North America Chinese Association for Nutrition

北美华人营养学会 *Nutrition for a Healthy Life*

Announcement

May 16, 2022

To all NACAN members and friends

Dear colleagues and friends:

We are pleased to continue Frontier Nutrition for Health Webinar series that North America Chinese Association for Nutrition (NACAN) presents in 2022. Dr. Ju-Sheng Zheng is a principal investigator and assistant professor in School of Life Sciences at Westlake University. This is an excellent opportunity for NACAN members and friends to become familiar with the concept and importance of personalized nutrition with the n-of-1 trial design. Below, you will find the detailed information of this webinar, the webinar link, speaker introduction and abstract.

Activity: Webinar North America Chinese Association for Nutrition (NACAN) in 2022

Title: Next Generation of Personalized Nutrition Intervention: n-of-1 trial

Speaker: Ju-Sheng Zheng, PhD

Time: 8:00 to 9:30 PM (Eastern Daylight Time)

Date: Friday, May 20, 2022

Webinar link:
Join Zoom Meeting
https://us02web.zoom.us/j/89639351189?pwd=V0VLdTAxYjBOZEYrMnp6UmlBQmh1dz09

Meeting ID: 896 3935 1189
Passcode: 869910

Speaker information:
Ju-Sheng got his PhD degree in nutrition at Zhejiang University. Within his PhD program, he received one year's training in the Nutrition and Genomics Lab at Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University. He was also a Marie Skłodowska-Curie Individual Fellow supported by the European Commission and a postdoctoral researcher at the MRC Epidemiology Unit, University of Cambridge. Ju-Sheng joined the School of Life Sciences at Westlake University as a principal investigator and assistant professor in September 2018. A major research interest of his group is personalized nutrition research with the application of novel study design (such as n-of-1) and modern omics technology. He is also interested in computational medicine research as to identify novel molecular

biomarkers/intervention targets for human chronic diseases using computational and system biology methods with human cohort big data. Ju-Sheng serves as associate editor for BMC Med and statistical editor for Asia Pac J Clin Nutr. He has published over 90 peer-reviewed papers in leading medical/nutrition journals such as BMJ, Gut, Diabetes Care, PLoS Med, Microbiome, BMC Med, Am J Clin Nutr and J Nutr..

Abstract:
The concept and importance of personalized nutrition has been well accepted in the past decade, and the recent precision nutrition study initiated by the NIH is further stimulating the progress of the field. The integration of artificial intelligence and machine learning with large-scale nutrition cohort study has attracted huge amounts of attention as one of the hottest research directions in personalized nutrition field. Here, we propose that, in parallel with the effort of making a large cohort and complicated algorithm, we could also go to another direction for personalized nutrition, that is make the sample size to "1". The concept of "n-of-1" trial (also called single patient trial) is not new but sparce even in the whole medical literature, with rare application in nutritional world. In this talk, I will introduce our effort to apply this method to discover the responders and non-responders for specific macronutrient intake in the Westlake N-of-1 Trials for Macronutrient Intake by integrating the feeding trial design and wearable continuous glucose monitors with the n-of-1 trial design. I will also discuss the potential of this study design for the application to other emerging topics such as the personalized gut microbiome response to diet.

Learning objectives:
Upon the completion of the webinar, attendees should be able to
1. Describe the design of n-of-1 trial
2. Understand the logics behind the design and the application
3. Discuss the future research direction

This webinar provides 1 CEU for Registered dietitians. To earn continuous education credit, please register by sending an email to nacan_CPE@outlook.com. If you have any questions, please send an email to nacanmembership@outlook.com. We look forward to meeting you at the webinar!

Sincerely yours

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