

Schedule

6:30 AM – 7:30 AM	Registration and Breakfast
7:30 AM – 8:30 AM	Session 1: The Power of the Plant: How Fruits and Vegetables Work as Nutraceuticals and Supplements
8:30 AM – 9:30 AM	Session 2: Effects of Flavonoid-Rich Foods on Cognitive Function and Mood in Healthy Children, Young Adults and Older Adults
9:30 AM – 9:45 AM	Break
9:45 AM – 10:45 AM	Session 3: The End of Diabetes (type 2) and Heart Disease
10:45 AM – 11:45 AM	Session 4: Gut Microbiome Changes Induced by a Diet Rich in Fruits and Vegetables
11:45 AM – 12:00 PM	Break
12:00 PM – 1:00 PM	Session 5: Childhood Obesity and the Role of Carotenoids

Registration and Conference Information

REGISTRATION	PRICING	JUICE PLUS+ LEADERSHIP CONFERENCE
Early Registration Register on or before September 17, 2019	\$149	Complimentary*
Regular Registration Register on or after September 18, 2019	\$199	Complimentary*

\* Registration to the 2019 Nutraceuticals and Medicine Conference provides an attendee complimentary registration to the Juice Plus+ Fall Leadership Conference (October 18-20, 2019)

Important Deadlines

Early Registration Ends on: **September 17, 2019**  
Regular Registration Begins on: **September 18, 2019**  
Conference Date: **October 17, 2019**

Continuing Education

Participants may earn up to the following continuing education (CE) hours:

- Physicians: 5 CME credits
- Nurses: 5 contact hours
- Registered Dietitians: 5 continuing educational hours
- Pharmacists: 5 continuing educational hours
- Dentists: 5 continuing educational hours

This activity is jointly provided by SynAptiv and CGI. Applications for these accreditation types have been submitted and are pending approval. Attendees are responsible for verifying that approving organizations are accepted by their state's practicing board.

NutraceuticalsAndMedicine.com



Nutraceuticals and Medicine Conference

Exploring the role nutraceuticals, exercise and other factors play in achieving and maintaining optimal health.



October 17, 2019  
Austin, Texas

NutraceuticalsAndMedicine.com

This activity is supported by an independent educational grant from The Juice Plus+ Company.  
This activity is eligible for AMA PRA Category 1 Credit(s)™, ANCC credit, CPEU credit (dietitians), ACPE credit, and CDE credit.  
This activity is jointly provided by SynAptiv and CGI.



## SESSION DESCRIPTIONS

### SESSION 1:

#### The Power of the Plant: How Fruits and Vegetables Work as Nutraceuticals and Supplements



**Luis Cisneros-Zevallos, PhD**  
Professor  
Food Engineering  
Texas A&M University  
College Station, TX

Plants are a rich source of nutraceuticals/

supplements/phytonutrients. There are many industries, health care systems and academic activities involved in their use and promotion. However, many of these key players are peripherally involved in the science and policy behind their production, processing and utilization. Here we will explore some key concepts related to the science and innovative strategies on the use of plants and their bioactive compounds for promoting human health and to fight chronic diseases.

### SESSION 2:

#### Effects of Flavonoid-Rich Foods on Cognitive Function and Mood in Healthy Children, Young Adults and Older Adults



**Claire Williams, PhD, RD**  
Professor of Neuroscience  
University of Reading  
Southampton,  
United Kingdom

Representing one of the most important

lifestyle factors, diet can strongly influence the incidence of cardiovascular disease and neurodegenerative diseases. Recent dietary intervention studies, in particular those using wine, tea, cocoa or blueberries, have begun to demonstrate beneficial effects on the function of blood vessels and on mental performance (cognition). While such foods

and beverages differ greatly in chemical composition, nutrient content and calories per serving, they have in common that they are amongst the major dietary sources of flavonoids. Our laboratory investigates the effects of flavonoid-rich foods on cognitive function in different populations across the age range, as well as potential mechanisms of action. We have shown that children, young and older adults supplemented with flavonoid-rich blueberries show improvements in performance on a number of memory and attention-based tasks, as well as increased blood flow to areas of the brain associated with cognition. Improvements in mood following blueberry supplementation have also been seen. These results demonstrate how important a flavonoid-rich diet may be for cognitive and mental health.

### SESSION 3:

#### The End of Diabetes (type 2) and Heart Disease



**Joel Fuhrman, MD**  
Dr. Fuhrman Wellness Center  
Flemington, NJ

In this session, Dr. Fuhrman confronts the conventional treatment of heart disease and diabetes

and makes the case that we can prevent and reverse almost all cases of these



conditions.

Proper nutrition, not more medical care, can save lives. Dr. Fuhrman explains the futility of modern medical treatments and the effectiveness, simplicity, and necessity of a diet high in micronutrients for the reversal of disease. Application of these principles can enable patients to reduce and eventually eliminate blood pressure and oral diabetic medications. The foods highest in nutrients turn our bodies into the miraculous, self-healing machines they can be, which results in significant weight loss, improved health, and, ultimately, the end of type 2 diabetes and heart disease.

### SESSION 4:

#### Gut Microbiome Changes Induced by a Diet Rich in Fruits and Vegetables



**Marie van der Merwe, PhD**  
Assistant Professor  
School of Health Studies  
University of Memphis  
Memphis, TN

Habitual dietary intake is a major determinant

of the structure and activity of trillions of microorganisms residing in the human gut. It influences which microbes will colonize, flourish or disappear throughout life. An increase in polyphenols, oligosaccharides and fiber – which are all components found in a fruit and vegetable-rich diet – have long been associated with decreased risk of chronic diseases. Many of the benefits induced by this type of diet result from the interaction of these dietary components with the gut microbiome, where they selectively enrich specific microbial species and increase microbial diversity.



### SESSION 5:

#### Childhood Obesity and the Role of Carotenoids



**Jose Atilio Canas, MD**  
Division Chief  
Pediatric Endocrinology  
and Diabetes  
Johns Hopkins  
All Children's Hospital  
St. Petersburg, FL

Dysmetabolic obesity during childhood and adolescence currently represents the greatest therapeutic challenge for healthcare systems worldwide. The global rates of obesity have more than doubled in the last 30 years. Based on a recent meta-analysis from national surveys and food composition studies, there is an inverse association between inadequate levels of carotenoids and the prevalence of metabolic syndrome in the general population, independent of serum retinol (vitamin A) levels. This session will present recent data on two double-blind randomized placebo-controlled studies describing the effects of mixed carotenoid supplementation on adipokines, insulin resistance and the rate of accrual of subcutaneous abdominal fat in young children. We will discuss the role of carotenoids and their conversion products (retinoids) in adipogenesis, lipolysis insulin resistance and the pathophysiology of the metabolic syndrome and review animal studies, which support our findings.