Kelly S. Swanson

The Kraft Heinz Company Endowed Professor in Human Nutrition Professor in Animal Sciences and Nutritional Sciences

Department of Animal Sciences <u>Affiliate Research Page</u> Email: ksswanso@Illinois.edu _{Created: Jan 2024}

Functional ingredients are added to pet diets to support health, with products targeting digestive and metabolic health being popular. Dietary fibers, biotics, and other substances are used to maintain stool quality, provide laxation, modulate gut microbiota populations, and/or provide metabolic health benefits to pets. Given the variability that exists between dogs and cats and among dog breeds, a personalized approach may identify more effective strategies and/or accurate dosages.



Keywords

Canine nutrition, dietary fiber, feline nutrition, gastrointestinal health, microbiome, postbiotics, prebiotics, probiotics

Research Interests

- · Evaluation of dietary fibers and biotic substances
- Dietary strategies to influence canine and feline gut microbiota populations and health
- · Strategies to manage canine and feline obesity
- Evaluation of novel proteins for use in canine and feline diets

Current Projects

- Effects of a novel probiotic on fecal characteristics, fecal microbiota, and immune function of healthy adult dogs
- Effects of veterinary gastrointestinal diets on fecal characteristics, metabolites, and microbiota concentrations of adult dogs and cats treated with antibiotics
- In vitro fermentation characteristics of dietary fibers using canine and feline fecal inocula
- Safety, gastrointestinal tolerance, digestibility, and palatability of a novel yeast protein in healthy adult dogs

Interest Areas for Collaboration/Future Work

Dr. Swanson is interested in collaborating with scientists to help identify associations between gastrointestinal microbiota, physiological outcomes, and health biomarkers to improve our understanding of how the microbiome impacts canine and feline health.

Personalized Nutrition Initiative

University of Illinois Urbana-Champaign Carl R. Woese Institute of Genomic Biology 1206 West Gregory Drive | Office 3113, MC 195 Urbana, IL 61801 personalizednutrition@illinois.edu