# Nutrition Platform Updates 2024

Indika Edirisinghe, Ph.D.





## Center for Nutrition Research What We Do

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1: Smith M et al, Investigation of the tolerability and potential health benefits of a novel butyrate generating supplement in a pilot human study, Nutrition and Healthy Aging



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### **Grants/Awards**

Research Grants: ~ 5.5 millions Two USDA awards NIH – Nutrition for Precision Health Hass Avocado California Strawberry Commission National Mango Board National Watermelon Board California Figs. National Beef and Cattle Association Sorridi Therapeutics Inc E. & J. Gallo Winery

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Yudai Huang received 3 <sup>rd</sup> place in Emerging Leaders in Nutrition Science at the American Society of Nutrition 2024 Conference, Chicago, IL

#### The Luminex xMAP INTELLIFLEX –An advanced multiplexing platform



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An advanced multiplexing platform that delivers accurate and reliable protein measurement results.

Designed for a 96- or 384-well high throughput format, the xMAP INTELLIFLEX system can save substantial time and sample volume.

INTELLIFLEX allows the user to view multiple analyte statistics concurrently. Combined with added heat map visualizations, this provides rapid insights into run performance in real-time.



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### **Collaborative Projects with FDA**

# Relative absorption of fat-soluble vitamins (A and D) and minerals from select plant-based milks in human subjects

Plant based milk alternatives (PBMAs) are becoming more popular with consumers.

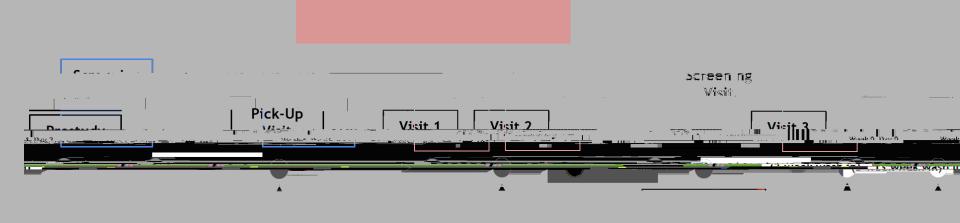
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This study will test how well certain nutrients are taken up by the body after drinking milk or after drinking almond, soy, and oat milks.





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### **Research Milestones and Updates**

	Milestone	Timeline
1	Develop the Institutional Review Board (IRB) documents and other study-related documents.	March 31, 2023; completed
2	Subject recruitment to conduct research collecting samples for analyses	Feb 28, 2024; completed with a modification
3	Develop and validate LC-MS/MS method to determine concentrations of vitamin A and D in plasma/serum and urine.	September 30, 2023, ongoing
4	Develop and validate ICP-MS methods to determine concentrations of target minerals in human serum and urine	January 31, 2024, ongoing
5	Analyze collected plasma/serum and urine samples for select micro-nutrients using validated methods.	September 30, 2024
6	Data and statistical analysis to calculate relative bioavailability of select micro-nutrients after intake of PBMAs	March 31, 2025
7	Complete draft report/manuscript for internal review at FDA and draft manuscript to a journal for publication	September 30, 2025

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## **Thank You**

#### Indika Edirisinghe, PhD



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