

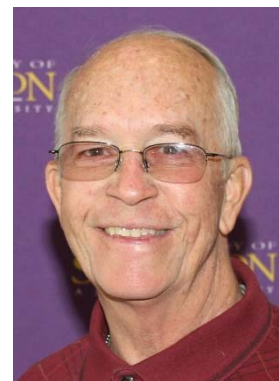
Annual Awards Banquet

Thursday 27 Apr 2017

# CHEMISTRY AND BIOCHEMISTRY OF CHOCOLATE: A GUILT-FREE FOOD?

Joe Vinson

*Department of Chemistry  
University of Scranton*



Food and beverages derived from cocoa beans have been consumed by humans for 1500 years, and the beverage was originally used as currency and in religious rites by the Mayans and Aztecs. A short history of chocolate will give some perspective to the science of chocolate. Cocoa pods from the cacao tree *Theobroma cacao* are harvested and the beans removed from the pods and fermented. Dried and roasted beans contain about 300 chemicals including unique fats, alkaloids, and simple and complex polyphenols. The manufacturing process results in the production of the various types of chocolate including white chocolate, milk chocolate, dark chocolate, and cocoa powder. Chocolate is purported to have aphrodisiac properties and one ingredient acts on the cannabinoid (marijuana) receptor. Chocolate's antioxidant properties will be outlined and compared with other foods. How chocolate's fat and antioxidants are related to heart disease will be discussed in terms of epidemiological, animal, human supplementation, and mechanistic studies. Recent animal and human studies will be described to determine whether chocolate should be considered a guilt-free food.

**6:00-6:30 pm Social Hour**

**6:30-7:30 pm Dinner**

**7:15-7:30 pm Awards**

**7:30-8:30 pm Presentation**

**Oklahoma State University – Oklahoma City**

Student Center 3rd Floor, Conference South

900 N. Portland Ave, Oklahoma City, OK 73107

map: <http://www.osuokc.edu/map/>



OSU-OKC map  
QR code

## Italian Buffet

Vegetable Lasagna

Penne Pasta with Meat Sauce

Grilled vegetables

Breadsticks, iced tea, and water.

assorted cakes

*RSVP is NOT required to attend the presentation.*

## Cost

\$20 members

\$5 students

## RSVP Deadline

Monday, Apr 24<sup>th</sup>, noon

Contact: Smita Mohanty

405-744-6636

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## Dr. Joe Vinson Biographical Sketch

Dr. Joe Vinson was born in Arkansas and grew up in the San Francisco Bay area. He attended college at the University of California at Berkeley, where he received his B.S. in chemistry in 1963. He was awarded a research assistantship at the Ames Lab of the Atomic Energy Commission at Iowa State and obtained a Ph.D. in both physical organic and analytical chemistry in 1967. After several teaching positions in Pennsylvania and a two-year stint in industry at J. T. Baker Chemical Company, he returned to academe and is now a professor of chemistry at the University of Scranton in

Northeastern Pennsylvania. His research has been featured in Prevention, Psychology Today, Consumer Reports, AARP, Tufts Health & Nutrition Newsletter, US News & World Report and lampooned in a cartoon in Time magazine. He has appeared on TV-Good Morning America Sunday and radio-NPR All Things Considered and The Peoples' Pharmacy, as well as being mentioned by Jay Leno and Rush Limbaugh. Dr. Vinson is the author of over 100 publications. His research interests are wide-ranging and include the effect of vitamins, minerals, and antioxidants on nutrition and health.