IFSH Seminar Series
Monday, November 7, 2016
1:00 – 2:00 PM
Building 91, Room 108

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"Utilization of Andes berry (*Rubus glaucus* Benth.) waste as a value-added beverage ingredient"
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Biosketch

Astrid Garzón grew up in Bogotá, Colombia, where she graduated from Universidad de Bogotá as a Food Engineer. Later, she was awarded a Fulbright scholarship to do her masters in Food Science and Nutrition at California State University, Fresno. After getting her degree, she returned to Colombia to teach Food Chemistry for two years. Then, she enrolled in the Food Science and Technology Department at Oregon State University to get her PhD in Food Science and Technology.

After acquiring her PhD, she has worked as an Assistant Manager for the Discovery Group at Whyet Nutritionals in the state of Vermont, Research Scientist at The USDA-ARS in Peoria, IL and Associate Professor in the Chemistry Department at Universidad Nacional de Colombia. For the last ten years, she has been teaching courses related to food chemistry, natural pigments and food science. Her research focuses on the chemical composition, phytochemical composition and stability of food products.

Abstract

Anthocyanin (ACN) powders were obtained from Andes berry (*Rubus glaucus* Benth.) waste by freeze-drying the extracted pigment. Isotonic model beverages were colored with freeze-dried ACN powder (FDA), freeze-dried ACN powder encapsulated with maltodextrin (MFDA), and red number 40. Beverages were stored in the dark and under illumination conditions and the stability of anthocyanin (ACN) as affected by storage, addition of maltodextrin as a carrier agent, and illumination was evaluated. Half-life of the ACNs, changes in color, total phenolics content (TPC), and antioxidant activity were analyzed for 71 days. Addition of maltodextrin and absence of light stabilized the color of the beverages and improved ACN and TPC stability during storage. The antioxidant activity of the beverages was higher when they were colored with MFDA and highly correlated with ACN content. It was concluded that encapsulation of the natural pigment with maltodextrin results in a value-added ingredient that serves as a natural colorant of isotonic beverages.