

Increasing sow milk yield and piglet growth via low-cost feeding and management strategies during gestation and/or lactation

- ▶ Denise Beaulieu, Prairie Swine Centre
- ▶ Chantal Farmer, Dairy and Swine Research and Development Centre, AAFC

The main objective is to develop low-cost feeding and management strategies that will increase sow milk yield and piglet growth while ensuring maximum animal welfare.

Summary

Sows do not produce enough milk to sustain optimal growth of their piglets; a problem exacerbated in recent years with hyperprolific sow lines.

In this project, researchers will develop:

- feeding and management strategies that will stimulate mammary development of gilts, and increase milk production. Researchers will determine the impact that body condition (i.e. backfat thickness) in gilts at mating and at the end of gestation has on mammary development at the end of gestation. The aim is to determine possible involvement of specific genes on the effect of body condition on mammary development.
- novel management strategies using naturally-occurring bioactive feed compounds (such as the phytoestrogen genistein, and the plant extract, silymarin).
- low-cost feeding strategies for group-housed gestating sows (use of high-fibre, low cost by-products, processing) to reduce aggression and maintain optimum production.

Researchers will also study how to prolong the colostral phase in early lactation in order to increase uptake of immunoglobulins and other growth factors by piglets.

Collaborators

Jennifer Brown

Prairie Swine Centre

Jérôme Lapointe

Dairy and Swine Research
and Development Centre, AAFC

Marie-France Palin

Tom Scott

University of Saskatchewan