

## Utilization of pulse-based ingredients to develop low glycemic pet food to improve the health of dogs

**Dr. Yongfeng Ai**

University of Saskatchewan – Dept. of Food and Bioproduct Sciences

SPG Contributions	Project Status	Duration/Timeline of Project (Year to Year)	Co-funders	Total Project Cost
\$222,977.00	Active	April 2018 – March 2023	Agriculture and Agri-Food Canada; AGT Foods; Horizon Pet Nutrition	\$760,757.00

### Project Description

To develop low-glycemic pet foods from 5 varieties of Canadian pulse flours by modifying molecular structure and organization of starch; to create low-glycemic pet foods from Canadian pulse flours by co-extrusion with crude phenolic extract from lentil hull; to examine in vivo starch digestibility, glycemic responses, and long-term health benefits of the low-glycemic pet foods obtained from Objective 1 and 2 in beagle dogs.

### Outcome

### Research Objective

#### OBJECTIVE 1

To develop low-glycemic pet foods from 5 varieties of Canadian pulse flours by modifying molecular structure and organization of starch.

#### OBJECTIVE 2

To create low-glycemic pet foods from Canadian pulse flours by co-extrusion with crude phenolic extract from lentil hull.

#### OBJECTIVE 3

To examine in vivo starch digestibility, glycemic responses, and long-term health benefits of the low-glycemic pet foods obtained from Objective 1 and 2 in beagle dogs.