Abstract Submission: Suggested Keywords

Presenting authors must provide at least two keywords associated with the content area of the abstract to assist with programming at NUTRITION 2023.

During abstract submission, a track and topical area must be selected for the abstract. ASN member groups (e.g., Research Interest Sections, Councils) will use tracks, topical areas and keywords to program abstracts. These groups have provided suggested keyword lists for each topical area which are included below, though, presenting authors are not limited to these keywords.

### Aging and Chronic Disease
- Aging
- Cardiovascular/Hypertension/CHF
- Chronic disease
- Cognition
- Macronutrient
- Micronutrient
- Musculoskeletal
- Nutritional status
- Older adults
- Osteoporosis
- Polyphenols
- Sarcopenia

### Carotenoids and Retinoids
- Antioxidants
- Bioavailability
- Bioefficacy
- Cancer
- Carotenoids
- Cognition
- Function
- Health
- Mechanisms
- Metabolism
- Receptors
- Retinoids
- Vitamin A
Climate/Health, Environment, Agriculture and Food Supply

- Environmental change impact through climate
- Environmental change impact through water availability/access
- Environmental change impact through water quality
- Environmental change impact through soil availability
- Environmental change impact through soil quality
- Agriculture impacts through farming systems
- Agriculture impacts through land use
- Agriculture impacts through sustainability (animal source foods)
- Agriculture impacts through plant-based food
- Agriculture impacts through fisheries (land/marine)
- Agriculture impacts through alternative foods
- Agriculture impacts through new food technologies
- Agriculture impacts through urban agriculture
- Agriculture impacts through alternative agricultural system
- Agriculture impacts through food composition
- Climate/environmental change impacts on nutrition/health through food/nutrition
- Climate/environmental change impacts on nutrition/health through insecurity/hunger
- Climate/environmental change impacts on nutrition/health through food quality
- Climate/environmental change impacts on nutrition/health through accessibility
- Climate/environmental change impacts on nutrition/health through affordability
- Climate/environmental change impacts on nutrition/health through economic sustainability
- Climate/environmental change impacts on public health through interaction of nutrition and surveillance and program/public health intervention development, monitoring and evaluation
- Climate/environmental change impacts on public health through interaction of nutrition and toxicology
- Climate/environmental change impacts on public health through interaction of nutrition and vector borne disease
- Climate/environmental change impacts on public health through interaction of nutrition and non-communicable diseases
- Climate/environmental change impacts on public health through interaction of nutrition and surveillance of global health targets
- Climate/environmental change impacts on public health through interaction of nutrition and 1000 Days
- Climate/environmental change impacts on public health through interaction of nutrition and nutrition transition
- Food waste
- Research approaches (systems modelling)
- Research approaches (multiple disciplinary)
- Research approaches (life cycle assessment)
- Research approaches (social science)
- Research approaches (data systems)
- Research approaches (data integration)
Community and Public Health Nutrition
- Acculturation
- Child health
- Community interventions
- eHealth/mHealth/virtual interventions
- Focus groups
- Food assistance programs
- Food environment
- Food insecurity
- Health disparities and inequities
- Maternal health
- Nutrition education
- Obesity prevention
- Physical activity

COVID-19 and Nutrition
- Coronavirus
- COVID-19
- Dietary-related risk factors
- Interactions between the immune system and coronavirus
- Viral detection in foods

Diet and Cancer
- Biomarkers
- Complex diseases
- Epigenetics
- Genetics
- Mendelian randomization analysis
- Metabolomics
- Nutrient assessment
- Nutritional biochemistry
- Omics
- Personalized/precision nutrition
- Transcriptomics

Dietary Bioactive Components
- Biomarkers
- Human health
- Inflammation
- Mechanisms
- Metabolism
- Metabolomics
- Microbiome
- Phytochemicals
- Polyphenols
- Prebiotics
- Probiotics
Dietary Patterns
- Dairy
- Diet quality
- Fruits and vegetables
- Mediterranean diet
- Nutrient density

Eating Frequency and Chrononutrition
- Chronobiology
- Chrononutrition
- Circadian rhythms
- Intermittent fasting
- Meal timing

Education and Teaching
- Career/professional development
- Curriculum
- Health professional education
- Innovations in education/training

Energy and Macronutrient Metabolism
- Alcohol
- Body composition
- Carbohydrate metabolism
- Energy expenditure, intake, and balance
- Fatty acid/lipid metabolism
- Fiber
- Ketone bodies
- Protein/amino acids metabolism
- Substrate oxidation

Experimental Animal Nutrition
- Animal models
- Animals
- Development
- Disease
- Fetal
- Health
- Maternal
- Metabolism
- Microbiome
- Nutrition interventions
- Omics
- Physiological state
Food Choice, Markets and Policy
- Alcohol
- Amino acid metabolism
- Consumer behavior
- Cost-effectiveness
- Diet quality
- Economic evaluation
- Food assistance programs
- Food costs
- Food environment
- Food security
- Food systems
- Policy

Food Science and Nutrition
- Food composition
- Food processing
- Food science and technology
- Formulation
- Fortification
- Processed foods

Global Nutrition
- Food and water insecurity
- Infant and child feeding
- Infection/Inflammation
- Micronutrient deficiencies
- Nutrition programs
- Policy
- Vulnerable populations
- Wasting/stunting and growth failure

Maternal, Perinatal and Pediatric Nutrition
- Breastfeeding/formula feeding
- Childhood growth/neurodevelopmental/disease outcomes
- Complementary diet/food packaging
- Diet quality/nutrient adequacy
- Epigenetics
- Genetics
- Human milk/infant formula composition
- Infant feeding behaviors/styles
- Lactation physiology
- Microbiome
- Pregnancy complications/birth outcomes
- Pregnancy nutrition/diet/supplementation
- Pregnancy weight gain
- Preterm infants
Medical Nutrition/Case Study Vignettes
- Cardiovascular/Hypertension/CHF
- Clinical assessment
- Complementary and alternative medicine
- Critical care nutrition
- Cystic fibrosis
- Developmental disabilities
- Diabetes/Prediabetes/Gestational diabetes
- Eating disorders
- GI - Celiac/IBS/IBD/SIBO/SBS
- GI - Maldigestion/Malabsorption
- HIV/AIDS
- Liver - Acute
- Liver - Chronic
- Malnutrition in the clinical setting
- Metabolic Stress/Inflammation/Hypermetabolism
- Men’s health
- Nutrition support
- Obesity treatments/Bariatric surgery
- Oncologic
- Other populations - amputees, vegetative states, hospice
- Pulmonary - Asthma, COPD, ARS
- Renal
- Transplantation: Organ
- Transplantation: Stem Cell
- Women’s health
- Wounds

Methods
- Assay development
- Biomarkers
- Dietary assessment
- Energy balance
- Simulation
- Study design

Neuroscience/Nutrition and the Brain
- Aging
- Brain
- Chronobiology
- Cognition
- Dementia/Alzheimer’s Disease
- Early development
- Mental health
- Mitochondria
- Neurodegenerative diseases
- Obesity
- Vitamin D
Nutrition Education and Behavioral Science

- Behavior change
- Behavior modification theory (or behavioral theory)
- Behavior science
- Behavioral nutrition interventions
- Choice behavior
- Feeding behavior
- Health behavior
- Healthy lifestyles
- Nutrition behavior
- Nutrition behavior assessment
- Nutrition counseling
- Nutrition education
- Nutrition education intervention (this would be for any setting including community)
- Nutrition education program
- Nutrition survey
- Physical activity
- Qualitative research
- Questionnaire
- Questionnaire development

Nutrition Translation and Communications

- Clinical trials
- Cognition
- Consumer, applied and therapeutic nutrition
- Databases and big data
- Dietary assessment and quality
- Dietary patterns
- Food science and technology
- Neuroscience
- Nutrition communication
- Nutrition translation
- Product development
- Public policy and regulation

Nutritional Epidemiology

- Behaviors
- Biomarkers
- Clinical trials
- Diet quality
- Dietary guidelines
- Dietary patterns
- Foods and nutrients
- Health outcomes
- Lifespan epidemiology
- Lifestyle factors
- Methods and validation
- Observational studies
Nutritional Immunology and Inflammation/Immunometabolism

- Adaptive
- Antigen
- Immune cells
- Immunity (immune, immunotherapy, immunometabolism, etc.)
- Infection
- Inflammation
- Innate
- Pathogen

Nutritional Microbiology/Microbiome

- Aging
- Animal models
- Infant and maternal nutrition
- Chronic disease
- Dietary interventions
- Dietary patterns
- Epidemiology
- Energy metabolism
- Fermented foods
- Fiber
- Gut-brain axis
- Host-microbe interactions
- In vitro models
- Metabolomics
- Metagenomics
- Microbiome
- Mycobiome
- Non-nutritive compounds
- Physical activity
- Polyphenols
- Postbiotics
- Prebiotics
- Probiotics
- Virome
Obesity
- Appetite
- Behavior change
- Body composition
- Childhood
- Dietary patterns
- eHealth/mHealth/virtual interventions
- Ingestive behavior
- Macronutrient
- Meal timing/circadian influences
- Microbiome
- Neurobiology
- Obesity treatment mediators/moderators/predictors
- Physical activity
- Social determinants of health

Policies and Regulations
- Fortification
- Cost-effectiveness
- Policy
- Labeling
- Implementation
- Malnutrition

Precision Nutrition/Nutrient-Gene Interactions
- Artificial intelligence
- Biomarkers
- Complex diseases
- Epigenetics
- Genetics
- Mendelian randomization analysis
- Metabolomics
- Nutrient assessment
- Nutritional biochemistry
- Omics
- Personalized/precision nutrition
- Transcriptomics

Protocols
- Assay development
- Biomarkers
- Dietary assessment
- Energy balance
- Simulation
Sports Nutrition and Physical Activity

- Carbohydrate metabolism
- Energy balance and expenditure
- Endurance exercise
- Fat, fatty acid metabolism, and ketone bodies
- Hydration
- Muscle physiology
- Nutritional supplementation and ergogenic aids
- Physical performance
- Protein and amino acids
- Recovery nutrition
- Resistance training
- Vitamins, minerals, and bioactive nutrients

Vitamins and Minerals

- Antioxidants
- B vitamins and one-carbon metabolism
- Dietary supplements
- Fortification
- Micronutrient bioavailability and antioxidant function
- Micronutrient interventions
- Selenium
- Trace element transport and homeostasis
- Vitamin D
- Vitamin K
- Water and fat soluble vitamins
- Zinc