The Effects of Almonds When Included as Part of an Energy-Restricted Diet on Weight, Body Composition, Visceral Adipose Tissue, Blood Pressure and Cognitive Function

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Abstract:
Inclusion of almonds in an energy restricted diet has been reported to enhance or have no effect on weight loss. Their effects specifically on visceral fat stores during energy restriction have not been widely examined. Additionally, almond consumption has been associated with reduced blood pressure, but whether this is linked to or is independent of changes of body composition has not been examined. Moreover, almond consumption during energy restriction may be an effective strategy for reversing the negative effects of dieting on cognitive performance. The unique nutrient profile of almonds also has the potential to influence cognitive function post-prandially. The post-lunch dip in cognition is a well-established phenomenon of decreased alertness, memory and vigilance after lunch consumption and can be affected by lunch composition. Almonds which are higher in fat and lower in carbohydrate may be able to reduce this post lunch dip in cognition. This seminar will present data from a 12 week randomized clinical trial examining 1) the effects of almond consumption as part of an energy-restricted diet on weight, body composition specifically visceral adipose depots, blood pressure and cognitive function compared to a nut-free energy restricted diet and 2) the acute effects of almond consumption on the post-lunch dip in cognitive function. The seminar will also briefly discuss the development of an analytical approach to identify metabolic profiles associated with almond consumption during energy restriction to ascertain compliance in long term clinical trials.

Bio:
Jaapna Dhillon is a Post-Doctoral Scholar in the School of Natural Sciences at the University of California, Merced. She has a PhD in Nutrition Science with a focus in ingestive behavior and a Graduate Certificate in Applied Statistics from Purdue University. Prior to acquiring a PhD, she received a Masters of Science degree in Community Nutrition and an undergraduate degree in Bioinformatics. Her current research examines 1) the effects of nut consumption on health and 2) pre-ingestive controls of nutrition.