



## *Prevention of Metabolic Syndrome by Dietary Phytochemicals A Symposium on the State of the Science*

Metabolic syndrome is a complex of symptoms related to obesity, Type II diabetes, and hypertension. A significant increase in the incidence of these conditions has been observed over the last two decades, and both the scientific literature and the popular press now discuss the “epidemic” of both obesity and Type II diabetes. Metabolic syndrome is associated with increased risk of several chronic diseases including heart disease, stroke, and cancer.

There is strong evidence that diet, in conjunction with sedentary lifestyle and some genetic risk factors, plays a role in the development of metabolic syndrome. Conversely, there is increasing epidemiological and laboratory evidence that certain classes of dietary phytochemicals may have preventive or therapeutic effects against one or more symptoms of metabolic syndrome.

This one day symposium will feature talks by experts in the field on: the biology of metabolic syndrome, the use of bioactive phytochemicals for the prevention of metabolic syndrome, and intervention strategies for the prevention of metabolic syndrome.

The goals of the symposium are to disseminate the latest findings on the biology and prevention/treatment of metabolic syndrome, to stimulate discussion on the role of dietary phytochemicals as preventive agents for metabolic syndrome, and to encourage interactions between scientists in the field. The hope of the organizers is that this symposium will aid in the development of cross-disciplinary research efforts to determine the efficacy and mechanisms of action of dietary phytochemicals as preventive agents for metabolic syndrome, and stimulate advancement of the science from the bench top to the clinic.

### *Topics & Speakers*

Genetic Risk Factors for Obesity  
Green Tea & Metabolic Syndrome  
Family-based Intervention for Obesity  
Biology of Pancreatic Lipase  
Phytochemicals & Diabetes Prevention  
Blueberries & Insulin Resistance  
Phytochemicals & Prevention  
Phytochemicals & Obesity

Dr. Susan Carnell, New York Obesity Research Ctr  
Dr. Joshua Lambert, Pennsylvania State University  
Dr. Tara Larowe, University of Wisconsin  
Dr. Mark Lowe, University of Pittsburgh  
Dr. Lina Musallam, Université de Montréal  
Dr. Martin Obin, Tufts University  
Dr. David Ribnicky, Rutgers University  
Dr. Jack Vanden Heuvel, Pennsylvania State Univ

## *Date & Location*

Thursday, October 14<sup>th</sup>, 2010  
8:30 am – 6:00 pm Symposium  
6:00 pm – 7:30 pm Reception

Celebration Hall  
2280 Commercial Blvd.  
State College, PA 16801

## *Registration*

Professional Registration ..... \$50 (\$60 if registering after October 6<sup>th</sup>)  
Student Registration ..... \$25 (\$30 if registering after October 6<sup>th</sup>)

Registration includes continental breakfast, morning and afternoon breaks, buffet lunch, and reception with appetizers and cash bar.

Please register by email to Kerry Kaylegian, kek14@psu.edu, before October 6<sup>th</sup>, 2010. Payment (cash or check only, no credit cards) may be sent to Kerry Kaylegian, 324 Food Science Building, University Park, PA 16802, or paid at the door.

## *For More Information*

Technical Program: Dr. Joshua Lambert, Assistant Professor, Department of Food Science  
jdl134@psu.edu, 814-865-5223

Other Information: Dr. Kerry Kaylegian, Director, Center for Food Manufacturing  
kek14@psu.edu, 814-867-1379

## *Sponsors*

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The Penn State Department of Food Science  
The Penn State College of Agricultural Sciences  
The Penn State Department of Nutritional Sciences  
The Penn State Obesity and Diabetes Institute

