



National Institutes of Health
Office of Dietary Supplements

2026–2027 Seminar Series

Dietary Supplements for Cardiometabolic Health

Wed., November 18 | 11 a.m. – 12 p.m. ET

Please join Dr. Diana Roopchand, who will discuss “Dietary polyphenols and metabolic resilience in humans: insights from meta-omics.”

Registration is required to attend.



Diana Roopchand, Ph.D., is an Associate Professor in the Department of Food Science at Rutgers University and her laboratory is located in the New Jersey Institute for Food, Nutrition, and Health. She received her Ph.D. from the Biochemistry Department of McGill University (Montreal, Canada) and completed an NIH-funded Postdoctoral Fellowship at Rutgers University. In addition to her academic training, she has worked in both the pharmaceutical and dietary supplement industry, gaining appreciation for the range of approaches available for health maintenance and disease prevention. She is also a founding partner of Nutrasorb, LLC, which develops functional botanical ingredients for foods, dietary supplements, and cosmetics.

Her team at Rutgers University investigates how food components and natural products compounds may interact with the gut microbiota to promote health and resilience to chronic disease. Her laboratory uses a range of approaches including preclinical murine models, cell culture, analytical chemistry, microbiology, and *in silico* tools with the goal of translating bench research into human intervention studies. Current projects use models of metabolic syndrome/prediabetes, ulcerative colitis, and female postmenopause.

Publications

1. Mezhibovsky E, Wu G, Wu Y, Ning Z, Roopchand DE, et al. Grape polyphenols reduce fasting glucose and increase hyocholic acid in healthy humans: a meta-omics study. *NPJ Sci Food*. 2025 May 27;9(1):87. doi: 10.1038/s41538-025-00443-6. PMID: 40425565; PMCID: PMC12116990.
2. Tveter KM, Mezhibovsky E, Wu Y, Roopchand DE. Bile acid metabolism and signaling: Emerging pharmacological targets of dietary polyphenols. *Pharmacol Ther*. 2023 Aug;248:108457. doi: 10.1016/j.pharmthera.2023.108457. Epub 2023 Jun 1. PMID: 37268113; PMCID: PMC10528343.
3. Tveter KM, Villa-Rodriguez JA, Cabales AJ, Zhang L, Roopchand DE, et al. Polyphenol-induced improvements in glucose metabolism are associated with bile acid signaling to intestinal farnesoid X receptor. *BMJ Open Diabetes Res Care*. 2020 Aug;8(1):e001386. doi: 10.1136/bmjdr-2020-001386. PMID: 32771984; PMCID: PMC7418775.