



### **John C. Peters, PhD**

John Peters is Professor of Endocrinology and Metabolism at the University of Colorado, School of Medicine and Chief Strategy Officer of the Anschutz Health and Wellness Center. Dr. Peters is a leading researcher and strategist in nutrition, obesity, diabetes and related diseases.

Prior to joining the Colorado faculty in 2011 he spent 26 years in research and development at the Procter & Gamble Company, where he conducted research, technology and product development programs in areas including nutrition, obesity, diabetes, and metabolism. Dr. Peters has published over 130 scientific articles and book chapters and is co-author of the Step Diet Book. He is co-founder and CEO of the America on the Move Foundation and is past President of the ILSI Center for Health Promotion. He has served on two Institute of Medicine committees on the prevention of childhood obesity.

### **Low calorie / no calorie sweetener in diabetes**

There is uncertainty about the benefit of non-nutritive sweeteners (NNS) in diabetes. Some observational studies have shown a positive association between NNS consumption and increased diabetes risk. There have been no large randomized controlled trials examining NNS in diabetics although there have been studies of NNS effects on weight loss and maintenance in non-diabetics which may provide relevant insight. Meta-analyses of randomized trials in non-diabetics indicate that NNS use leads to modest weight loss and more successful weight maintenance. Recent randomized trials have shown that compared to water, NNS beverage consumption led to greater weight loss. In one trial that reported blood parameters there were no adverse effects of NNS on fasting glucose and subjects reported feeling less hungry during the trial compared to water. NNS may be a useful tool for diabetic individuals trying to lose and maintain weight although more direct clinical evidence is needed.

#### **Learning objectives:**

1. To understand the evidence from longitudinal observational cohort studies relating the use of non-nutritive sweeteners (NNS), body weight and diabetes risk.
2. To understand the evidence from randomized controlled trials examining the effects of NNS on body weight and implications for diabetes risk.
3. To understand the potential role for NNS as a tool for prevention and management of diabetes.