

<b>PRO0922</b>
<i>Supporting healthy development in the early years: perceptions of rural educators around the promotion of physical activity and pulse crop consumption</i>
<b>INVESTIGATORS</b>
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<b>STUDY SPONSORS</b>
Saskatchewan Pulse Growers
<b>STUDY TYPE</b>
Health Outcomes; Observational; Cross-Sector survey; One-on-one interviews
<b>OBJECTIVES</b>
<ol style="list-style-type: none"> <li>1) To identify the barriers and facilitators parents and educators living in rural Saskatchewan face when attempting to provide physical activity and good nutrition (specifically pulses) for early years children in their care.</li> <li>2) To train parents and educators in a program called LEAP which educates early years educators on how to effectively increase physical activity and healthy eating opportunities with a specific emphasis on incorporating pulses into the nutrition component of the program.</li> </ol>
<b>WHY STUDY NEEDED</b>
<p>Research indicates that rural residents (adults and children) have significantly lower physical activity and poorer diets than urban individuals. Establishing healthy behaviours at an early age is critical to developing and maintaining good behaviours as adults; and early childhood educators play an important role in establishing these behaviours. To date there is limited research to identify the barriers (factors that discourage behaviour) and facilitators (factors that encourage behaviour) rural early years educators face in providing both physical activity and affordable healthy eating opportunities. Pulse crops are a healthy and affordable food that could be incorporated into childcare centre menus. However, no studies have investigated factors influencing the incorporation of pulse crops into rural childcare centres in Saskatchewan.</p>

<b>HYPOTHESIS</b>
No specific hypothesis as this was an explorative study design using qualitative methods to identify and understand the challenges educators face when incorporating physical activity and healthy foods into the lives of early years children.
<b>STUDY DESIGN</b>
Eight (8) care centre directors or educators in rural settings in the Kelsey Trail Health Region (SK) participated in one-on-one semi-structured interviews using open-ended questions. The interviews were based upon an established ecological model that uncovers personal factors and social environmental factors (intrapersonal, interpersonal, institutional, community, and public policy) influencing behaviour. All responses were kept confidential and results reported anonymously.
<b>FINDINGS</b>
<ol style="list-style-type: none"> <li>1. All those interviewed believed physical activity and healthy eating are important to development of early years children, but educators found it difficult to promote these behaviours at the child care centres.</li> <li>2. In general, early years children ate meals that consisted of highly processed foods.</li> <li>3. There was a general lack of awareness of pulses and their nutritional benefits Consequently, there was no incorporation of pulses into care centre meals</li> <li>4. Barriers to physical activity included: absence of physical activity policies, lack of space and poor weather</li> <li>5. Facilitators to physical activity included personal health and physical activity practices and co-worker support</li> <li>6. Barriers to consuming healthy foods: access to fresh produce and price of these foods</li> <li>7. Barriers to incorporating pulse crops into centre menus included the lack of knowledge of pulses and how to prepare and thus incorporate pulses into centre meal plans</li> <li>8. Facilitators to consuming healthy foods included care centre knowledge to prepare healthy menus</li> </ol>
<b>SIGNIFICANCE OF STUDY</b>
<p>Identified barriers and facilitators influencing rural educators in providing physical activity and healthy eating opportunities (with a focus on pulse crops) in rural care centres. The study revealed that lack of knowledge about pulses and their use in meal preparation is a barrier to increased consumption of pulses. Possible ways to increase pulse consumption among rural early years children and educators were identified.</p> <p>There was a positive attitude of educators to learn more about pulses.</p> <ol style="list-style-type: none"> <li>a) Educators expressed an interest in having a workshop to increase awareness and knowledge to incorporate pulses in care centre menus</li> <li>b) Learning about pulses and incorporating into care centre meals could lead to</li> </ol>

increasing parental knowledge and use of pulses.

**PUBLICATIONS, PRESENTATIONS, EDUCATIONAL MATERIALS PRODUCED**

Froehlich, A. L., & Humbert, M. L. (2010, May). *Barriers and Facilitators to Providing Physical Activity Opportunities for Rural Early Years Children in Care*. Poster session presented at the 3rd International Conference on Physical Activity and Public Health. Toronto, Ontario.

- Froehlich, A. L., & Humbert, M. L. (2010, June). *Providing Opportunities for Physical Activity and Nutrition in Early Years Care Centres*. 16th Annual Qualitative Health Research Conference. Edmonton, Alberta.
- Froehlich Chow, A. & Humbert, L. (2013). Perceptions of Early Years Caregivers: Factors Influencing the Promotion of Physical Activity Opportunities in Rural Care Centres. *The International Society for Child Indicators*. 7: 57-73.

**VALUE TO PRODUCERS**

A number of barriers were identified that limit domestic consumption of pulses, including a lack of awareness of nutritional benefits and a lack of knowledge about preparation and recipes.

The study demonstrated that educators were excited about incorporating locally grown pulse crops into meals served at care centres—how can domestic pulse supply become more of a reality?

This study has led to two additional studies that SPG has also funded. First it was used to inform a pulse crop intervention that was designed for rural childcare centres and pilot tested in a rural childcare centre. Following the pilot study the intervention has been expanded and adapted and is currently being implemented in Saskatoon based childcare centres.