

Bringing Research to LIFE

Upcoming Events

Café Scientifique

HIV/AIDS IN MANITOBA: GLOBAL STRATEGIES FOR A LOCAL PROBLEM

For decades, the University of Manitoba has led the fight against the spread of HIV/AIDS around the globe. Come join our experts to learn about the latest prevention strategies being used to address Manitoba's growing HIV/AIDS cases and the status of the development of a vaccine to prevent the disease.

Experts:

Dr. Keith Fowke
Dr. Marissa Becker
Blain Butyniec

Moderator:

Dr. Stephen Moses

Thursday, Nov. 29, 2012 – 7pm
McNally Robinson Booksellers
1120 Grant Ave., Event Atrium

RSVP to:

Research_Communications@
umanitoba.ca or 204-474-6689

Visionary Conversations

Trailblazing Indigenous Success

At the University of Manitoba we're passionate about advancing Indigenous education. Engage in a discussion with our expert panel about the ingredients needed for Indigenous student success.

Featured Speakers:

Deborah Young – Executive Lead,
Indigenous Achievement,
Office of the President

Michael Hart – Canada Research
Chair in Indigenous Knowledges and
Social Work, Faculty of Social Work

Catherine Cook – Associate Dean,
First Nations, Métis and Inuit Health,
Faculty of Medicine

Heather McRae – PhD Candidate,
Faculty of Education

Wednesday, Dec. 12, 2012
Frederic Gaspard Theatre
Basic Medical Sciences Building
Bannatyne campus

Reception on Joe Doupe Concourse

6:30 to 7:00 p.m.

Panel discussion

7:00 to 8:30 p.m.

RSVP to:

Visionary.Conversations@
ad.umanitoba.ca

Stick to the flax

Researchers discover hidden powers of prairie plant to lower blood pressure and significantly reduce risk of stroke, heart attack

BY KATIE CHALMERS-BROOKS
For The Bulletin

If you have high blood pressure, adding ground flaxseed to your diet every day could reduce your risk of stroke by half and lower your chances of having a heart attack by 30 per cent, according to new findings by a U of M research team.

Lead investigator and physiology professor Grant Pierce says they were surprised to discover just how powerful flaxseed is at reducing blood pressure in people with heart disease. High blood pressure (or hypertension) is the leading cause of heart attack and stroke.

The participants in their study who ate 30 grams of ground flaxseed daily for six months showed the largest drop in blood pressure ever demonstrated by any dietary intervention.

Pierce says they experienced similar results to what you would expect from taking conventional anti-hypertension medication. Flaxseed has more punch than even the popular DASH (Dietary Approaches to Stop Hypertension) diet, which is widely recommended by doctors across North America to patients with hypertension.

"Honestly, we didn't expect these effects to be as significant as they were. It took a while for us to realize what we had and now of course we're pretty excited," says Pierce, who is a principal investigator with the Canadian Centre for Agri-Food Research in Health and Medicine at St-Boniface Hospital. "These anti-hypertensive effects of flaxseed are among the most potent ever observed."

The study involved 110 people, half of whom received a placebo. Neither the participants nor the researchers knew who belonged to which group. They were provided with bagels, muffins, bars, pasta and buns which had in them either flax or a placebo that looked and tasted like flax. They also had the option of sprinkling flax (or the placebo) on their meals.

Blood pressure is measured as systolic (the pressure when the heart beats) and diastolic (the pressure when the heart is between beats) and is expressed in millimetres of mercury (mmHg). After six months, the systolic blood pressure of those who ate the flaxseed had dropped an average of 15 mmHg and the diastolic blood pressure fell seven mmHg. In the placebo group, systolic pressure increased slightly while diastolic was unchanged. Researchers also detected in the flax group a notable increase in alpha linolenic acid (ALA), a healthy type of fatty acid, and enterolactone, a potent antioxidant.

Pierce says they had the study participants follow the diet for 12 months and are still analyzing the data



Photo by Rob Blaich
Grant Pierce, physiology professor at the U of M and executive director of research at St-Boniface Hospital.

from the second half of the year. He believes the impact of these results will be far-reaching. For example, flax crops may be a viable solution for third-world countries who can't afford to treat widespread hypertension with costly medications, Pierce says.

"Every country has a huge problem with hypertension. Whether you are economically disadvantaged or not, findings like what we have not only have an impact on health but may have a great impact on the cost of health care."

Pierce will now try to figure out the inner-workings of flax, a purple plant grown on the Canadian prairies. Already he knows that flax doesn't significantly lower blood pressure in

otherwise healthy people, so those who enjoy eating flax regularly aren't at risk of their blood pressure dropping to a dangerously low level.

Flax contains ALA, an omega-3 that works like an anti-inflammatory; lignans, which act as antioxidants; and fibre, which reduces cholesterol. All three have been shown to reduce blood pressure on their own, but only in a small way. Pierce suspects there may be a cumulative effect happening within the flaxseed.

He recently presented the findings at the American Heart Association's scientific sessions in Los Angeles and has submitted them for publication. "There were a lot of questions at the conference," Pierce says, "and a lot of excitement."