B12 deficiency a concern for long-term care

WATERLOO, Ont. (Tuesday, January 19, 2016) – A high proportion of older adults entering long-term care homes in Ontario are B12 deficient, with more developing deficiencies over the course of their first year in residence, according to research from the University of Waterloo. There is a connection between B12 deficiency and several serious health conditions.

Researchers found that almost 14 per cent of study participants were B12 deficient at the time of admission to a long-term care home, while another 38 percent had only slightly better levels. Over the course of one year, an additional four per cent developed B12 deficiencies. However, those receiving supplements had better B12 levels.

The <u>study</u>, conducted in partnership with the Schlegel-University of Waterloo Research Institute for Aging (RIA) and published in <u>Applied Physiology</u>, <u>Nutrition</u>, <u>and Metabolism</u>, suggests a simple yearly blood test could be the key to eliminating B12 deficiencies among elderly living in long-term care homes.

In Ontario, there is currently no systematic screening system to identify B12 deficiencies among long-term care residents — at the time of admission or afterwards.

"The negative effects of a B12 deficiency are considerable," said Heather Keller, a professor of kinesiology at Waterloo and Schlegel Research Chair in Nutrition and Aging. "This is of particular importance in the context of our aging population with more Canadians requiring long-term care."

Untreated B12 deficiency will eventually lead to anemia and neurologic complications such as unsteady gait and paralysis. Low levels of the vitamin have been found to be associated with depression and dementia, increased confusion, lethargy and even osteoporosis.

"In spending time in long-term care homes, you often see depression and loneliness. This is why we need to do everything in our power to enhance quality of life and quality of care in this setting," said Kaylen Pfisterer, lead author on the paper and assistant research coordinator at the RIA. "Screening for B12 deficiency is a first step to targeting B12 treatment to those who may benefit most."

A blood test would allow health-care practitioners to screen for a B12 deficiency among new residents and if performed annually, monitor vitamin levels throughout the resident's time in long-term care, improving overall health and well-being.

B12 deficiency is highly preventable and easily treatable with improved food choice and supplements. Foods rich in B12 include meat and dairy products and foods fortified with this vitamin such as soy milk breakfast cereals.

About the University of Waterloo

In just half a century, the University of Waterloo, located at the heart of Canada's technology hub, has become one of Canada's leading comprehensive universities with 35,000 full- and part-time students in undergraduate and graduate programs. A globally focused institution, celebrated as Canada's most innovative university for 24 consecutive years, Waterloo is home to the world's largest post-secondary co-operative education program and encourages enterprising partnerships in learning, research and discovery. In the next decade, the university is committed to building a better future for Canada and the

world by championing innovation and collaboration to create solutions relevant to the needs of today and tomorrow. For more information about Waterloo, please visit <u>uwaterloo.ca</u>.