research Chair in Nutrition and Metabolism, Department of Nutritional Sciences, Faculty of Medicine, University of Toronto, Director, Risk Factor Modification Centre, St. Michael's Hospital (Toronto, Canada)

9:35 GI/GL/GR: definitions, methodology and issues

Thomas M.S. Wolever MD, PhD, Professor, Department of Nutritional Sciences, University of Toronto (Toronto, Canada)

10:00 Postprandial glycemia (PPG): should we keep it low? If yes, how?

Antonio Ceriello, MD, Head of Research at the Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS) (Barcelona, Spain)

10:25 **Q&A**

10:45 *Coffee break*

Session 2: GI/GL/GR and Chronic Disease

Session Chairs: **Inger Björck, PhD**, Professor and Managing Director Antidiabetic Food Centre, Lund University (Lund, Sweden) and **Livia Augustin, PhD**, Research Fellow, Risk Factor Modification Centre, St. Michael's Hospital (Toronto, Canada)

- 11:00 Is GI/GL of the diet important in diabetes prevention and management?
Cyril W.C. Kendall, PhD, Research Associate, Department of Nutritional Sciences, Faculty of Medicine, University of Toronto (Toronto, Canada) and Adj. Professor College of Pharmacy and Nutrition, University of Saskatchewan (Saskatoon, Canada)
- 11:25 GI/GL and risk of diabetes and cardiovascular disease: an epidemiologic perspective
Walter C. Willett, MD, DrPH, Fredrick John Stare Professor of Epidemiology and Nutrition Chair, Department of Nutrition, Harvard School of Public Health (Boston, USA)
- 11:50 GI/GL and risk of major cancers: what can we conclude based on epidemiological evidence?
Carlo La Vecchia, MD, Chief, Department of Epidemiology, Mario Negri Institute, and Professor of Epidemiology, University of Milan, (Milan, Italy)
- 12:15 **Q&A**
- 12:35 *Lunch break*

Afternoon sessions:

Session 3: GI/GL/GR – Metabolic Effects and Body Weight

Session Chairs: **David J.A. Jenkins, MD, PhD, DSc**, University Professor and Canada Research Chair in Nutrition and Metabolism, Department of Nutritional Sciences, Faculty of Medicine, University of Toronto, Director, Risk Factor Modification Centre, St. Michael's Hospital (Toronto, Canada) and **Gabriele Riccardi, MD**, Full Professor of Endocrinology and Metabolic Diseases, Department of Clinical Medicine and Surgery, Federico II University (Naples, Italy)

- 14:00 Dietary carbohydrates and metabolic outcomes: assessing the totality, consistency and quality of epidemiologic observations and clinical interventions
Simin Liu, MD, ScD, Professor, Departments of Epidemiology and Medicine, Brown University (Providence, USA)
- 14:25 Fructose the low-GI sugar: Is there cause for concern?
John L. Sievenpiper, MD, PhD, Toronto 3D Knowledge Synthesis and Clinical Trials Unit, Clinical Nutrition and Risk Factor Modification Centre, St. Michael's Hospital (Toronto, Canada), Department of Pathology and Molecular Medicine, Faculty of Health Sciences, McMaster University (Hamilton, Canada).
- 14:50 Effects of GI/GL on satiety and body weight
Salwa W Rizkalla, MD, PhD, DSc, Senior Researcher, National Institute of Health and Medical Research (INSERM) U 872, team 7, Research centre in human nutrition, ICAN Institute of Cardiometabolism & Nutrition, University Pierre et Marie Curie-Paris 6, Centre of Research in Human Nutrition, Pitié Salpêtrière Hospital (Paris, France).
- 15:15 GI/GL during childhood and adolescence and its relevance for metabolic outcomes - insights from observational studies
Anette E. Buyken, PhD, Research Associate, Department of Nutritional Epidemiology, University of Bonn (Bonn, Germany).
- 15:40 **Q&A**
- 16:00 *Coffee break*

Session 4: Practical Issues to Lowering GI/GL/GR

Session Chairs: **Walter Willett, MD, DrPH**, Fredrick John Stare Professor of Epidemiology and Nutrition Chair, Department of Nutrition, Harvard School of Public Health (Boston, USA) and **Antonia Trichopoulou, MD, PhD**, Professor and Director, World Health Organization Collaborating Centre for Food & Nutrition, Department of Hygiene and Epidemiology, University of Athens Medical School, and Vice President, Hellenic Health Foundation (Athens, Greece)

16:15 GI/GL/GR: are all methods of reducing postprandial glycemic responses equally beneficial?
Jennie C. Brand-Miller, PhD, Professor, Boden Institute of Obesity, Nutrition, Exercise and Eating Disorders, University of Sydney (Sydney, Australia)

16:40 Some experience regarding possibilities to affect the GI by the presence of proteins/amino acids.
Inger Björck, PhD, Professor and Managing Director Antidiabetic Food Centre, Lund University (Lund, Sweden)

17:05 **Q&A**

Session 5: Industry Perspective / Viewpoint from Industry Representatives

Session Chairs: **Andrea Poli, MD**, Scientific Director, Nutrition Foundation of Italy (Milan, Italy) and **Furio Brighenti, DrPH**, Professor of Human Nutrition, Department of Food Science University of Parma (Parma, Italy)

17:25 Agrico / Carisma. **Graham Liney**. Owner and Farmer, Willowvale Potatoes, Professional Chef (Laggan, Australia)

17:40 Barilla. **Kristen Anderson**, Director of Nutrition Research, Food Science and Consumer Science, Barilla Group (Parma, Italy)

17:55 Beneo Institute. **Stephan Theis, PhD**, Senior Manager of Nutrition Science, BENEIO Institute (Obrigheim/Pfalz, Germany)

18:05 General Mills.

18:20 Glycemic Index Foundation. **Kathy Usic, APN, AD**, Relationship and Nutrition Manager, Glycemic Index Foundation (Sydney, Australia)

18:25 Glycemic Index Laboratories. **Alexandra Jenkins, PhD, RD**, Director of Research, GI Labs (Toronto, Canada)

18:30 **Q&A**

20:00 **Gala Dinner**

Friday June 7, 2013

Morning sessions:

9:00 **Introduction**

Cyril W.C. Kendall, PhD, Research Associate, Department of Nutritional Sciences, Faculty of Medicine, University of Toronto (Toronto, Canada) and Adj. Professor College of Pharmacy and Nutrition, University of Saskatchewan (Saskatoon, Canada) and **Livia Augustin, PhD**, Research Fellow, Risk Factor Modification Centre, St. Michael's Hospital (Toronto, Canada)

Session 6: GI/GL/GR – Dietary Approaches and Health Claims

Session Chairs: Vittorio Silano Professor of Health Legislation Medical School Second University of Rome Tor Vergata (Rome, Italy) and former President Scientific Committee EFSA and **Jennie C. Brand-Miller, PhD**, Professor, Boden Institute of Obesity, Nutrition, Exercise and Eating Disorders, University of Sydney (Sydney, Australia)

9:10 Mediterranean diet, glycemic load and diabetes: evidence from EPIC-Greece

Antonia Trichopoulou, MD, PhD, Professor and Director, World Health Organization Collaborating Centre for Food & Nutrition, Department of Hygiene and Epidemiology, University of Athens Medical School, and Vice President, Hellenic Health Foundation (Athens, Greece)

9:35 An update on the health claims in Europe and some considerations about reducing GI/GL in the context of the Italian diet

Furio Brighenti, DrPH, Professor of Human Nutrition, Department of Food Science University of Parma (Parma, Italy)

10:00 GI claims on foods: the Australian experienceB

Alan W. Barclay, PhD, Head of Research, Australian Diabetes Council; Chief Scientific Officer Glycemic Index Foundation (Sydney, Australia),

10:25 **Q&A**

10:45 *Coffee break*

Session 7: Industry Perspective / Viewpoints from Industry Representatives

Session Chairs: Sara Baer-Sinnott, President, Oldways (Boston, USA) and **Alan W. Barclay, PhD**, Head of Research, Australian Diabetes Council (Sydney, Australia), CSO Glycemic Index Foundation

11:00 Ingredient. **Christine Pelkman, PhD**, Senior Nutrition Scientist, Ingredient (Bridgewater, USA)

11:15 Meal Garden. **Vlad Chernenko**, Founder and President, Meal Garden (Toronto, Canada)

11:20 Mondelez International. **Sophie Vinoy, PhD**, Nutrition Research Manager, Mondelez International (Saclay, France)

11:35 **Q&A**

Session 8: Novel Health Effects and Future Research

Session Chairs: **Antonio Ceriello, MD**, Head of Research at the Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS) (Barcelona, Spain) and **John L. Sievenpiper, MD, PhD**, Knowledge Synthesis Lead, Toronto 3D Knowledge Synthesis and Clinical Trials Unit, Clinical Nutrition and Risk Factor Modification Centre, St. Michael's Hospital (Toronto, Canada), Department of Pathology and Molecular Medicine, Faculty of Health Sciences, McMaster University (Hamilton, Canada)

11:50 Do low GI/GL diets improve traditional and novel cardiovascular risk factors including chronic inflammation?

Gabriele Riccardi, MD, Full Professor of Endocrinology and Metabolic Diseases, Department of Clinical Medicine and Surgery, Federico II University (Naples, Italy)

12:15 Planning new research and concluding remarks

David J.A. Jenkins, MD, PhD, DSc, University Professor and Canada Research Chair in Nutrition and Metabolism, Department of Nutritional Sciences, University of Toronto (Toronto, Canada)

12:40 **Q&A**

13:00 *Lunch break*

Afternoon session:

14:00 Panel discussions and drafting of consensus statement

18:00 Announcement of the Scientific Consensus Statement
Co-Chairs, Scientific Consensus Committee

Concluding Remarks:

Andrea Poli, MD, Scientific Director, Nutrition Foundation of Italy (Milan, Italy)
Sara Baer-Sinnott, President, Oldways (Boston, USA)

20:00 **Concluding Dinner**

Questions addressed through the program:

1. An historical perspective: GI as an indicator of CHO metabolism.
2. How should we measure GI? Resolved and unresolved issues.
3. Simple sugars and low GI diets: the role of fructose within a healthy diet.
4. Is it appropriate to include GI in national and international nutrition guidelines?
5. Post-prandial glycemia: should we keep it low? If yes, how?
6. GI/GL/GR: strong and weak points of these parameters.
7. GI/GL & GR: testing food, meals or the overall diet?
8. Are there different ways of lowering the GI?
9. Do low GI/GL diets improve chronic inflammation?
10. Is GI/GL of the diet important in diabetes prevention and management?
11. GI/GL and CHD: what can we conclude based on epidemiological evidence and mechanistic studies?
12. GI/GL and cancer: what can we conclude based on epidemiological evidence and mechanistic studies?
13. Is the control of GI/GL & GR a good way to affect satiety?
14. Is GI/GL of the diet in relevant correlation with metabolic disorders (OW/OB)?
15. GI/GL in childhood and adolescence
16. GI/GL in different dietary patterns
17. Do low GI diets matter in the context of a healthy Mediterranean diet?
18. Setting a consensus: what can we agree upon?
19. A look to the future: planning new research.

Scientific Committee:

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