Food manufacturers today are attuned to the importance of sustainable food production in addressing the challenge of providing valuable nutrition to the growing global population. Visit these online symposia at IFT 2020 to explore how consumer demand for sustainably produced high protein ingredients is driving the need for more efficient processing/drying technologies and how artificial intelligence/machine learning is being utilized from farm to fork. Also, discover the impact of nutrient profiling on front of pack labels and consumer food choices, and uncover what plant-based eating is and is not.

**Protein Processing 2.0**

*Next Gen Scalable Technologies For Advancing the Functionalization and Sustainable Production of Protein Ingredients*

Protein ingredients play an integral role in food products by providing nutrition, taste, and functionality which are all key for a great consumer experience. Moreover, sustainable food production is paramount to addressing the challenge of providing valuable nutrition to the growing global population. This symposium will present a survey of the current commercial production landscape for various food protein ingredients, analyzing how they are processed. It will also highlight emerging and immensely scalable technologies that will shape the future of protein processing to deliver highly functional and more sustainably produced high protein ingredients to serve today's evolving consumer needs.

**Featured Speakers:**

- Rohit Kapoor, Ph.D.
  *Vice President, Product Research, National Dairy Council*
- Federico Harte, Ph.D.
  *Professor, Pennsylvania State University*
- Lloyd Metzger, Ph.D.
  *Professor, South Dakota State University*
- Jayendra Amamcharla, Ph.D.
  *Associate Professor, Kansas State University*

**Moderated By:**

- Hari Meletharayil, Ph.D.
  *Vice President, Product Research, National Dairy Council*
- Nitin Joshi, Ph.D.
  *Vice President, Product Development, Dairy Management Inc.*

**Artificial Intelligence and Machine Learning**

*For a Safer, Better, and Sustainable Food Production Ecosystem*

Speed to market is the new mantra in the food innovation space. Food companies that offer innovative products that are safe, sustainable, and delight consumers will be winners in the marketplace. Tools like artificial intelligence (AI) and machine learning (ML) offer solutions to make our food production ecosystem, from the farm to factories, more efficient and sustainable. This symposium will highlight some of the revolutionary technologies that aim to utilize big (quantitative) and thick (qualitative) data from the farm, factory and sensory insights to offer safe, sustainable, and better tasting products while ensuring speed to market and forward compatibility of the products developed.

**Featured Speakers:**

- Martin Wiedmann, Ph.D.
  *Professor, Department of Food Science, Cornell University*
- Jason Cohen
  *Founder and CEO, Gastrograph*
- Jayendra Amamcharla, Ph.D.
  *Associate Professor, Kansas State University*
- David Barbano, Ph.D.
  *Professor, Department of Food Science, Cornell University*

**Moderated By:**

- Hari Meletharayil, Ph.D.
  *Vice President, Product Research, National Dairy Council*
- Rohit Kapoor, Ph.D.
  *Vice President, Product Research, National Dairy Council*
Nutrient Profiling
From the Global Landscape to the Evidence Base

Nutrient profiling is defined, by the World Health Organization, as the science of classifying or ranking foods according to their nutritional composition for reasons related to preventing disease and promoting health. Globally, a variety of nutrient profiling models have been developed by governments, public health authorities, and the food industry. These profiling models are being used to inform a range of policy applications such as marketing restrictions, reformulation efforts, and front of pack labeling. Not only are nutrient profiling models growing in number, they are extremely diverse in their methodological approach to classifying foods. This session will explore the potential for unintended consequences of nutrient profiling/front of pack labeling and address the question of whether existing approaches oversimplify the relationship between the foods we eat and human health.

Featured Speakers:
Claire Kruger, Ph.D., DABT, CFS, Managing Partner, Spherix Consulting Group, Rockville, MD
Roger Clemens, Ph.D., FIFT, CFS, FASN, FACN, CNS, FIAFST, University of Southern CA
Moises Torres-Gonzalez, Ph.D., Director, Nutrition Research, National Dairy Council

Moderated By:
Amy Boileau, PhD, RDN, Regulatory Affairs, National Dairy Council

Plant-Based Eating Patterns Vs. Plant-Based Foods
Why distinguishing between the two is vital for industry, research, and consumers

Eating mostly plants (vegetables, fruits, legumes, nuts, and seeds) has long been a tenet of healthy diets, but including foods and beverages made with isolated plant protein sources in the diet is new. With perspectives from academics, industry, and trends analysts, this session will help individuals across the food industry uncover what “plant-based” really means by explaining the differences between plant-based proteins and animal-based proteins in terms of protein quality and quantity, enhancing the understanding of what a plant-based eating pattern is and is not, and explaining how consumer perceptions of “plant-based” differ from a nutrition science perspective.

Featured Speakers:
Laurie Demeritt, CEO, The Hartman Group
Pam Ismail, PhD, Associate Professor, University of Minnesota
Moises Torres-Gonzalez, PhD, Vice President, Nutrition Research, National Dairy Council

Moderated By:
Julie Hess, PhD, Director of Scientific Affairs, National Dairy Council