ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᐅᐦᒋ ᐊᓂᔫ ᐁ ᓂᑑᒋᔅᑫᔮᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᔫᐦ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔮᐦᐧᑳᐤᐦ ᐁ ᓈᑳᐦᐅᑌᐠ ᐁ ᔑᐧᐋᑲᒥᐦᐧᑳᓅᐦᒃ*

*ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓂᔮ ᐋ ᓂᑑᒋᔅᑳᔮᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᐦᐄ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔮᒡᐦ ᐋ ᓂᑳᐦᐅᑖᒡᐦ ᐋ ᔑᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ**

Reports from the anti-diabetic plant project*

CIHR Team in Aboriginal Anti-Diabetic Medicines
Équipe IRSC sur les médecines autochtones antidiabétiques

ᐁ ᓂᔅᑐᐧᐄᐧᑖᐤ ᑳ ᓂᑑᒋᔅᑫᔮᐦᑕᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ
ᑳᓈᑖ ᐋᐸᑎᓲᐧᐃᓐ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᑫᔮᐦᑖᑲᓅᐦᒃ ᒥᔦᐱᒫᑎᓲᐧᐃᓐ ᐊᓂᒌ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑎᐦᐧᑳᐤ ᐄᓅ ᓂᑐᐦᑯᔮᓐᐦ ᐁ ᒫᓯᐦᑫᐸᔮᓃᐦᐧᑳᐤᐦ ᐁ ᔑᐧᐋᑲᒥᐦᐧᑫᓅᐦᒃ
ᒨᓀᔮᐤ, ᑳᑕᐦᑯᓯᑕᐲᓯᒻ 2011

ᐋ ᓂᔅᑐᔮᒡ ᑳ ᓂᑑᒋᔅᑳᔮᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ
ᑳᓈᒑᐦ ᐋᐱᑎᓲᐧᐃᓐ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᑳᔮᐦᑖᑭᓂᐧᐃᒡ ᒥᔦᐱᒫᑎᓲᐧᐃᓐ ᐊᓂᒌ ᑳ ᐋᐱᑎᔒᔅᑎᐦᒡ ᐄᔮᔮᐤ ᓂᑐᐦᑯᔮᓐᐦ ᐋ ᒫᓯᐦᑳᐱᔮᔮᒡᐦ ᐋ ᔑᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ
ᐧᒫᓀᔮᐤ, ᒋᔖᐲᓯᒼ 2011

Scientific Committee Meeting
CIHR Team in Aboriginal Anti-Diabetic Medicines
Montreal, February 2011

Université de Montréal
McGill
uOttawa
L'Université canadienne
Canada's university
Institut de recherche en biologie végétale IRBV
JARDIN BOTANIQUE DE MONTRÉAL
Université de Montréal

Conseil Cri de la santé et des services sociaux de la Baie James
ᓂᑐᑯᔮᓐ ᑲᔦ ᐃᔑᐧᐄ ᐧᐋᐃᓐ ᐊᓇᓇᑲᒋᑖᑲᓂᐅᒡ
Cree Board of Health and Social Services of James Bay

*ᑯᐃᔅᑯ ᐁ ᑲᓇᐧᐁᔮᐦᑖᑲᓅᐧᐃᐦᒡ ᑫᐧᑳᓐ: ᐁᐅᑯ ᑫ ᒋᔅᑫᔮᐦᑕᑫᑯ ᒥᑯ ᐊᓂᒌ ᐊᐧᐁᓂᒌ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐧᑖᐤ ᐊᓂᔫ ᐁ ᓂᑑᒋᔅᑫᔮᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑫ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔮᐦᐧᑳᐤᐦ ᐁ ᔑᐧᐋᑲᒥᐦᐧᑫᓅᐧᐃᐦᒡ ᒋᑲ ᒌ ᐊᔮᒥᐦᑌᐅᐠ ᐅᔫ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᔫ᙮ ᐁᑯᑦ ᐁ ᒪᓯᓈᑌᐠ ᐄᓅ ᒋᔅᑫᔮᐦᑕᒧᐧᐃᓐ ᑲᔦ ᐊᓂᔫ ᑳ ᐄᔑ ᒥᔅᑲᐧᐊᐦᑖᐧᑖᐤ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᑫᔮᐦᑕᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᒦᓐ ᒋᑲ ᒪᓯᓇᐦᐄᑲᓅ ᑯᑕᒃ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᒥᔑᐧᐁ ᐊᐧᐁᓐ ᑫ ᒌ ᐧᐋᐸᐦᑕᒃ ᒥᓷ ᒌ ᐊᔮᒥᐦᑖᐧᑖᐤ ᓅᔅᑕᒻ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᑫᔮᐦᑕᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᒋᓭᐄᓅᒡ ᑲᔦ ᐅᑌᓈᐤᐦ᙮

**ᑯᔮᔅᑯ ᐋ ᑭᓂᐧᐋᔮᐦᑖᑭᓂᐧᐃᒡ ᑳᐧᑳᓐ: ᐋᐅᑯ ᑳ ᒋᔅᑳᔮᐦᑎᒫᑯ ᒥᑯ ᐊᓂᒌ ᐋ ᐧᐄᒋᐦᐄᐧᐋᒡ ᐊᓂᔮ ᐋ ᓂᑑᒋᔅᑳᔮᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑳ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔮᒡᐦ ᐋ ᔑᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ ᒋᑭ ᒌ ᐊᔮᒥᐦᑖᐅᒡ ᐅᔮ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᔮᐤ᙮ ᐋᑯᑎᐦ ᐋ ᒥᓯᓈᑖᒡ ᐄᔮᔮᐤ ᒋᔅᑳᔮᐦᑎᒧᐧᐃᓐ ᑭᔮ ᐊᓂᔮ ᑳ ᐄᔑ ᒥᔅᑭᐧᐊᐦᑖᒡ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᑳᔮᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᒦᓐ ᒋᑭ ᒥᓯᓂᐦᐄᑭᓂᐤ ᑯᑎᒃ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᒥᓯᐧᐊ ᐊᐧᐋᓐ ᑳ ᒌ ᐧᐋᐱᐦᑎᒃ ᒥᓷ ᒌ ᐊᔮᒥᐦᑖᐧᑖᐤ ᓅᔅᑎᒻ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᑳᔮᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᒋᓭᔮᔮᐅᒡ ᑭᔮᐦ ᐃᐦᑖᐧᐃᓐᐦ᙮*

***CONFIDENTIAL: Please note that this report is only intended for review by participants in the Anti-diabetic Plant Project. It contains confidential Iiyiyiu traditional knowledge and confidential results from the academic researchers. A public report will be made once the information has been reviewed by the researchers, the elders and the communities.**

ᑳ ᓂᓯᑐᐦᑖᑯᐦᑖᑦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ: **ᐁᓀᓐ ᐧᐹᐯᑦ**
Plain-language summaries: **Ellen Bobet**

ᐄᔮᔮᐤ/ᐄᓅ ᐃᐧᑖᔅᑎᒫᑳᓯᐤ: **ᐱᕆᔮᓐ ᐧᐁᑉ**
Cree translations: **Brian Webb**

ᒥᓯᓈᐱᔅᑭᐦᐄᑭᓐᐦ: **ᐋᓓᐃᓐ ᑰᕆᔦ**
Photos: **Alain Cuerrier**

ᑳ ᒥᔦᓈᑯᐦᑖᒡ ᒥᓯᓂᐦᐄᑭᓂᔮᐤ: **ᑳᑎᔮ ᐯᑦᕈᕝ**
Design and page layout: **Katya Petrov**


NEOSKWESKAU
MEMORIAL ARENA

ᐊᓐ ᐯᔭᑦ ᑲ·ᑫᒋᔅᒉᒧ·ᐃᓐ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑌ ᓂᑐᐦᑯᔨᓐ ᐋᐸᑎᓰ·ᐃᓂᐦᒡ: ᑖᓐ ᐁ ᐃᑖᐸᑎᐦᒡ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓄ·ᐃᐦᒡ ᐅᐦᒋ ᐊᓂᑦ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᒡ ᓂᑐᐦᑯᔨᓐ ᐋᐸᑎᓰ·ᐃᓐ? ᐁᐅᑦ ᒫᒃ ᐆ ᑖ·ᐯ ᒨᔥ ᒋᐹᐦ ᒌ ᑲ·ᑫᒋᔅᒉᒧᓈᓅ᙮

ᐁ ᒋᔅᒋᔫᐦᑐᑖᑲᓄ·ᐃᐦᒡ ᐊᓐ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦ·ᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐅᐦᒋ ᓇᑳᐦᐄᑲᓄ·ᐃᐦᒡ ᐁ ᔒ·ᐋᑲᒥᐦ·ᑳᓄ·ᐃᐦᒡ, ᐊᓐ ᐯᔭᑦ ᒣ·ᑳᓐ ᑳ ᐃᐦᑎᓈᓄ·ᐃᐦᒡ ᐆ ᔔᔥ ᓃ·ᔔᔥᒡ ᑎᐦᑐ ᐱᐳᓐᐦ ᑳ ᐃᔅᐱᔑ ᐱᒥᐸᔨᐦᒡ, ᐁᐅᑦ ᐊᓐ ᐁ ᓂᔅᑐᔨ·ᑖᐤ ᐊ·ᐁᓂᒌ ᐅᐦᒋ ᐊᓂᑌ ᒥᓯ·ᐁ ᐃᐦᑖ·ᐃᓐᐦ ᒫᒨ ᒉ ᒌ ᐃᐦᑖ·ᑖᐤ ᓃ·ᔔᐤ ᓀᔅᒡ ᓂᔅ·ᑖᐤ ᒣᔑᑯᒻ ᐱᐳᓐᐦ ᒉ ᒌ ᐋᔨᒧᑌᐦ·ᑳᐤ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ (TM)᙮ ·ᐹᒧᔥ ᒫᒃ ᐊᓐ ᑳ ᐃᔅᐸᔨᐦᒡ, ᒌ ᐃᐦᑖᐅᒡ-ᐋ ᐊ·ᐁᓂᒌ ᐁ ᐋᔨᒧᑌᐦ·ᑳᐤ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ·ᐄ·ᐄᑎᒣ ᐊᓂᒌ ᒋᔔᐄᓅᒡ ᑳ ᒫᒨᐱ·ᑖᐤ? ᒌ ·ᐄᒋᐦᐄ·ᐁᐸᔫ ᐆ ᑳ ᐄᔑ ᐱᒥᐸᔨᐦᒡ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓄ·ᐃᐦᒡ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᒉ ᒌ ᐋᔨᒧᑌᑲᓅᐦ·ᑳᐤᐦ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ, ·ᐁᔥ ᐁᔫᑦ ·ᐁᐦᒋ ᒌ ᓂᑐ·ᐁᔨᐦᑕᐦ·ᑳᐤ ᒥᔅᑎᔫᓂᐤ ᒋᔔᐄᓅᒡ ᑳ ᒫᒨᐱ·ᑖᐤ ᒉ ᐄᔑ ᒋᐦᒋᐸᔨᐦᑖᑲᓅᔨᒡ᙮

ᐆ ᒫᒃ ᑳ ᐄᔑ ᐱᒥᐸᔨᐦᒡ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓄ·ᐃᐦᒡ, ᐁᐅᑦ ᑳ ᓅᑯᐦᒡ ᐁᑳ ᓈᔅᒡ ᐅᔮᒻ ᐁ ᐋᔨᒥᐦᒡ ᓂᑐᐦᑯᔨᓂᑲᒥᑦ ᐁ ᐅᐦᒋ ᐱᒥᐸᔨᐦᑖᑲᓄ·ᐃᐦᒡ ᐊᓂᑌ ᓂᑐᐦᑯᔨᓐ ᐋᐸᑎᓰ·ᐃᓂᐦᒡ ᒉ ᒌ ᒥᔭ·ᑖᐤ ᐅᑖᐦᑯᓰᐦ ᒉ ᒌ ᐋᐸᒋᐦᑖᔨᒡᐦ ᐄᓅ ᓂᑐᐦᑯᔨᓂᔫ ᒣ·ᑳᒡ ᑲᔦ ᐊᓂᔫ ᐁ ᐄᔑ ·ᐄᒋᐦᐋᑲᓄ·ᐃᐦᒡ ·ᐁᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᐋᐸᒋᐦᑖᔨᒡᐦ᙮ ᓇᒧᔨ

ᐅᐦᒋ ᐃᐦᑎᑯᓐ ᐊᓐ ᒉ ᒌ ᐋᐸᒋᐦᑖᑲᓄ·ᐃᐦᒡ ᐄᓅ ᓂᑐᐦᑯᔨᓐ ᐅᐦᒋ ᐊᓂᑌ ᓂᑐᐦᑯᔨᓐ ᐋᐸᑎᓰ·ᐃᓂᐦᒡ – ᐁᐅᑯᓂᒡ ᑳ ᐱᒥᐸᔨᐦᑖ·ᑖᐤ ᐊᓂᒌ ᐄᓅᒡ ᑳ ·ᐄᒋᐦᐋ·ᑖᐤ ᐊ·ᐁᔫᐦ ᑲᔦ ᐊᓂᑌ ᐅᒋᒫᐦᑳᓐ ᐋᐸᑎᓰ·ᐃᓂᐦᒡ ᒌ ᐅᐦᒋ ·ᐄᒋᐦᐋᑲᓅ·ᐃᒡ; ᒥᑦ ᒫᒃ ᐊᓂᑌ ᓂᑐᐦᑯᔨᓂᑲᒥᑯᐦᒡ, ᐁᔫᑦ ᑳ ·ᐄᐦᑕᒧ·ᐋ·ᑖᐤ ᐊ·ᐁᔫᐦ ᒉ ᐋᐸᒋᐦᑖᔨᒡᐦ

A question is being asked right now in the Cree Board of Health: what use is research to the mission of the health board which is to provide services? It is a valid question to continually ask.

Thinking about the Anti-diabetic plant project, one thing that this project has done is provide about seven years of meetings where people from all communities have sat down two or three times a year to discuss traditional medicines (TM). Prior to that, were any groups talking about TM outside of the Elders' Councils? The project has helped to broaden this discussion, which was one of the reasons that the Mistissini Elders' Council wanted it in the first place.

ᐊᓐ ᐹᔨᑦ ᑯ·ᑳᒋᔅᒑᒧ·ᐃᓐ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑖ ᓂᑐᐦᑯᔨᓐ ᐋᐱᑎᓰ·ᐃᓂᐦᒡ: ᑖᓐ ᐋ ᐃᑖᐱᑎᐦᒡ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂ·ᐃᒡ ᐅᐦᒋ ᐊᓂᑦ ᐋ ᐄᔑ ᐱᒥᐱᔨᒡ ᓂᑐᐦᑯᔨᓐ ᐋᐱᑎᓰ·ᐃᓐ? ᐋᐅᑦ ᒫᒃ ᐆ ᑖ·ᐸ ᒨᔥ ᒋᐱᐦ ᒌ ᑯ·ᑳᒋᔅᒑᒧᓈᓂᐤ᙮

ᐋ ᒋᔅᒋᔫᐦᑖᑭᓂ·ᐃᒡ ᐊᓐ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂ·ᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐅᐦᒋ ᓂᑳᐦᐄᑭᓂ·ᐃᒡ ᐋ ᔒ·ᐋᑭᒥᐦ·ᑳᓂ·ᐃᒡ, ᐊᓐ ᐹᔨᑦ ᒫ·ᑳᓐ ᑳ ᐃᐦᑎᓈᓂ·ᐃᒡ ᐆ ᔔᔥ ᓃ·ᔔᔥᒡ ᑎᐦᑐ ᐱᐳᓐᐦ ᑳ ᐃᔅᐱᔑ ᐱᒥᐱᔨᒡ, ᐋᐅᑦ ᐊᓐ ᐋ ᓂᔅᑐᔨᒡ ᐊ·ᐋᓂᒌ ᐅᐦᒋ ᐊᓂᑖ ᒥᓯ·ᐋ ᐃᐦᑖ·ᐃᓐᐦ ᒫᒨ ᒑ ᒌ ᐃᐦᑖᒡ ᓃ·ᔔᐤ ᑭᔮ ᒫᒃ ᓂᔅ·ᑖᐤ ᐋᔑᑯᒻ ᐱᐳᓐᐦ ᒑ ᒌ ᐋᔨᒧᑎᐦᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ (TM)᙮ ᐋᐦ·ᒫᔭ ᒫᒃ ᐊᓐ ᑳ ᐃᔅᐱᔨᒡ, ᒌ ᐃᐦᑖᐅᒡ-ᐋ ᐊ·ᐋᓂᒌ ᐋ ᐋᔨᒧᑎᐦᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ·ᐄ·ᐄᑎᒫ ᐊᓂᒌ ᒋᔔᔨᔨᐅᒡ ᑳ ᒫᒨᐱᒡ? ᒌ ·ᐄᒋᐦᐄ·ᐋᐱᔨᐤ ᐆ ᑳ ᐄᔑ ᐱᒥᐱᔨᒡ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂ·ᐃᒡ ᐊᑎᑑ ᒥᔥᑏ ᒑ ᒌ ᐋᔨᒧᑖᑭᓂ·ᐃᒡᐦ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ, ·ᐋᔥ ᐋᔫ·ᐃᑦ ·ᐋᐦᒋ ᒌ ᓂᑐ·ᐋᔨᐦᑎᐦᒡ ᒥᔅᑎᔫᓂᐤ ᒋᔔᔨᔨᐅᒡ ᑳ ᒫᒨᐱᒡ ᒑ ᐄᔑ ᒋᐦᒋᐱᔨᐦᑖᑭᓂ·ᐃᔨᒡ᙮

ᐆ ᒫᒃ ᑳ ᐄᔑ ᐱᒥᐱᔨᒡ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂ·ᐃᒡ, ᐋᐅᑦ ᑳ ᓅᑯᐦᒡ ᐋᑳ ᓈᔅᒡ ᐅᔮᒻ ᐋ ᐋᔨᒥᐦᒡ ᓂᑐᐦᑯᔨᓂᑭᒥᑦ ᐋ ᐅᐦᒋ ᐱᒥᐱᔨᐦᑖᑭᓂ·ᐃᒡ ᐊᓂᑖ ᓂᑐᐦᑯᔨᓐ ᐋᐱᑎᓰ·ᐃᓂᐦᒡ ᒑ ᒌ ᒥᔭᒡ ᐅᑖᐦᑯᓰᐦ ᒑ ᒌ ᐋᐱᒋᐦᑖᔨᒡᐦ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓂᔨᐤ ᒫ·ᑳᒡ ᑭᔦ ᐊᓂᔦ ᐋ ᐄᔑ ·ᐄᒋᐦᐋᑭᓂ·ᐃᒡ ·ᐋᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᐋᐱᒋᐦᑖᔨᒡᐦ᙮ ᓂᒧᔨ ᐅᐦᒋ ᐃᐦᑎᑯᓐ ᐊᓐ ᒑ ᒌ ᐋᐱᒋᐦᑖᑭᓂ·ᐃᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐ ᐅᐦᒋ ᐊᓂᑖ ᓂᑐᐦᑯᔨᓐ ᐋᐱᑎᓰ·ᐃᓂᐦᒡ – ᐋᐅᑯᓂᒡ ᑳ ᐱᒥᐱᔨᐦᑖᒡ ᐊᓂᒌ ᐄᔨᔨᐅᒡ ᑳ ·ᐄᒋᐦᐋᒡ ᐊ·ᐋᔨᐤᐦ ᑭᔦ ᐊᓂᑖ ᐅᒋᒫᐦᑳᓐ ᐋᐱᑎᓰ·ᐃᓂᐦᒡ ᒌ ᐅᐦᒋ ·ᐄᒋᐦᐋᑭᓂ·ᐃ·ᐃᒡ; ᒥᑦ ᒫᒃ ᐊᓂᑖ ᓂᑐᐦᑯᔨᓂᑭᒥᑯᐦᒡ, ᐋᔫ·ᐃᑦ ᑳ ·ᐄᐦᑎᒧ·ᐋᒡ ᐊ·ᐋᔨᐤᐦ ᒑ ᐋᐱᒋᐦᑖᔨᒡᐦ ᐊᓂᔮ ᓂᑐᐦᑯᔨᓂᔨ ᐋ ᐄᔑ ᓂᑐ·ᐋᔨᐦᑎᒥᔨᒡᐦ᙮ ᐋᑦ ᒫᒃ ᑳ ·ᐄᒋᐦᐋᑭᓂ·ᐃᒡ

This project showed that it is not difficult for a clinic within the Cree Board of Health to give patients access to their traditional system of care at the same time as providing western care. The Cree Board of Health did not provide the traditional care – that was done by the Healers with support from the Cree Nation; but the clinic encouraged people to choose the type of care they preferred. The clinic then helped patients to use both systems safely. The initiative in Mistissini is showing that patients can

ᐊᓂᔫ ᓂᑐᐦᑯᔨᓂᔫ ᐁ ᐄᔑ ᓂᑐᐧᐁᔨᐦᑕᒥᔨᒡᐦ᙮ ᐁᒄ ᒫᒃ ᑳ ᐧᐄᒋᐦᐋᑲᓅᐧᑖᐤ ᐊᓂᒌ ᐅᑖᐦᑯᔩᒡ ᐅᐦᒋ ᐊᓂᑌ ᓂᑐᐦᑯᔨᓂᑲᒥᑯᐦᒡ ᐊᓂᔫ ᑖᐸᐦᑯᓐ ᒉ ᒌ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᑲᔦ ᐧᐁᒥᔥᑎᑯᔓᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐊᓐ ᒫᒃ ᑳ ᒋᐦᒋᐸᔨᐦᑖᑲᓄᐧᐃᐦᒡ ᐊᓂᑌ ᒥᔅᑎᓰᓅᐦᒡ, ᐁᐅᒄ ᐊᒃ ᑳ ᐄᐦ ᐧᐋᐱᐦᑎᔮᑲᓅᐧᑖᐤ ᐅᑖᐦᑯᔩᒡ ᐄᐧᐋᐤ ᒉ ᒌ ᐅᔦᔨᐦᑕᐦᐧᑳᐤ ᑖᓂᔫ ᐊᓂᔫ ᒉ ᒌ ᐄᔑ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐁ ᐄᔑ ᐧᐄᒋᐦᐄᓯᐧᑖᐤ, ᐊᓂᔫ ᐯᔮᑯᔨᒡ ᓄᔥᑦ ᒫᒃ ᑖᐸᐦᑯᓐ ᐁ ᐃᔑᓈᑯᓂᔨᒡᐦ ᓂᑐᐦᑯᔨᓐᐦ, ᐁᒄ ᒫᒃ ᒫᒨ ᑳ ᐋᐸᑎᓰᐧᑖᐤ ᐅᒋᒫᐦᑳᓐ ᐋᐸᑎᓰᐧᐃᓐ ᑲᔦ ᓂᑐᐦᑯᔨᓂᑲᒥᒄ ᒉ ᒌ ᒥᔮᐧᑖᐤ ᐊᓂᔫ ᐁ ᐄᔑ ᓂᑐᐧᐁᔨᐦᑕᒥᔨᒡᐦ ᐅᑖᐦᑯᔫ ᒉ ᐄᔑ ᐧᐄᒋᐦᐋᑲᓅᔨᒡᐦ᙮

ᓈᔅᒑᐧᐯ ᒌ ᒋᔅᑖᒫᐧᐃᓂᔫ ᐅᑖᐸᑎᓰᐧᐃᓂᐧᐋᐤ ᐊᓂᒌ ᑳ ᓃᑑᒋᔅᑫᔨᐦᑕᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐆ ᑳ ᐅᔅᑳᐤ ᐁ ᐄᔑ ᐧᐄᒑᐸᑎᓰᒪᑑᓈᓄᐧᐃᐦᒡ᙮ ᐁᔫᒄ ᑳ ᑲᓄᐧᐋᐱᐦᑕᐦᐧᑳᐤ ᐊᓂᔫ ᑳ ᐄᔑ ᐧᐄᐦᑕᒥᔨᒡᐦ ᐄᓅᐦ ᑳ ᐧᐄᒋᐦᐋᔨᒡᐦ ᐊᐧᐁᔫᐦ ᐊᓂᔫ ᒫᔅᑯᒡ ᐁᑳ ᒉ ᒥᔫᔅᑳᑐᒪᑲᓂᔨᒡᐦ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᑲᔦ ᐧᐁᒥᔥᑎᑯᔓᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᓈᔅᒑᐧᐯ ᑲᔦ ᒌ ᒋᔅᑖᒫᐧᐃᓂᔫ ᑳ ᐄᔑ ᒋᔅᒉᔨᐦᑖᑯᐦᑖᐧᑖᐤ ᒉᐧᑳᔫ ᐅᐦᒋ ᐊᓂᔫ ᑖᓂᑌ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᓂᔨᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ ᐊᓂᑌ ᐲᐦᒋᔫ, ᐧᐁᔥ ᐁᔫᒄ ᑳ ᐄᔑ ᐧᐄᐦᑕᐦᐧᑳᐤ ᐊᓂᒌ ᐄᓅᒡ ᑳ ᐧᐄᒋᐦᐋᐧᑖᐤ ᐊᐧᐁᔫᐦ ᐊᓐ ᑯᔨᔅᒄ ᒉ ᐄᔑ ᐋᐸᒋᐦᑖᑲᓄᐧᐃᐦᒡ ᐄᓅ ᓂᑐᐦᑯᔨᓐ ᐁᑳ ᒉ ᒪᒋᐸᔨᐦᐄᑯᑦ ᐊᐧᐁᓐ ᐁ ᐋᐸᒋᐦᑖᑦ᙮ ᐁᐅᒄ ᑲᔦ ᑳ ᓃᑑᒋᔅᒉᔨᐦᑖᑲᓄᐧᐃᐦᒡ ᑖᓂᑌ ᒉ ᐃᐦᑎᓈᓄᐧᐃᐦᒡ ᐁ ᒫᐅᐦᑐᓈᑲᓅᐦᐧᑳᐤ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐊᓐ ᒉ ᒌ ᓂᔅᑐᐦᑖᑲᓄᐧᐃᐦᒡ ᑯᔨᔅᒄ ᒉ ᐃᐦᑎᓈᓄᐧᐃᐦᒡ ᑲᔦ ᐁᑳ ᒉ ᐧᐋᓈᒋᐦᑖᑲᓄᐧᐃᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋᐸᔨᐦᐧᑳᐤ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮

ᐅᑌ ᒫᒃ ᓂᑐᐦᑯᔨᓐ ᐋᐸᑎᓰᐧᐃᓂᐦᒡ, ᒣᐧᑳᒡ ᐋᐸᑎᓰᐦᑲᐦᑕᒧᒡ ᐋᐦᒌᐤᐦ ᒉ ᐄᔑ ᐱᒥᐸᔨᓂᔨᒡ ᐋᐱᑎᓰᐧᐃᓂᔫ ᐊᓂᑌ ᓂᑐᐦᑯᔨᓂᑲᒥᒄᐦ᙮ ᐊᓐ ᒉ ᐅᔅᑳᒡ ᒉ ᐄᔑ ᐋᐸᑎᓰᐦᑲᐦᑖᑲᓄᐧᐃᐦᒡ, ᐁᐅᒄ ᐊᓐ ᒐ ᐃᔑᓈᑯᐦᒡ ᒉ ᒌ ᒥᔮᑲᓅᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐁ ᐄᔑ ᓂᑐᐧᐁᔨᐦᑕᐦᐧᑳᐤ ᒉ ᐄᔑ ᐧᐄᒋᐦᐋᑲᓅᐧᑖᐤ, ᑲᔦ ᐁᐅᒄ ᑳ ᓂᔨᑑᓇᑲᓄᐧᐃᐦᒡ ᐅᑌ ᓂᑐᐦᑯᔨᓐ ᐋᐸᑎᓰᐧᐃᓂᐦᒡ ᐊᓐ

choose to use one or both systems, and the Cree Nation and the local clinic can work together to give patients that access.

The researchers played an important role in this new process of collaboration. They addressed the concerns of the Healers about potential interactions between TM and western medicines. They also provided valuable feedback on how the plants may work in the body, to address the Healers' main concern that Cree TM be used safely and effectively. They also explored how TM plants respond to being picked in order to help understand responsible and sustainable management of the resource.

ᐊᓂᒌ ᐅᑖᐦᑯᔩᒡ ᐅᐦᒋ ᐊᓂᑖ ᓂᑐᐦᑯᔨᓂᑭᒥᑯᐦᒡ ᐊᓂᔮ ᑖᐸᐦᑯᓐ ᒑ ᒌ ᐋᐱᒋᐦᑖᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᑭᔮ ᐧᐋᒥᔥᑎᑯᔓᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐊᓐ ᒫᒃ ᑳ ᒋᐦᒋᐸᔨᐦᑖᑭᓂᐧᐃᒡ ᐊᓂᑖ ᒥᔅᑎᓯᓅᐦᒡ, ᐋᐅᒄ ᐊᒃ ᑳ ᐄᐦ ᐧᐋᐱᐦᑎᔮᑭᓂᐧᐃᒡ ᐅᑖᐦᑯᔩᒡ ᐄᐧᐋᐤ ᒑ ᒌ ᐅᔮᔨᐦᑎᐦᒡ ᑖᓂᔮ ᐊᓂᔮ ᒑ ᒌ ᐄᔑ ᐋᐱᒋᐦᑖᒡ ᐋ ᐄᔑ ᐧᐄᒋᐦᐄᓱᒡ, ᐊᓂᔮ ᐹᔨᑯᔨᒡ ᑭᔮ ᒫᒃ ᑖᐸᐦᑯᓐ ᐋ ᐃᔑᓈᑯᓂᔨᒡᐦ ᓂᑐᐦᑯᔨᓐᐦ, ᐋᒄ ᒫᒃ ᒫᒨ ᑳ ᐋᐱᑎᓱᒡ ᐅᒋᒫᐦᑳᓐ ᐋᐱᑎᓱᐧᐃᓐ ᑭᔮ ᓂᑐᐦᑯᔨᓂᑭᒥᒄ ᒑ ᒌ ᒥᔮᒡ ᐊᓂᔮ ᐋ ᐄᔑ ᓂᑐᐧᐋᔨᐦᑎᒥᔨᒡᐦ ᐅᑖᐦᑯᔫ ᒑ ᐄᔑ ᐧᐄᒋᐦᐋᑭᓂᐧᐃᔨᒡᐦ᙮

ᓈᔅᒑᐧᐸ ᒌ ᒋᔅᑎᒫᐧᐃᓂᔨᐤ ᐅᑖᐱᑎᓱᐧᐃᓂᐧᐋᐤ ᐊᓂᒌ ᑳ ᓃᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐆ ᑳ ᐅᔅᑳᒡ ᐋ ᐄᔑ ᐧᐄᒑᐱᑎᓱᒥᑑᓈᓂᐧᐃᒡ᙮ ᐋᔫᐧᐃᒄ ᑳ ᑭᓄᐧᐋᐱᐦᑎᐦᒡ ᐊᓂᔮ ᑳ ᐄᔑ ᐧᐄᐦᑎᒥᔨᒡᐦ ᐄᔨᔨᐤᐦ ᑳ ᐧᐄᒋᐦᐋᔨᒡᐦ ᐊᐧᐋᔨᐤᐦ ᐊᓂᔮ ᐧᑳᐧᓵᓐ ᐋᑳ ᒑ ᒥᔫᔅᑳᑐᒥᑭᓂᔨᐦᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᑭᔮ ᐧᐋᒥᔥᑎᑯᔓᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᓈᔅᒑᐧᐸ ᑭᔮ ᒌ ᒋᔅᑎᒫᐧᐃᓂᔨᐤ ᑳ ᐄᔑ ᒋᔅᒑᔨᐦᑖᐦᑖᒡ ᒑᐧᑳᔨᐤ ᐅᐦᒋ ᐊᓂᔮ ᑖᓂᑖ ᐋ ᐄᔑ ᐋᐱᑎᓯᒥᑭᓂᔨᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔫ ᐊᓂᑖ ᐲᐦᒋᔨᐤ, ᐧᐋᔥ ᐋᔫᐧᐃᒄ ᑳ ᐄᔑ ᐧᐄᐦᑎᐦᒡ ᐊᓂᒌ ᐄᔨᔨᐅᒡ ᑳ ᐧᐄᒋᐦᐋᒡ ᐊᐧᐋᔨᐤᐦ ᐊᓐ ᑯᔨᔅᒄ ᒑ ᐄᔑ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐ ᐋᑳ ᒑ ᒥᒋᐸᔨᐦᐃᑯᑦ ᐊᐧᐋᓐ ᐋ ᐋᐱᒋᐦᑖᑦ᙮ ᐋᐅᒄ ᑭᔮ ᑳ ᓃᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᑖᓂᑖ ᒑ ᐃᐦᑎᓈᓂᐧᐃᒡ ᐋ ᒫᐅᐦᑐᓂᑭᓂᐧᐃᒡᐦ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᓂᔅᑐᐦᑖᑭᓂᐧᐃᒡ ᑯᔨᔅᒄ ᒑ ᐃᐦᑎᓈᓂᐧᐃᒡ ᑭᔮ ᐋᑳ ᒑ ᐧᐃᓈᒋᐦᑖᑭᓂᐧᐃᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋᐱᔨᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮

ᐅᑖ ᒫᒃ ᓂᑐᐦᑯᔨᓐ ᐋᐱᑎᓯᐧᐃᓂᐦᒡ, ᒫᐧᑳᒡ ᐋᐱᑎᓰᔅᑎᒧᒡ ᐊᔨᐦᒡ ᒑ ᐄᔑ ᐱᒥᐱᔨᔨᒡ ᐋᐱᑎᓯᐧᐃᓂᔨᐤ ᐊᓂᑖ ᓂᑐᐦᑯᔨᓂᑭᒥᒄᐦ᙮ ᐊᓐ ᒑ ᐅᔅᑳᒡ ᒑ ᐄᔑ ᐋᐱᑎᓰᔅᑖᑭᓂᐧᐃᒡ, ᐋᐅᒄ ᐊᓐ ᒋ ᐃᔑᓈᑯᐦᒡ ᒑ ᒌ ᒥᔫᑭᓂᐧᐃᒡ ᐊᐧᐋᓂᒌ ᐋ ᐄᔑ ᓂᑐᐧᐋᔨᐦᑎᐦᒡ ᒑ ᐄᔑ ᐧᐄᒋᐦᐋᑭᓂᐧᐃᒡ, ᑭᔮ ᐋᐅᒄ ᑳ ᓂᔨᑑᓂᑭᓂᐧᐃᒡ ᐅᑖ ᓂᑐᐦᑯᔨᓐ ᐋᐱᑎᓯᐧᐃᓂᐦᒡ ᐊᓐ ᐄᔨᔨᐅᒡ ᐋ ᐄᔑ

The Cree Board of Health is currently reorganizing services in the clinics. The new approach aims to provide services that respond to the needs of the population, and the Board has identified a Cree approach to services as the cornerstone of that change.

Diabetes is one of the major, if not the greatest, health problem in every community in Eeyou Istchee. We need all the resources of the territory working together to meet this challenge. As diabetes is a new disease, when the project began in 2003, the effectiveness of TM was not generally known. The Anti-diabetic Plant Project proved that TM are

ᐄᓅᒡ ᐁ ᐄᔑ ᓂᑐᐧᐁᔨᐦᑕᐦᐧᑳᐤ ᒉ ᐋᐸᒋᐦᑖᑲᓄᐧᐃᐦᒡ, ᐁᐅᔥ ᐆ ᐧᒫᐅᒡ ᐁ ᒋᔅᑕᒫᐅᐦᒡ ᒉ ᒌ ᐃᐦᑎᓈᓄᐧᐃᐦᒡ ᐁ ᐋᐦᒋᐦᑖᑲᓄᐧᐃᐦᒡ ᒉᐧᑳᓐ᙮

ᓈᔅᑖᐧᐯ ᒪᒋᐸᔨᐦᐄᐧᐁᐤ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓄᐧᐃᐦᒡ ᐊᓂᑌ ᒥᓯᐧᐁ ᐃᐦᑖᐧᐃᓐᐦ ᐊᓂᑌ ᐄᓅ ᐊᔅᒌᐦᒡ᙮ ᒥᓯᐧᐁ ᒋᓂᑐᐧᐁᔨᐦᑖᓈᓅ ᒉ ᐄᔑ ᐋᐸᒋᐦᑖᔨᐦᔥ ᒉᐧᑳᓐ ᒉ ᒌ ᐅᐦᒋ ᓇᑳᐦᐊᒥᐦᔥ ᐆ ᒉᐧᑳᓐ ᐁ ᐃᔅᐸᔨᐦᐄᑯᔨᐦᔥ᙮ ᐊᓐ ᒫᒃ ᐁ ᐅᔅᑳᒡ ᐃᑖᔅᐱᓀᐧᐃᓐ ᐁ ᐃᔑᓈᑯᐦᒡ ᐊᓐ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓄᐧᐃᐦᒡ, ᐆ ᑳ ᒋᐦᒋᐸᔨᐦᒡ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓄᐧᐃᐦᒡ 2003 ᑳ ᐃᔅᐸᔨᐦᒡ, ᓇᒧᔨ ᐅᐦᒋ ᒋᔅᒉᔨᐦᑖᑲᓅ ᑖᐧᐯ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐆ ᒫᒃ ᑳ ᐄᔑ ᐱᒥᐸᔨᐦᒡ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᒉ ᒌ ᐅᐦᒋ ᓇᑳᐦᐄᑲᓄᐧᐃᐦᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓄᐧᐃᐦᒡ, ᐁᑯᑦ ᑳ ᓅᑯᐦᒡ ᑖᐧᐯ ᓈᔅᒡ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓐ ᒉ ᒌ ᐅᐦᒋ ᓇᑳᐦᐄᑲᓄᐧᐃᐦᒡ ᒉ ᒌ ᓈᑎᑯᑦ ᐊᐧᐁᓐ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᔨᒡ ᑲᔦ ᒉ ᒌ ᓃᒋᐸᔨᐦᒡ ᐊᓐ ᐁ ᐃᔅᐱᔑ ᐧᐊᓈᒋᐸᔨᐦᐄᐧᐁᒡ ᐆ ᐃᑖᔅᐱᓀᐧᐃᓐ᙮ ᐆ ᒫᒃ ᑳ ᐄᔑ ᐱᒥᐸᔨᐦᑖᑲᓄᐧᐃᐦᒡ, ᐁᐅᔥ ᑳ ᒌᐦᑳᔦᔨᐦᑖᑲᓄᐧᐃᐦᒡ ᐁ ᐃᔅᐱᔑ ᒋᔅᑕᒫᐅᐦᒡ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᑲᔦ ᐊᓂᒌ ᐄᓅᒡ ᑳ ᐧᐄᒋᐦᐊᐧᑖᐤ ᐊᐧᐁᔫᐦ ᐅᐦᒋ ᐊᓐ ᒉ ᒌ ᒥᔪᐱᒫᑎᓰᓈᓄᐧᐃᐦᒡ ᐊᓂᑌ ᐄᓅ ᐃᐦᑖᐧᐃᓐᐦ᙮

ᐊᓂᔫᐦ ᒥᓯᐧᐁ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ, ᐃᑖᐧᐃᓂᐦᒡ ᐁ ᐅᐦᒋᐸᔨᐦᐧᑳᐤ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᑲᔦ ᑯᑕᒡ ᒉᐧᑳᓐ ᐁ ᒪᓯᓈᑌᒡ ᐅᐦᒋ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓄᐧᐃᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐅᐦᒋ ᓇᑳᐦᐄᑲᓄᐧᐃᐦᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓄᐧᐃᐦᒡ, ᐁᑯᑌ ᒥᓯᐧᐁ ᐁ ᐃᐦᑎᑯᐦᐧᑳᐤ ᐊᓂᑌ ᐁ ᓅᑯᐦᑖᑲᓄᐧᐃᐦᒡ ᒉᐧᑳᓐ ᑳ ᒪᓯᓈᔅᑌᐸᔨᐦᒡ, ᐧᒫᐅᑌ ᒉ ᒌ ᐄᔑ ᐲᐦᑌᐸᔨᓈᓄᐧᐃᐦᒡ http://www.taam-emaad.umontreal.ca/ ᓀᔅᑦ ᒫᒃ http://www.creehealth.org᙮ ᐁᐅᔥ ᒫᒃ ᒉ ᒋᔅᒉᔨᐦᑕᒣᔥ ᓈᔅᑖᐧᐯ ᒣᒣᐦᒡ ᒉᐧᑳᓐ ᐄᔑ ᑲᓄᐧᐋᐱᐦᑖᑲᓅ ᒉ ᒌ ᓵᐳᐦᑐᐧᐁᐸᔨᐦᑖᑲᓄᐧᐃᐦᒡ ᒪᓯᓇᐦᐄᑲᓐ ᒉ ᒌ ᐧᐋᐱᐦᑕᐦᐧᑳᐤ ᒥᓯᐧᐁ ᐄᓅᒡ ᐆ ᐁ ᐄᔒ ᐱᒥᐸᔨᐦᒡ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᔅᔥ ᒫᒃ

ᓂᑐᐧᐋᔨᐦᑎᐦᒡ ᒑ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡ, ᐋᐅᔥ ᐆ ᒫᐅᒡ ᐋ ᒋᔅᑎᒫᐅᐦᒡ ᒑ ᒌ ᐃᐦᑎᓈᓂᐧᐃᒡ ᐋ ᐋᐦᒋᐦᑖᑭᓂᐧᐃᒡ ᒑᐧᑳᓐ᙮

ᓈᔅᑖᐧᐹ ᒥᒋᐱᔨᐦᐄᐧᐋᐤ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ ᐊᓂᑖ ᒥᓯᐧᐋ ᐃᐦᑖᐧᐃᓐᐦ ᐊᓂᑖ ᐄᔨᔨᐤ ᐊᔅᒌᐦᒡ᙮ ᒥᓯᐧᐋ ᒋᓂᑐᐧᐋᔨᐦᑖᓈᓂᐤ ᒑ ᐄᔑ ᐋᐱᒋᐦᑖᔨᐦᔥ ᒑᐧᑳᓐ ᒑ ᒌ ᐅᐦᒋ ᓂᑳᐦᐊᒥᐦᔥ ᐆ ᒑᐧᑳᓐ ᐋ ᐃᔅᐱᔨᐦᐄᑯᔨᐦᔥ᙮ ᐊᓐ ᒫᒃ ᐋ ᐅᔅᑳᒡ ᐃᑖᔅᐱᓈᐧᐃᓐ ᐋ ᐃᔑᓈᑯᐦᒡ ᐊᓐ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ, ᐆ ᑳ ᒋᐦᒋᐱᔨᒡ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ 2003 ᑳ ᐃᔅᐱᔨᒡ, ᓂᒧᔨ ᐅᐦᒋ ᒋᔅᒑᔨᐦᑖᑭᓂᐤ ᑖᐧᐹ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐆ ᒫᒃ ᑳ ᐄᔑ ᐱᒥᐱᔨᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᒑ ᒌ ᐅᐦᒋ ᓂᑳᐦᐄᑭᓂᐧᐃᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ, ᐋᑯᑦ ᑳ ᓅᑯᐦᒡ ᑖᐧᐹ ᓈᔅᒡ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓐ ᒑ ᒌ ᐅᐦᒋ ᓂᑳᐦᐄᑭᓂᐧᐃᒡ ᒑ ᒌ ᓈᑎᑯᑦ ᐊᐧᐋᓐ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᔨᒡ ᑭᔮ ᒑ ᒌ ᓃᒋᐱᔨᒡ ᐊᓐ ᐋ ᐃᔅᐱᔑ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᒡ ᐆ ᐃᑖᔅᐱᓈᐧᐃᓐ᙮ ᐆ ᒫᒃ ᑳ ᐄᔑ ᐱᒥᐱᔨᐦᑖᑭᓂᐧᐃᒡ, ᐋᐅᔥ ᑳ ᒌᐦᑳᔮᔨᐦᑖᑭᓂᐧᐃᒡ ᐋ ᐃᔅᐱᔑ ᒋᔅᑎᒫᐅᐦᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᑭᔮ ᐊᓂᒌ ᐄᔨᔨᐅᒡ ᑳ ᐧᐄᒋᐦᐋᒡ ᐊᐧᐋᔨᐤᐦ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᒥᔪᐱᒫᑎᓰᓈᓂᐧᐃᒡ ᐊᓂᑖ ᐄᔨᔨᐤ ᐃᐦᑖᐧᐃᓐᐦ᙮

ᐊᓂᐦᐄ ᒥᓯᐧᐋ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ, ᐃᑖᐧᐃᓂᐦᒡ ᐋ ᐅᐦᒋᐱᔨᐦᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᑭᔮ ᑯᑎᒡ ᒑᐧᑳᓐ ᐋ ᒥᓯᓈᑖᒡ ᐅᐦᒋ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐅᐦᒋ ᓂᑳᐦᐄᑭᓂᐧᐃᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ, ᐋᑯᑖ ᒥᓯᐧᐋ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑖ ᐋ ᓅᑯᐦᑖᑭᓂᐧᐃᒡ ᒑᐧᑳᓐ ᑳ ᒥᓯᓈᔅᑖᐱᔨᒡ, ᒫᐅᑖ ᒑ ᒌ ᐄᔑ ᐲᐦᑖᐱᔨᓈᓂᐧᐃᒡ http://www.taam-emaad.umontreal.ca/ ᑭᔮ ᒫᒃ http://www.creehealth.org᙮ ᐋᐅᔥ ᒫᒃ ᒑ ᒋᔅᒑᔨᐦᑎᒫᔥ ᓈᔅᑖᐧᐹ ᒫᒫᐦᒡ ᒑᐧᑳᓐ ᐄᔑ ᑭᓄᐧᐋᐱᐦᑖᑭᓂᐤ ᒑ ᒌ ᓵᐳᐦᑐᐧᐋᐱᔨᐦᑖᑭᓂᐧᐃᒡ ᒥᓯᓂᐦᐄᑭᓐ ᒑ ᒌ ᐧᐋᐱᐦᑎᐦᒡ ᒥᓯᐧᐋ ᐄᔨᔨᐅᒡ ᐆ ᐋ ᐄᔒ ᐱᒥᐱᔨᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᔅᔥ ᒫᒃ

extremely effective to prevent the onset of diabetes and to reduce its symptoms and complications. And in doing so, it has highlighted the important role that TM and Eeyou Healers have to play in helping to make our communities healthy.

All of the publications, local reports and documents from the anti-diabetic medicinal plant project are available on the project website which can be found at http://www.taam-emaad.umontreal.ca/ or through http://www.creehealth.org. Because of the complex approval process within the project, many of the documents are not yet available to everyone. For now, this current report will remain confidential within the project and in the confidential section of the website because it mentions aspects of traditional and scientific knowledge which may not yet have been approved by the healers and elders and made public by the scientists. Later it will become available on the main website.

If you wish to know more about the overall project please contact: **Nadine Methot**, the project's administrative coordinator at **(902) 446-2461** or antidiabetic-trad-med@pharmco.umontreal.ca. If you want to speak to someone about the Putting

ᒥᐦᑫᑎᓐᐦ ᑎᐹᒋᒨᔨᓇᐦᐄᑳᓐᐦ ᐁᓐᒄ ᐁᑳ ᐃᔑᓈᑯᐦᒀᐤ ᑫ ᒌ ᐙᐱᐦᑕᐦᒀᐤ ᒥᓯᐍ ᐊᐍᓂᒌˣ ᐁᐅᒄ ᐆ ᒘᐦᒡ ᐆ ᐊᓂᒌᔥ ᑎᐹᒋᒨᔨᓇᐦᐄᑳᓐ, ᓇᒧᔾ ᐁᓐᒄ ᒧᔕ ᒋᑳ ᐙᐱᐦᑏᐙᓅ ᑲᔦ ᐁᐅᒄ ᐁᑳ ᒥᒄ ᑫ ᒌ ᐅᐦᒋ ᐙᐱᐦᑕᑲᓄᐏᐦᒡ ᐊᓂᑦ ᑳ ᒫᔨᓈᔅᑌᐸᔨᐦᒡ, ᐁᐅᒄ ᐁᒄ ᐊᓐ ᐁ ᐃᐦᑎᒄᐦᒡ ᐄᓅ ᒋᔅᑫᔨᐦᑕᒧᐏᓐ ᑲᔦ ᑳ ᐄᔑ ᒥᔅᑲᐙᐦᑖᑲᓄᐏᐦᒡ ᑫᒂᓐ ᒋᔅᑫᔨᐦᑕᒧᐏᓐ ᐁᑳ ᐁᓐᒄ ᐅᐦᒋ ᔖᐸᐦᑐᐍᐸᔨᐦᑖᑣᐤ ᒋᔕᐄᓅᐤ ᑲᔦ ᑳ ᐑᒋᐦᐋᑣᐤ ᐊᐍᔮᐦ ᐊᓂᔦ ᒧᔕ ᑫ ᒌ ᒋᔅᑫᔨᐦᑖᐦᑯᑖᑣᐤ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑕᐦᒀᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦˣ ᐁᓐᒄ ᒫᒃ ᐹᑎᒫ ᒋᑳ ᓅᑯᐦᑖᑲᓅ ᐊᓂᑦ ᑳ ᒫᔨᓈᔅᑌᐸᔨᐦᒡ ᒥᓷ ᐁ ᒌ ᓂᔅᑯᒧᓈᓄᐏᐦᒡ ᑫ ᔖᐸᐦᑐᐍᐸᔨᐦᑖᑲᓄᐏᐦᒡ ᐁ ᐄᔑ ᒫᔨᓈᑌᒡˣ

ᐁᑎᑑ ᒫᒃ ᐑᐦ ᒋᔅᑫᔨᐦᑕᒥᓲ ᐆ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᒡ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓄᐏᐦᒡ ᑫᒂᓐ, ᒸᐤ ᑫ ᒌ ᐊᔨᒥᐦᐄᑦ: ᓈᑏᓐ ᑯᑣᐤ, ᑳ ᐅᐍᔦᔨᐦᑌᐦᒃ ᒫᒨ ᑫ ᒌ ᐋᐸᑎᓰᓈᓅᔨᒡ, ᒸᐅᑌ ᑫ ᒌ ᐄᔑ ᑖᐦᑳᐸᐦᑫᓇᒨᑦ (902) 446-2461 ᓄᔥᑦ ᒫᒃ antidiabetic-trad-med@pharmco.umontreal.caˣ ᐊᓐ ᒫᒃ ᐁ ᐑᐦ ᐊᔨᒥᐦᐄᑦ ᐊᐍᓐ ᐅᐦᒋ ᐊᓐ ᐋᐸᑎᓰᐏᓐ ᐁ ᓃᑳᓂᔥᑖᑲᓄᐏᐦᒡ ᐄᓅ ᓂᑐᐦᑯᔨᓐ ᐊᓂᑌ ᒥᔅᑎᓯᓃᐦᒡ, ᐁᐅᒄ ᑫ ᒌ ᐊᔨᒥᐦᐄᑦ ᕗᕋᓐᓯᔅ ᐊᐙᔑᔥ, ᒸᐅᑌ ᑫ ᒌ ᐄᔑ ᑖᐦᑳᐸᐦᑫᓇᒨᑦ (418) 923-3355 ᓄᔥᑦ ᒫᒃ francisawashish@hotmail.comˣ ᐁᐅᒄ ᑲᔦ ᑫ ᒌ ᐊᔨᒥᐦᐄᑦ ᒋᓪ, ᒸᐅᑌ ᑫ ᒌ ᐄᔑ ᑖᐦᑳᐸᐦᑫᓇᒨᑦ (514) 953-8283 ᓄᔥᑦ ᒫᒃ torrie.jill@ssss.gouv.qc.caˣ

ᒋᓪ ᑣᕆ
ᑳ ᐑᒋᐦᐋᑦ ᑳ ᐱᒥᐸᔨᐦᑖᔨᒡᐦ ᒥᔦᐱᒫᑎᓰᐏᓐ ᐁ ᐅᐦᒋ ᓈᓈᑲᒋᐦᑖᑲᓄᐏᐦᒡ
ᓂᑐᐦᑯᔨᓐ ᑲᔦ ᐑᒋᐦᐄᐍᐏᓐ ᐁ ᓈᓈᑲᒋᐦᑖᑲᓄᐏᐦᒡ

ᐱᔦᕐ ᐦᐋᑖᑦ
ᑳ ᐱᒥᐸᔨᐦᑖᑦ
CIHR ᑳ ᐋᐸᑎᓰᐦᑲᐦᑕᐦᒀᐤ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᓇᑳᐦᐄᑲᓄᐏᐦᒡ ᐁ ᔒᐙᑲᒥᐦᒀᓄᐏᐦᒡ

ᒥᐦᓛᓐᐦ ᑎᐹᒋᒨᔨᓂᐦᐄᑭᓐᐦ ᐋᓐᒄ ᐋᑳ ᐃᔑᓈᑯᐦᒡ ᓛ ᒌ ᐙᐱᐦᑎᐦᒡ ᒥᓯᐚ ᐊᐚᓂᒌˣ ᐋᐅᒄ ᐆ ᒧᔮᒻ ᐆ ᐊᓄᐦᒡ ᑎᐹᒋᒨᔨᓂᐦᐄᑭᓐ, ᓂᒧᔾ ᐋᓐᒄ ᒧᔖ ᒋᑭ ᐙᐱᐦᑏᐚᓂᐤ ᑭᔮ ᐋᐅᒄ ᐋᑳ ᒥᒄ ᓛ ᒌ ᐅᐦᒋ ᐙᐱᐦᑎᑭᓂᐏᒡ ᐊᓂᑦ ᑳ ᒥᔨᓈᔅᑖᐱᔨᒡ, ᐋᐅᒄ ᐋᒄ ᐊᓐ ᐋ ᐃᐦᑎᒄᐦᒡ ᐄᔨᔨᐤ ᒋᔅᓚᔨᐦᑎᒧᐏᓐ ᑭᔮ ᑳ ᐄᔑ ᒥᔅᑭᐚᐦᑖᑭᓂᐏᒡ ᓛᒂᓐ ᒋᔅᓚᔨᐦᑎᒧᐏᓐ ᐋᑳ ᐋᓐᒄ ᐅᐦᒋ ᔖᐸᐦᑐᐚᐱᔨᐦᑖᒡ ᒋᔖᔨᔨᐅᒡ ᑭᔮ ᑳ ᐑᒋᐦᐋᒡ ᐊᐚᔨᐤᐦ ᐊᓂᔮ ᒧᔖ ᓛ ᒌ ᒋᔅᓛᔨᐦᑖᐦᑯᑖᒡ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᓛᔨᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦˣ ᐋᓐᒄ ᒫᒃ ᐹᑎᒫ ᒋᑭ ᓅᑯᐦᑖᑭᓂᐤ ᐊᓂᑦ ᑳ ᒥᔨᓈᔅᑖᐱᔨᒡ ᒥᓷ ᐋ ᒌ ᓂᔅᑯᒧᓈᓂᐏᒡ ᓚ ᔖᐸᐦᑐᐚᐱᔨᐦᑖᑭᓂᐏᒡ ᐋ ᐄᔑ ᒥᔨᓈᑖᒡˣ

ᐊᑎᑑ ᒫᒃ ᐑᐦ ᒋᔅᓛᔨᐦᑎᒥᓈ ᐆ ᐋ ᐄᔑ ᐱᒥᐱᔨᒡ ᐋ ᓂᑑᒋᔅᓛᔨᐦᑖᑭᓂᐏᒡ ᓛᒂᓐ, ᒫᐤ ᓚ ᒌ ᐊᔨᒥᐦᐄᑦ: ᓈᑏᓐ ᑯᑣᐤ, ᑳ ᐅᐚᔮᐦᑎᐦᒃ ᒫᒨ ᓚ ᒌ ᐋᐱᑎᓰᓈᓂᐏᔨᒡ, ᒫᐅᑖ ᓚ ᒌ ᐄᔑ ᑖᐦᑳᐱᐦᓛᓂᒨᑦ (902) 446-2461 ᑭᔮ ᒫᒃ antidiabetic-trad-med@pharmco.umontreal.caˣ ᐊᓐ ᒫᒃ ᐋ ᐑᐦ ᐊᔨᒥᐦᐄᑦ ᐊᐚᓐ ᐅᐦᒋ ᐊᓐ ᐋᐱᑎᓰᐏᓐ ᐋ ᓃᑳᓂᔥᑖᑭᓂᐏᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐ ᐊᓂᑖ ᒥᔅᑎᓯᓃᐦᒡ, ᐋᐅᒄ ᓚ ᒌ ᐊᔨᒥᐦᐄᑦ ᕗᕋᓐᓯᔅ ᐊᐚᔑᔥ, ᒫᐅᑖ ᓚ ᒌ ᐄᔑ ᑖᐦᑳᐱᐦᓛᓂᒨᑦ (418) 923-3355 ᑭᔮ ᒫᒃ francisawashish@hotmail.comˣ ᐋᐅᒄ ᑭᔮ ᓚ ᒌ ᐊᔨᒥᐦᐄᑦ ᒋᓪ, ᒫᐅᑖ ᓚ ᒌ ᐄᔑ ᑖᐦᑳᐱᐦᓛᓂᒨᑦ (514) 953-8283 ᑭᔮ ᒫᒃ torrie.jill@ssss.gouv.qc.caˣ

ᒋᓪ ᑣᕆ
ᑳ ᐑᒋᐦᐋᑦ ᑳ ᐱᒥᐱᔨᐦᑖᔨᒡᐦ ᒥᔦᐱᒫᑎᓰᐏᓐ ᐋ ᐅᐦᒋ ᓈᓈᑭᒋᐦᑖᑭᓂᐏᒡ
ᓂᑐᐦᑯᔨᓐ ᑭᔮ ᐑᒋᐦᐄᐚᐏᓐ ᐋ ᓈᓈᑭᒋᐦᑖᑭᓂᐏᒡ

ᐱᔦᕐ ᐦᐋᑖᑦ
ᑳ ᐱᒥᐱᔨᐦᑖᑦ
CIHR ᑳ ᐋᐱᑎᓰᔥᑎᐦᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᓂᑳᐦᐄᑭᓂᐏᒡ ᐋ ᔒᐚᑭᒥᐦᒀᓂᐏᒡ

Traditional Medicines First Mistissini project, please call **Francis Awashish** at **(418) 923-3355** or at francisawashish@hotmail.com. You are also invited to contact **Jill** anytime at **(514) 953-8283** or at torrie.jill@ssss.gouv.qc.ca.

Jill Torrie
Assistant Director of Public Health
Cree Board of Health and Social Services of James Bay

Pierre Haddad
Director
CIHR Team in Aboriginal Anti-diabetic Medicines


Hurley

ᑎᕿᒋᔨᓇᐃᐅᓐᐊᑲᓐᓴ ᐅᐱᑉ ᐊᓂᑌ ᐁ ᐅᐱᑉ ᓂᑐᑭᔭᖅᑕᐱᓚᑲᓐᑲᓐᓴ ᓂᐱᑦᐅᑭᐱᑉᑭᑲᓐᓴ ᐃᔨᐱᓴ ᐱᓴᔨᑭᐅᐊᔨᒃ 2010 - ᐧᐃᐊᒪᓚᓂᐊᔨᒃ 2011

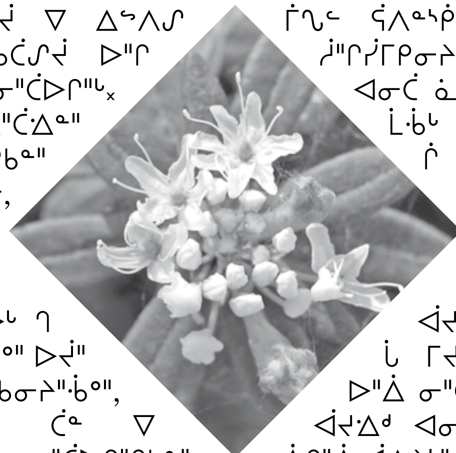
ᑎᕿᒋᔨᓇᓂᐃᐱᓴ ᐅᐱᑉ ᐊᓂᒋ ᐋ ᐅᐱᑉ ᓂᑐᑭᔨᓕᑉᒋᑭᐱᓂᐃᓴᑲᐳ ᓂᐳᒋᐅᐱᑉᑭᑭᐱᓴ ᐃᔨᐱᓴ ᒥᔪᑲᓕᐳᐊᔨᒃ 2010 - ᑭᕆᔨᑲᔨᓇᓂᐊᔨᒃ 2011

Reports from the laboratories for September 2010 – January 2011

A. ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓂᑌ ᑰᓇᔦᐃ ᓛᑉ
(ᐧᐋᐧᐋᒪᑲᓂᐲᓯᒼ 2011)

ᐁ ᑲᓄᐧᐋᐸᐦᑌᑲᓄᐧᐃᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐁ ᐃᔅᐱᔑ ᓲᐦᒋᓲᒪᑲᐦᒡ ᐅᐦᒋ ᐊᓂᑦ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᐦᒡ

ᒦᓀᐨ ᕇᐸᓐᔅᑮ ᐋᐸᑎᓰᐦᑲᐦᑕᒼ ᐊᓂᔦ ᐁ ᐃᔅᐱᔑ ᓲᐦᒋᓲᒪᑲᓂᔨᐦ ᑳᒋᒉᐸᑯᔦ ᑲᔦ ᐊᔨᑲᑖᔑᔦ ᐅᐦᒋ ᐊᓂᑌ ᐧᐁᑖᐦ ᒌᐧᐁᑎᓂᐦᒡ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᒉᐧᑳᒡ ᑳ ᓃᐱᐦᒡ 2010, ᓅᐧᔔᔅᒡ ᐃᐦᑖᐧᐃᓐᐦ ᒌ ᐅᐦᒋ ᒫᐅᐦᑐᓇᒼ ᐅᔦᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ (ᐧᐋᐱᒉᑯᔅᑐᐃ, ᐧᐄᒥᓂᒌ, ᐄᔅᒣᐃᓐ, ᓅᒥᔅᑳᐤ, ᒥᔅᑎᓯᓃ, ᐧᐋᔅᑳᐦᐄᑲᓂᔅ, ᑲᔦ ᐊᑖᐧᐋ)᙮



ᐁᔫᒄ ᑳ ᐧᐄᐦ ᒥᒥᔦᐸᔨᐦᑖᐨ ᐊᓂᔦ ᐧᒫᐅᒡ ᒉ ᒥᔦᐸᔨᓂᔨᐦ ᒉ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐅᔦᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᐃᔅᐱᔑ ᓲᐦᒋᓲᒪᑲᓂᔨᐦᐧᑳᐤᐦ, ᐁᔫᒄ ᐊᓂᔦ ᑳ ᑲᓄᐧᐋᐸᐦᑌᐦᒃ ᑖᓐ ᐁ ᐃᔅᐱᔑ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔦᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐲᐦᑌᐸᔨᐦᒡ ᔔᑳᐤ ᐊᓂᑌ ᐲᐦᒋᔦ ᒉ ᐅᐦᒋ ᑲᓄᐧᐁᔨᐦᑖᑯᐦᒡ᙮

ᐁ ᒪᓯᓇᐦᐄᑲᓄᐧᐃᐦᒡ ᒪᔑᓇᐦᐄᑲᓂᔅ ᐁ ᐋᔨᒧᑌᐦᐧᑳᐤᐦ ᒥᓯᐧᐁ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ

ᐁᔫᒄ ᑲᔦ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑌᐦᒃ ᒦᓀᐨ ᒪᔑᓇᐦᐄᑲᓂᔑᔦ ᐅᐦᒋ ᐊᓐ ᐁ ᐋᔨᒧᑌᐦᐧᑳᐤᐦ ᒥᓯᐧᐁ 19 ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐁᐅᒄ ᒫᒃ ᔔᔅ ᑳ ᐊᑕ ᐋᔨᒧᑕᒫᐦᒡ ᐊᓂᔦᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᑳ ᐊᑕ ᒪᓯᓇᐦᐊᒫᐦᒡ᙮ ᐁᐅᒄ ᐧᑫᔅᒡ ᒉ ᐊᔑᒋᐸᔨᐦᑖᔮᐦᒡ ᐊᓂᔦ ᒋᓀᐄᓅᐨ ᑲᔦ ᐄᓅᐨ ᑳ ᐧᐄᒋᐦᐊᐧᑖᐤ ᐊᐧᐁᔦᐦ ᐅᒋᔅᒉᔨᐦᑕᒧᐧᐃᓂᐧᐋᐤ᙮ ᐆ ᒉᐧᑳᒡ ᐁ ᓂᔅᑐᔨᓈᓄᐧᐃᐦᒡ, ᐁᐅᒄ ᐁ ᐧᐄᐦ ᐊᔨᒥᐦᐄᒋᐦᐧᑖᐤ ᐊᓂᒌ ᑳ ᐊᔨᒦᔅᑌᐦᐧᑳᐤ ᐃᐦᑖᐧᐃᓐᐦ ᐅᐦᒋ ᐅᔦ ᒪᔑᓇᐦᐄᑲᓂᔑᔦ᙮ ᓂᐧᐄᐦ ᑲᐧᑫᒋᔅᒉᒧᓈᓐ ᒉᐧᑳᓐ: ᑖᓐ ᐁ ᐄᔑ ᓂᑐᐧᐁᔨᐦᑌᐦᐧᑳᐤ ᐄᓅᐨ ᒉ ᐃᔑᓈᑯᓂᔨᐦ? ᒋᑳ ᐃᔑᓈᑯᓐ-ᐊ ᒧᓀ ᒉ ᒥᔮᑲᓅᐧᒑᐤ ᒥᓯᐧᐁ ᐄᓅᐨ, ᓄᔅᑦ ᒫᒃ ᒥᒄ ᐊᓂᒌ ᐊᐧᐁᓂᒌ

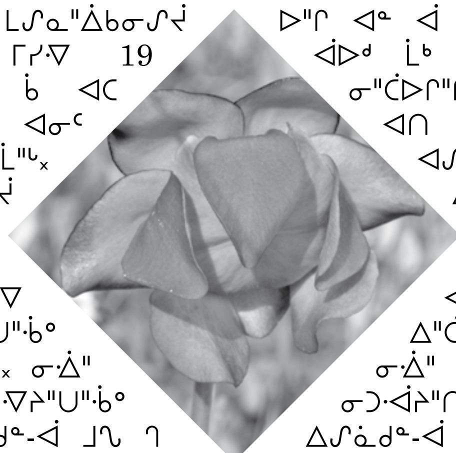
A. ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓂᑖ ᑰᓇᔦᐃ ᓛᑉ
(ᒋᐣᔮᐣᑯᓂᐲᓯᒻ 2011)

ᐋ ᑭᓄᐧᐋᐱᐦᑖᑭᓂᐧᐃᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐋ ᐃᔅᐱᔑ ᓲᐦᒋᓲᒥᑭᐦᒡ ᐅᐦᒋ ᐊᓂᑦ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᐦᒡ

ᒦᓀᐨ ᕇᐸᓐᔅᑮ ᐋᐱᑎᔔᔅᑎᒻ ᐊᓂᔮ ᐋ ᐃᔅᐱᔑ ᓲᐦᒋᓲᒥᑭᓂᔨᐦ ᑳᒋᒑᐱᑯᔨᐤ ᑭᔮ ᐊᔨᑭᑖᔑᔨᐤ ᐅᐦᒋ ᐊᓂᑖ ᓈᓈᒥᒌᒼ ᐊᑎᒪᐲᓯᒻ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᒫᐧᑳᒡ ᑳ ᓃᐱᐦᒡ 2010, ᓅᐧᔔᔅᒡ ᐃᐦᑖᐧᐃᓐᐦ ᒌ ᐅᐦᒋ ᒫᐅᐦᑐᓂᒻ ᐅᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ (ᐧᐋᐱᒫᑯᔅᑐᐃ, ᐧᐄᒥᓂᒌ, ᐄᔅᒣᐃᓐ, ᓅᒥᔅᑳᐤ, ᒥᔅᑎᓯᓃ, ᐧᐋᔅᑳᐦᐄᑲᓂᔅ, ᑭᔮ ᐊᑖᐧᐋ)᙮

ᐋᔦᐧᐃᒄ ᑳ ᐧᐄᐦ ᒥᒥᔦᐱᔨᐦᑖᐨ ᐊᓂᔮ ᒫᐅᒡ ᒫ ᒥᔦᐱᔨᔨᐦ ᒫ ᐅᐦᒋ ᓂᑑᒋᔅᒫᔨᐦᑖᑭᓂᐧᐃᐦ ᐅᐦᐋ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊ ᐃᔅᐱᔑ ᓲᐦᒋᓲᒥᑭᓂᔨᐦ, ᐋᔦᐧᐃᒄ ᐊᓂᔮ ᑳ ᑭᓄᐧᐋᐱᐦᑎᐦᒃ ᑖᓐ ᐋ ᐃᔅᐱᔑ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᐦ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒫ ᒌ ᐲᐦᑖᐱᔨᐦ ᔔᑳᐤ ᐊᓂᑖ ᐲᐦᒋᔨᐤ ᒫ ᐅᐦᒋ ᑭᓄᐧᐋᔨᐦᑖᑯᐦᒡ᙮

ᐋ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᐦ ᒥᔑᓂᐦᐄᑭᓂᔅ ᐋ ᐋᔨᒧᑖᐦ ᒥᓯᐧᐋ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ



ᐋᔦᐧᐃᒄ ᑭᔮ ᑳ ᐋᐱᑎᔔᔅᑎᐦᒃ ᒦᓀᐨ ᒥᔑᓂᐦᐄᑭᓂᔑᔨᐤ ᐅᐦᒋ ᐊᓐ ᐋ ᐋᔨᒧᑖᐦ ᒥᓯᐧᐋ 19 ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐋᐅᒄ ᒫᒃ ᔔᔅ ᑳ ᐊᑎ ᐋᔨᒧᑎᒫᐦᒡ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑦ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᑳ ᐊᑎ ᒥᓯᓂᐦᐊᒫᐦᒡ᙮ ᐋᐅᒄ ᐧᑳᔅᒡ ᒫ ᐊᔑᒋᐱᔨᐦᑖᔮᐦᒡ ᐊᓂᔮ ᒋᔔᔨᔨᐅᐨ ᑭᔮ ᐄᔨᔨᐅᐨ ᑳ ᐧᐄᒋᐦᐊᐧᐋᐨ ᐊᐧᐋᔨᐤᐦ ᐅᒋᔅᒫᔨᐦᑎᒧᐧᐃᓂᐧᐋᐤ᙮ ᐆ ᒫᐧᑳᐤ ᐋ ᓂᔅᑐᔨᓈᓂᐧᐃᐦ, ᐋᐅᒄ ᐋ ᐧᐄᐦ ᐊᔨᒥᐦᐄᒋᐦᒡ ᐊᓂᒌ ᑳ ᐊᔨᒦᔅᑎᐦᒡ ᐃᐦᑖᐧᐃᓐᐦ ᐅᐦᒋ ᐅᔮ ᒥᔑᓂᐦᐄᑭᓂᔑᔨᐤ᙮ ᓂᐧᐄᐦ ᑯᐧᑳᒋᔅᒫᒧᓈᓐ ᒫᐧᑳᓐ: ᑖᓐ ᐋ ᐄᔑ ᓂᑐᐧᐋᔨᐦᑎᐦᒡ ᐄᔨᔨᐅᐨ ᒫ ᐃᔑᓈᑯᓂᔨᐦ? ᒋᑭ ᐃᔑᓈᑯᓐ-ᐊ ᒧᔔ ᒫ ᒥᔮᑭᓂᐧᐃᐦ ᒥᓯᐧᐋ ᐄᔨᔨᐅᐨ, ᑭᔮ ᒫᒃ ᒥᒄ ᐊᓂᒌ ᐊᐧᐋᓂᒌ ᑳ ᐧᐄᒋᐦᐄᐧᐋᐤ ᐅᔮ ᐊ

A. Report for the Cuerrier lab
(January 2011)

Looking at how a plant's strength varies with where it grows

Michel Rapinski's project looks at how the strength of Labrador tea and pitcher plant changes depending on how far north the plants grow. During the summer of 2010 he collected samples of these plants from seven places (Whapmagoostui, Wemindji, Eastmain, Nemaska, Mistissini, Waskaganish, and Ottawa).

He has been trying to perfect the lab tests that he will use to see if where the plants grew affects how well they help cells take in sugar.

Preparing a booklet about all the plants

Michel has also been working on the booklet that will summarize information about the 19 plants. So far, we have summarized the information from our journal articles. Next, we need to add the information the Elders and Healers shared with us. At this meeting, we would like to talk with the community representatives about this booklet. We have questions like: What format would people like?

ᑳ ᐐᒋᐦᐄᐌᑘᐤ ᐅᔫ ᐁ ᐄᔑ ᐋᐸᑎᔒᐦᑲᐦᑌᑲᓅᔨᒡ? ᒋᑳ ᒪᓯᓂᐦᐄᑲᓅ-ᐋ ᐋᓐ ᐁ ᐄᔑ ᒋᔅᑫᔨᐦᑖᑯᐦᑿᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑫ ᐅᐦᒋ ᐋᐸᑎᐦᒡ ᐁ ᒋᔅᑯᑕᒫᑲᓄᐎᐦᒡ?

ᐊᓂᔫ ᒫᒃ ᔖᔥ ᑳ ᓇᔅᑯᒫᑲᓄᐎᒡ ᒦᓵᒡ ᐅᔫ ᑫ ᐄᔑ ᐋᐸᑎᔒᐦᑲᐦᑌᐦᒃ ᐊᓂᑌ ᐐᒥᓂᒌᐦᒡ, ᒦᓐ ᒋᑳ ᐃᔅᐸᔫ ᐊᓂᑌ ᐅᔫ ᑫ ᐱᐳᓂᔨᒡ ᑫ ᐊᔨᒥᐦᐋᒡ ᒋᔖᐄᓅᐦ ᑲᔦ ᑯᑕᒃᐦ ᐊᐌᔫᐦ ᐁ ᐐᐦ ᐐᒋᐦᐄᐌᔨᒡᐦ ᐅᔫ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᑖᑲᓅᔨᒡ᙮

ᐁ ᑳᓅᐚᐱᐦᑌᑲᓄᐎᐦᒡ ᑖᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᐋᓐ ᐁ ᒫᐅᐦᑐᓇᑲᓄᐎᐦᒡ ᑳᒋᑫᐸᒄ

ᒋ ᓂᑑᒋᔅᑫᔨᐦᑕᒻ ᔫᓈ ᐊᓂᔫ ᑖᓐ ᑫ ᒌ ᐃᔥᐱᔑ ᒫᐅᐦᑐᓇᑲᓅᐦᑿᐤᐦ ᑳᒋᑫᐸᒄ ᑲᔦ ᐊᔨᑲᑖᔥ ᐺᒎᔥ ᐁ ᐘᓈᒋᐦᑖᑲᓄᐎᐦᒡ ᐊᓂᐦ ᐁ ᐅᐦᒋ ᓂᐦᑖᐅᒋᓂᐦᑿᐤᐦ᙮ ᐋᓐ ᑳᒋᑫᐸᒄ, ᓂᔥᑐᔨᒡ ᓂᒌ ᐃᐦᑎᓈᓐ ᐁ ᒫᐅᐦᑐᓇᒫᐦᒡ:

- ᐁᑳ ᒥᑯᔥᑳᒋᐦᑌᑲᓅᐦᑿᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ (ᑫ ᐅᐦᒋ ᒋᔅᑫᔨᐦᑖᑲᓄᐎᐦᒡ)
- ᒥᒄ ᑳ ᒋᔖᐄᓅᐐᒪᑲᐦᒡᐦ ᓃᐲᐦ ᐁ ᐅᑎᓇᑲᓅᐦᑿᐤᐦ
- ᒥᓯᐌ ᓃᐲᐦ ᐁ ᐅᑎᓇᑲᓅᐦᑿᐤᐦ

ᐁᐅᒄ ᐆ ᑳ ᐃᐦᑎᔮᐦᒡ ᑳ ᒫᐅᐦᑐᓇᒫᐦᒡ 2008 ᑳ ᐃᔅᐸᔨᐦᒡ, ᑲᔦ ᐁᐅᒄ ᒦᓐ ᑳ ᐃᐦᑎᔮᐦᒡ 2009 ᑳ ᐃᔅᐸᔨᐦᒡ᙮ ᐁᐅᒄ ᑳ ᐐᐦ ᐃᐦᑑᑕᒫᐦᒡ ᑵᐦᒡ ᐋᓐ ᔫᐦᒃ ᐁ ᐱᒥᐸᔨᐦᒡ ᐁ ᒫᐅᐦᑐᓇᑲᓅᐦᑿᐤᐦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᑫᔑᑯᒻ ᓃᐱᓐᐦ, ᓂᒌ ᐊᒋᐦᑖᓈᓐ ᐊᓂᔫᐦ ᓃᐲᐦ ᐁ ᐃᐦᑎᑯᐦᑿᐤᐦ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ, ᑖᓐ ᐁ ᐃᔥᐱᔖᐦᑿᐤᐦ ᐊᓂᑦ ᐁ ᒥᔥᑎᑰᐦᒡ ᐋᓐ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ, ᑖᓐ ᑳ ᐃᔥᐱᔑ ᓂᐦᑖᐅᒋᐦᒡ, ᑲᔦ ᑖᓐ ᑳ ᐄᔑ ᐙᐱᑯᐦᒡᐦ ᓃᐲᔥᐦ᙮ ᐁᑯᑦ ᑳ ᐅᐦᒋ ᑎᐱᐦᑎᑖᔮᐦᒡ

ᐄᔑ ᐋᐱᑎᔒᐦᑭᐦᑖᑭᓂᐎᔨᒡ? ᒋᑭ ᒥᓯᓂᐦᐄᑭᓂᐤ-ᐋ ᐋᓐ ᐋ ᐄᔑ ᒋᔅᒑᔨᐦᑖᑯᐦᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᐅᐦᒋ ᐋᐱᑎᐦᒡ ᐋ ᒋᔅᑯᑎᒫᑭᓂᐎᒡ?

ᐊᓂᔮ ᒫᒃ ᔖᔥ ᑳ ᓂᔅᑯᒫᑭᓂᐎᒡ ᒦᓵᒡ ᐅᔮ ᒑ ᐄᔑ ᐋᐱᑎᔒᔥᑎᐦᒃ ᐊᓂᑖ ᐐᒥᓂᒌᐦᒡ, ᒦᓐ ᒋᑭ ᐃᔅᐱᔫ ᐊᓂᑖ ᐅᔮ ᒑ ᐱᐳᓂᔨᒡ ᒑ ᐊᔨᒥᐦᐋᒡ ᒋᔖᔨᔨᐤᐦ ᑭᔮ ᑯᑎᒃᐦ ᐊᐚᔨᐤᐦ ᐋ ᐐᐦ ᐐᒋᐦᐄᐚᔨᒡᐦ ᐅᔮ ᐋ ᐄᔑ ᐱᒥᐱᔨᐦᑖᑭᓂᐎᔨᒡ᙮

ᐋ ᑭᓅᐚᐱᐦᑖᑭᓂᐎᒡ ᑖᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐋᓐ ᐋ ᒫᐅᐦᑐᓂᑭᓂᐎᒡ ᑳᒋᒑᐱᒄ

ᒋ ᓂᑑᒋᔅᒑᔨᐦᑎᒻ ᔫᓈ ᐊᓂᔮ ᑖᓐ ᒑ ᒌ ᐃᔥᐱᔑ ᒫᐅᐦᑐᓂᑭᓂᐎᐦ ᑳᒋᒑᐱᒄ ᑭᔮ ᐊᔨᑭᑖᔥ ᐊᐦᒹᔮ ᐋ ᐎᓈᒋᐦᑖᑭᓂᐎᒡ ᐊᓂᐦ ᐋ ᐅᐦᒋ ᓂᐦᑖᐅᒋᐦᒡᐦ᙮ ᐋᓐ ᑳᒋᒑᐱᒄ, ᓂᔥᑐᔨᒡ ᓂᒌ ᐃᐦᑎᓈᓐ ᐋ ᒫᐅᐦᑐᓂᒫᐦᒡ:

- ᐋᑳ ᒥᑯᔥᑳᒋᐦᑖᑭᓂᐎᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ (ᒑ ᐅᐦᒋ ᒋᔅᒑᔨᐦᑖᑭᓂᐎᒡ)
- ᒥᒄ ᑳ ᒋᔖᔨᔨᐅᔨᒥᑭᐦᒡᐦ ᓃᐲᐦ ᐋ ᐅᑎᓂᑭᓂᐎᒡᐦ
- ᒥᓯᐚ ᓃᐲᐦ ᐋ ᐅᑎᓂᑭᓂᐎᒡᐦ

ᐋᐅᒄ ᐆ ᑳ ᐃᐦᑎᔮᐦᒡ ᑳ ᒫᐅᐦᑐᓂᒫᐦᒡ 2008 ᑳ ᐃᔅᐱᔨᒡ, ᑭᔮ ᐋᐅᒄ ᒦᓐ ᑳ ᐃᐦᑎᔮᐦᒡ 2009 ᑳ ᐃᔅᐱᔨᒡ᙮ ᐋᐅᒄ ᑳ ᐐᐦ ᐃᐦᑑᑎᒫᐦᒡ ᒧᔮᒻ ᐋᓐ ᔫᐦᒃ ᐋ ᐱᒥᐱᔨᒡ ᐋ ᒫᐅᐦᑐᓂᑭᓂᐎᒡᐦ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐋᔑᑯᒻ ᓃᐱᓐᐦ, ᓂᒌ ᐊᒋᐦᑖᓈᓐ ᐊᓂᔮᐦ ᓃᐲᐦ ᐋ ᐃᐦᑎᑯᐦᒡᐦ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ, ᑖᓐ ᐋ ᐃᔥᐱᔖᒡᐦ ᐊᓂᑦ ᐋ ᒥᔥᑎᑰᐦᒡ ᐋᓐ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ, ᑖᓐ ᑳ ᐃᔥᐱᔑ ᓂᐦᑖᐅᒋᐦᒡ, ᑭᔮ ᑖᓐ ᑳ ᐄᔑ ᐙᐱᑯᐦᒡᐦ ᓃᐲᔥᐦ᙮ ᐋᑯᑦ ᑳ ᐅᐦᒋ ᑎᐱᐦᑎᑖᔮᐦᒡ

Should the booklet be public, or only for people involved with the project? Should the information be summarized for use in teaching materials?

Now that Michel has received approval to work in Wemindji, he will return there later this year to talk with the Elders and other interested people.

Looking at how harvesting affects Labrador tea populations

Youri has been studying how much Labrador tea and pitcher plant you can collect before you damage the populations. For Labrador tea, we tried three different harvest methods:

- Leaving the plants untouched (control)
- Taking just the old leaves
- Taking all the leaves

We harvested this way in 2008, and again in 2009. The idea was to simulate intensive harvesting. Each year, we counted the number of leaves on the plants, how big their stems were, how much they had grown, and how many flowers they had. That allowed us to compare how the plants were doing, depending on how heavily we'd harvested.

We found that taking all the leaves really damaged the plant. Most of these plants died after the second

ᐊᓂ ᐁ ᐃᓵᐸᓕ·ᑲᐤ ᐊᓂᔨᐦ ᓂᐦᑕᐅᑎᑭᓴᓂ, ᐅᐦᑎ ᐊᓂ ᑕᓂ ᑲ ᐃᔅᐱᔨᓐ ᓯᐅᐦᑐᓪᒪᐦᐃᓂ ᐊᓂ ᚢᑲᓂ ᐊᓂᑉ ᓂᐦᑕᐅᑎᑭᓴᓂᐦᐧᐣ

ᐁᐅᓀ ᑲ ·ᐊᐱᐦᑕᒪᐦᐃ ᐊᓂ ᒥᔨᐁ ᐁ ᐅᑎᓴᑲᓰᐦᑲᐤᐦ ᐅᐸᐱᐦ ᐅᐦᑎ ᐊᓂᑉ ᓂᐦᑕᐅᑎᑭᓴᓂᐦᐃ, ᐁᔨᑉᐦ ᐅᐦᑎ ᐊᓂᑉ ᐅᐦᑎᑕᐱᐦᐃ ᐊᓂᑉ ᑲ ᐅᐦᑎᑕᐱᐦᐃ ᐁᑎᐦ ᐁᐅᐦᐃ ᐅᐦᑎ ᐃᓂᐦᐃ ᐊᓂᑉ ᐃᓂᐦᐃ ᐁᐅᐦᑎ

ᕂ ᔃᑯᐦᐣ ᒌᓈ ᒉ ᐃᐢᐸᔐᐦᐣ ᐄᔑ ᓅᐡᒌᒥᐦᐣ, ᐅᐦᒋ ᐋᓈ ᑳ ᐄᔑ ᐚᐱᐦᑕᒫᐦᐣ ᒉᐧᑳᐣ 2008-2010 ᑳ ᐃᐢᐸᔐᐦᐣ᙮ ᐋᓈ ᒫᒃ ᑳ ᐄᔑ ᐚᐱᐦᑕᒫᐦᐣ ᐊᓂᑦ ᑳ ᒪᓯᓇᐧᐋᐡᑌᓯᓇᐦᐄᒉᐸᔐᐦᐣ, ᐋᑦ ᔦᐸᐣ ᑯᔐᐢᑯ ᐁ ᐄᔑ ᐱᒥᐸᔐᐦᐣ ᐁ ᒫᐅᐦᑐᓇᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓈᐦ (ᒥᑯ ᐁ ᒋᔕᐄᓅᐧᐄᒪᑲᐦᐣᐦ ᑲᔦ ᐁᑳ ᐚᐱᑯᐦᐣ ᓂᐦᑖᐅᒋᐦᒋᑲᓈᐦ), ᐋᓈ ᐯᔦᑯ ᓂᐦᑖᐅᒋᐦᒋᑲᓈ ᒉᔑᑯᒻ ᓅᐡᑎᓅ, 100 ᐱᐳᓈᐦ ᒉᒃ ᒋᐹᐦ ᕂ ᒫᐦᒋᐦᒌᑲᓅ ᐊᓂᑦ ᐯᔦᑯᔐᐣ ᐁ ᐅᐦᒋ ᓂᐦᑖᐅᒋᓂᐦᐧᑳᐤᐦ᙮ ᒥᑯ ᒫᒃ ᐧᒫᐤ ᒋᐹᐦ ᕂ ᒥᔦᐸᔦ ᐆ ᐁ ᐃᐦᑎᓈᓄᐧᐄᐦᐣ:

- 5% (ᐯᔦᑯ ᓂᐦᑖᐅᒋᐦᒋᑲᓈ ᒉᔑᑯᒻ ᓅᐡᑎᓅ) ᒉᔑᑯᒻ ᓅᓂ ᐱᐳᓈᐦ
- 10% (ᐯᔦᑯ ᒉᔑᑯᒻ ᒥᒌᐦᑐ) ᒉᔑᑯᒻ ᓂᔦᔐᓈ ᐱᐳᓈᐦ ᓄᐡᑦ ᒫᒃ
- 20% (ᐯᔦᑯ ᒉᔑᑯᒻ ᓂᔦᔐᓈ) ᒉᔑᑯᒻ ᒥᒌᐦᑐ ᐱᐳᓈᐦ (ᑲᓄᐧᐋᐱᐦᑕᒥᑯ ᐋᓈ ᒪᓯᓈᐱᐢᑲᐦᐄᑲᓂᐦᑳᓈ 1)

ᒪᓯᓈᐱᐢᑲᐦᐄᑲᓂᐦᑳᓈ 1: ᓃᑳᓂᐦᐣ ᐁ ᐄᔑ ᐧᐋᐱᐦᒌᑲᓄᐧᐄᐦᐣ ᒉ ᐃᐢᐸᔐᐦᐣ ᐊᔐᑲᒌᐡ ᐁ ᐄᔑ ᓂᐦᒌᐅᒋᐦᐣ ᐋᓈ 100 ᑎᐦᑐ ᐱᐳᓈᐦ ᐁ ᑲᓄᐧᐋᐱᐦᒌᑲᓄᐧᐄᐦᐣ ᐅᐦᒋ ᐋᓈ ᓇᓈᐦᑰ ᐁ ᐃᐦᑎᓈᓄᐧᐄᐦᐣ ᐁ ᐄᔑ ᒫᐅᐦᑐᓇᑲᓄᐧᐄᐦᐣ (ᐧᒉᐦᐣ ᐋᓈ ᓇᓈᐦᑰ ᐁ ᐃᐡᐱᔑ ᐅᑎᓇᑲᓄᐧᐄᐦᐣ ᑲᔦ ᑎᐦᑐ ᐱᐳᓈᐦ ᐁᑳ ᒥᑯᐡᑳᒋᐦᒌᑲᓄᐧᐄᐦᐣ ᐧᐹᒍᐡ ᒦᓈ ᒉ ᐅᐦᒋ ᐅᑎᓇᑲᓄᐧᐄᐦᐣ)᙮

ᐋᓈ ᒫᒃ ᒥᓯᐧᐁ ᒉᐧᑳᓈ ᐁ ᐅᑎᓇᑲᓄᐧᐄᐦᐣ, ᐁᑎᑑ ᒋᐹᐦ ᓈᑲᑐᐧᐁᔐᐦᑌᓈ ᐁ ᐃᐦᑎᔐᓈ᙮ ᐋᓈ ᐁᑎᑑ ᒥᐡᒐᐦᐄ ᐁ ᐅᑎᓇᑲᓄᐧᐄᐦᐣ ᓂᐦᑖᐅᒋᐦᒋᑲᓈ ᐅᐦᒋ ᐋᓈ ᐯᔦᑯ ᒉᔑᑯᒻ ᓂᔦᔐᓈ, ᐁᑯᑦ ᒉᒃ ᒋᐹᐦ ᓂᐱᐦᒌᑲᓅ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᐦᑖᐅᒋᓂᐦᐧᑳᐤᐦ, ᐋᑦ ᔦᐸᐣ ᒋᓄᐅᐡ ᐁᑳ ᒥᑯᐡᑳᒋᐦᑌᑲᓅᐦᐧᑳᐤᐦ᙮ ᒥᑯ ᒫᒃ ᒫᐡᑯᐣ ᒋᑳ ᕂ ᒫᐅᐦᑐᓇᑲᓅ ᐯᔦᑯ ᓂᐦᑖᐅᒋᐦᒋᑲᓈ ᐊᓂᑦ ᓅᐡᑎᓅ ᐁ ᐃᐦᑎᓂᐦᐧᑳᐤᐦ ᒉᔑᑯᒻ ᓂᐡᑐ ᐱᐳᓈᐦ᙮

ᕂ ᔃᑯᐦᐣ ᒌᓈ ᒑ ᐃᐢᐱᔐᐣ ᐄᔑ ᓅᐡᒌᒥᐦᐣ, ᐅᐦᒋ ᐋᓈ ᑳ ᐄᔑ ᐚᐱᐦᑎᒫᐦᐣ ᒫᐧᑳᐣ 2008-2010 ᑳ ᐃᐢᐱᔐᐣ᙮ ᐋᓈ ᒫᒃ ᑳ ᐄᔑ ᐚᐱᐦᑎᒫᐦᐣ ᐊᓂᑦ ᑳ ᒥᓯᓂᐧᐋᐡᒌᓯᓂᐦᐄᒑᐱᔐᐣ, ᐋᑦ ᐋᔦᐱᐣ ᑯᔐᐢᑯ ᐋ ᐄᔑ ᐱᒥᐱᔐᐣ ᐋ ᒫᐅᐦᑐᓂᑭᓂᐧᐃᐣᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓈᐦ (ᒥᑯ ᐋ ᒋᔖᔐᔐᐅᔐᒥᑭᐦᐣᐦ ᑭᔦ ᐋᑳ ᐧᐋᐱᑯᐦᐣ ᓂᐦᑖᐅᒋᐦᒋᑭᓈᐦ), ᐋᓈ ᐹᔐᑯ ᓂᐦᑖᐅᒋᐦᒋᑭᓈ ᐋᔑᑯᒻ ᓅᐡᑎᓅ, 100 ᐱᐳᓈᐦ ᒌᒃ ᒋᐱᐦ ᕂ ᒫᐦᒋᐦᒌᑭᓅ ᐊᓂᑦ ᐹᔐᑯᔐᐣ ᐋ ᐅᐦᒋ ᓂᐦᑖᐅᒋᐦᐣᐦ᙮ ᒥᑯ ᒫᒃ ᒫᐤ ᒋᐱᐦ ᕂ ᒥᔦᐱᔐᐤ ᐆ ᐋ ᐃᐦᑎᓈᓂᐧᐃᐣ:

- 5% (ᐹᔐᑯ ᓂᐦᑖᐅᒋᐦᒋᑭᓈ ᐋᔑᑯᒻ ᓅᐡᑎᓅ) ᐋᔑᑯᒻ ᓅᓂ ᐱᐳᓈᐦ
- 10% (ᐹᔐᑯ ᐋᔑᑯᒻ ᒥᒌᐦᑐ) ᐋᔑᑯᒻ ᓂᔦᔦ ᐱᐳᓈᐦ ᑭᔦ ᒫᒃ
- 20% (ᐹᔐᑯ ᐋᔑᑯᒻ ᓂᔦᔦ) ᐋᔑᑯᒻ ᒥᒌᐦᑐ ᐱᐳᓈᐦ (ᑭᓄᐧᐋᐱᐦᑎᒥᑯ ᐋᓈ ᒥᓯᓈᐱᐢᑭᐦᐄᑭᓂᐦᑳᓈ 1)

ᒥᓯᓈᐱᐢᑭᐦᐄᑭᓂᐦᑳᓈ 1: ᓃᑳᓂᐦᐣ ᐋ ᐄᔑ ᐧᐋᐱᐦᒌᑭᓂᐧᐃᐣ ᒑ ᐃᐢᐱᔐᐣ ᐊᔐᑭᒌᐡ ᐋ ᐄᔑ ᓂᐦᒌᐅᒋᐦᐣ ᐋᓈ 100 ᑎᐦᑐ ᐱᐳᓈᐦ ᐋ ᑭᓄᐧᐋᐱᐦᒌᑭᓂᐧᐃᐣ ᐅᐦᒋ ᐋᓈ ᓂᓈᐦᑰ ᐋ ᐃᐦᑎᓈᓂᐧᐃᐣ ᐋ ᐄᔑ ᒫᐅᐦᑐᓂᑭᓂᐧᐃᐣ (ᐱᑯᓂᒑ ᐋᓈ ᓂᓈᐦᑰ ᐋ ᐃᐡᐱᔑ ᐅᑎᓂᑭᓂᐧᐃᐣ ᑭᔦ ᑎᐦᑐ ᐱᐳᓈᐦ ᐋᑳ ᒥᑯᐡᑳᒋᐦᒌᑭᓂᐧᐃᐣ ᐋᐦᐧᒫᔦ ᒦᓈ ᒑ ᐅᐦᒋ ᐅᑎᓂᑭᓂᐧᐃᐣ)᙮

ᐋᓈ ᒫᒃ ᒥᓯᐧᐋ ᒑᐧᑳᓈ ᐋ ᐅᑎᓂᑭᓂᐧᐃᐣ, ᐊᑎᑑ ᒋᐱᐦ ᓈᑭᑐᐧᐋᔐᐦᒌᓈ ᐋ ᐃᐦᑎᔐᓈ᙮ ᐋᓈ ᐊᑎᑑ ᒥᐡᒋᐦ ᐋ ᐅᑎᓂᑭᓂᐧᐃᐣ ᓂᐦᑖᐅᒋᐦᒋᑭᓈ ᐅᐦᒋ ᐋᓈ ᐹᔐᑯ ᐋᔑᑯᒻ ᓂᔦᔐᓈ, ᐋᑯᑦ ᒫᒃ ᒋᐱᐦ ᓂᐱᐦᒌᑭᓅ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᐦᑖᐅᒋᐦᐣᐦ, ᐋᑦ ᐋᔦᐱᐣ ᓈᐅᐡ ᐋᑳ ᒥᑯᐡᑳᒋᐦᒌᑭᓂᐧᐃᐣᐦ᙮ ᒥᑯ ᒫᒃ ᐧᑳᐧᔖᓈ ᒋᑭ ᕂ ᒫᐅᐦᑐᓂᑭᓅ ᐹᔐᑯ ᓂᐦᑖᐅᒋᐦᒋᑭᓈ ᐊᓂᑦ ᓅᐡᑎᓅ ᐋ ᐃᐦᑎᐦᐣᐦ ᐋᔑᑯᒻ ᓂᐡᑐ ᐱᐳᓈᐦ᙮

you would still kill off the population within 100 years. However, you could sustainably take:

- 5% (one plant in twenty) every two years
- 10% (one in ten) every five years or
- 20% (one in five) every ten years (see Figure 1).

If instead of the “sensible” method you used a “take everything” method, you would have to be much more careful. Taking more than one plant in five would eventually kill off the population, no matter how many years you left between collections. But you could probably harvest this way every three years if you only took one plant in twenty.

The healers use the whole plant in their remedies, so we too collected the entire plant. However, our observations lead us to believe that taking just the leaves would have less impact on the populations. We are starting a study to look at this.

This is a simplified summary of a more technical report from the Cuerrier lab.

ᐊᓂᒌ ᑳ ᐑᒋᐦᐋᐧᒑᐤ ᐊᐧᐁᓂᔫᐦ, ᒥᓯᐧᐁ ᐊᓂᔫ ᓂᐦᒑᐅᒋᐦᒋᑲᓂᔫ ᐋᐸᒋᐦᒑᐅᐢ ᐁ ᓂᑐᐦᑯᔥᓂᐦᑫᐧᒑᐤ, ᐁᑯ ᒫᒃ ᓂᔫᓐ ᑲᔦ ᒥᓯᐧᐁ ᑳ ᐅᑎᓇᒫᐦᐢ ᐊᓐ ᓂᐦᒑᐅᒋᐦᒋᑲᓐ᙮ ᒥᑯ ᒫᒃ ᐊᓐ ᑳ ᐄᔑ ᓃᔫᒋᐢᑫᔥᐦᑖᒫᐦᐢ, ᐊᓂᑦ ᐁ ᓈᐲᐅᐢ ᐊᓐ ᓂᐦᒑᐅᒋᐦᒋᑲᓐ, ᐁᐅᒃ ᔫᐸᐢ ᐁ ᐄᔑ ᐃᐦᑎᑯᐦᐢ ᐊᓐ ᑫᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔥᓄᐧᐃᐦᐢ ᑲᔦ ᓇᒧᐃ ᒋᑳ ᐃᐢᐱᔑ ᐧᐊᓈᒋᐦᐅᑲᓅ ᐊᓐ ᓂᐦᒑᐅᒋᐦᒋᑲᓐ ᐆ ᐁ ᐃᐦᑎᓈᓄᐧᐃᐦᐢ᙮ ᐁᐅᒃ ᐁ ᒋᐦᒋᐸᔥᐦᑖᔫᐦᐢ ᐆ ᑫ ᓃᔫᒋᐢᑫᔥᐦᑖᒫᐦᐢ᙮

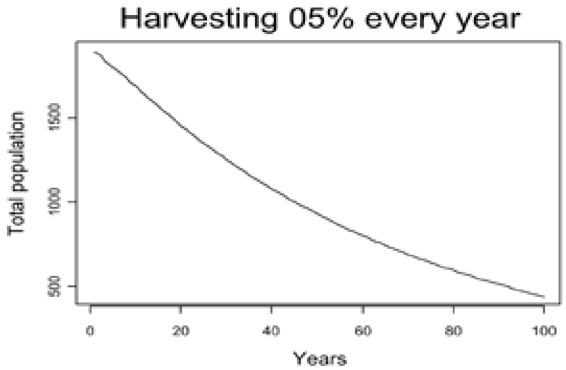
ᐁᐅᒃ ᐆ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᐤ ᒪᓯᓇᐦᐋᑲᓐ ᐅᐦᒋ ᐊᓐ ᐁᑎᔫ ᒥᐢᑕᐦᐋ ᑳ ᒪᓯᓈᑌᐤ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐ ᐊᓂᑌ ᑰᓇᔦᐃ ᓃᑉ ᑳ ᐅᐦᒋᐸᔫᐦᐢ᙮

ᐊᓂᒌ ᑳ ᐑᒋᐦᐋᒡ ᐊᐧᐋᓂᔮᐤᐦ, ᒥᓯᐧᐋ ᐊᓂᔮ ᓂᐦᒑᐅᒋᐦᒋᑭᓂᔮᐤ ᐋᐱᒋᐦᒑᐅᒡ ᐋ ᓂᑐᐦᑯᔮᓂᐦᒐᒡ, ᐋᑯ ᒫᒃ ᓂᔮᓐ ᑭᔮ ᒥᓯᐧᐋ ᑳ ᐅᑎᓂᒫᐦᒡ ᐊᓐ ᓂᐦᒑᐅᒋᐦᒋᑭᓐ᙮ ᒥᑯ ᒫᒃ ᐊᓐ ᑳ ᐄᔑ ᓃᔫᒋᐢᒐᔥᐦᑎᒫᐦᒡ, ᐊᓂᑦ ᐋ ᓈᐲᐅᒡ ᐊᓐ ᓂᐦᒑᐅᒋᐦᒋᑭᓐ, ᐋᐅᒃ ᐊᔮᐱᒡ ᐋ ᐄᔑ ᐃᐦᑎᑯᐦᒡ ᐊᓐ ᒐᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔑᓂᐧᐃᒡ ᑭᔮ ᓂᒧᔑ ᒋᑭ ᐃᐢᐱᔑ ᐧᐃᓈᒋᐦᒑᑭᓂᐤ ᐊᓐ ᓂᐦᒑᐅᒋᐦᒋᑭᓐ ᐆ ᐋ ᐃᐦᑎᓈᓂᐧᐃᒡ᙮ ᐋᐅᒃ ᐋ ᒋᐦᒋᐱᔑᐦᑖᔮᐦᒡ ᐆ ᒐ ᓃᔫᒋᐢᒐᔥᐦᑎᒫᐦᒡ᙮

ᐋᐅᒃ ᐆ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᒑᐤ ᒥᓯᓂᐦᐋᑭᓐ ᐅᐦᒋ ᐊᓐ ᐊᑎᔫ ᒥᐢᑏ ᑳ ᒥᓯᓈᒑᐤ ᑎᐹᒋᒨᓯᓂᐦᐋᑭᓐ ᐊᓂᒑ ᑰᓇᔦᐃ ᓃᑉ ᑳ ᐅᐦᒋᐱᔑᐤ᙮

5% ᐁ ᒫᐅᐦᑐᓇᑲᓄᐧᐃᐦᐢ ᒉᔑᑯᒻ ᐱᐳᓐᐦ

5% ᐋ ᒫᐅᐦᑐᓂᑭᓂᐧᐃᐠ ᐋᔑᑯᒻ ᐱᐳᓐᐦ



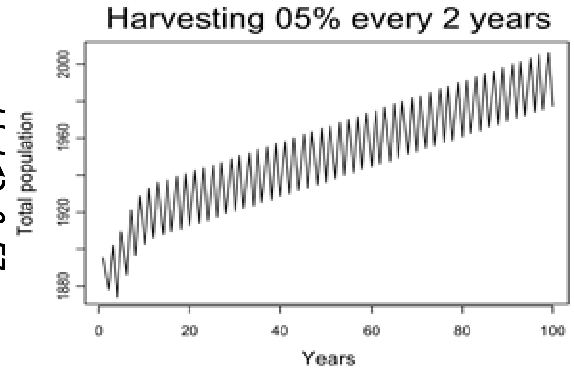
ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑲᓐ

ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑭᓐ

ᐱᐳᓐᐦ

5% ᐁ ᒫᐅᐦᑐᓇᑲᓄᐧᐃᐦᐢ ᒉᔑᑯᒻ 2 ᐱᐳᓐᐦ

5% ᐋ ᒫᐅᐦᑐᓂᑭᓂᐧᐃᐠ ᐋᔑᑯᒻ 2 ᐱᐳᓐᐦ



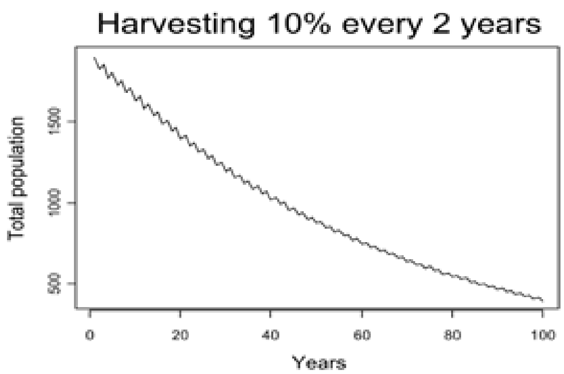
ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑲᓐ

ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑭᓐ

ᐱᐳᓐᐦ

10% ᐁ ᒫᐅᐦᑐᓇᑲᓄᐧᐃᐦᐢ ᒉᔑᑯᒻ 2 ᐱᐳᓐᐦ

10% ᐋ ᒫᐅᐦᑐᓂᑭᓂᐧᐃᐠ ᐋᔑᑯᒻ 2 ᐱᐳᓐᐦ



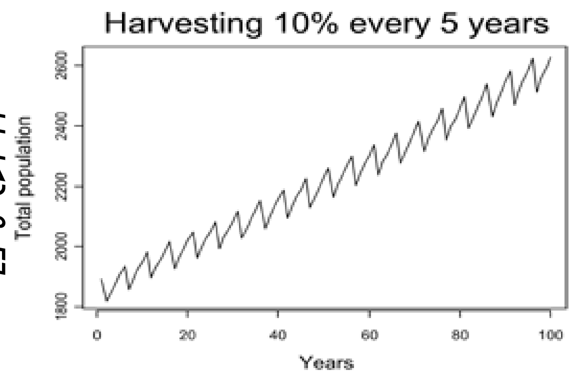
ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑲᓐ

ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑭᓐ

ᐱᐳᓐᐦ

10% ᐁ ᒫᐅᐦᑐᓇᑲᓄᐧᐃᐦᐢ ᒉᔑᑯᒻ 5 ᐱᐳᓐᐦ

10% ᐋ ᒫᐅᐦᑐᑭᓂᐧᐃᐠ ᐋᔑᑯᒻ 5 ᐱᐳᓐᐦ



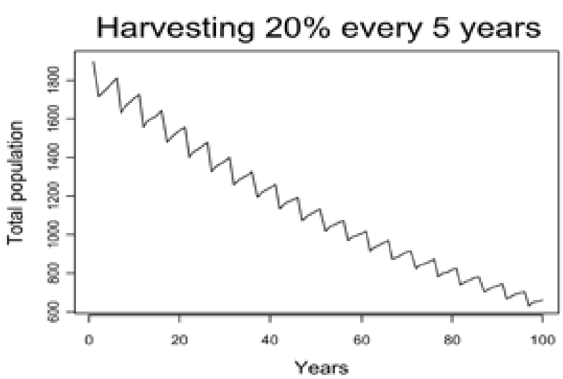
ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑲᓐ

ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑭᓐ

ᐱᐳᓐᐦ

20% ᐁ ᒫᐅᐦᑐᓇᑲᓄᐧᐃᐦᐢ ᒉᔑᑯᒻ 5 ᐱᐳᓐᐦ

20% ᐋ ᒫᐅᐦᑐᓂᑭᓂᐧᐃᐠ ᐋᔑᑯᒻ 5 ᐱᐳᓐᐦ



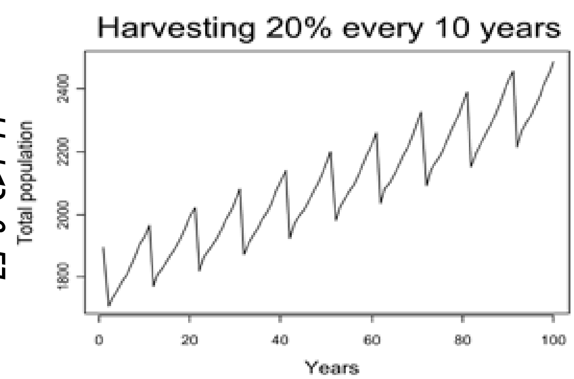
ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑲᓐ

ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑭᓐ

ᐱᐳᓐᐦ

20% ᐁ ᒫᐅᐦᑐᓇᑲᓄᐧᐃᐦᐢ ᒉᔑᑯᒻ 10 ᐱᐳᓐᐦ

20% ᐋ ᒫᐅᐦᑐᓂᑭᓂᐧᐃᐠ ᐋᔑᑯᒻ 10 ᐱᐳᓐᐦ



ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑲᓐ

ᒫᒨ ᓂᐦᒑᐅᒋᐦᒋᑭᓐ

ᐱᐳᓐᐦ

ᒪᓕᓴᐃᑎᐅᓕᖅ | ᑕᓕᓂᐃᑦᑎᐅᓕᖅ Notes

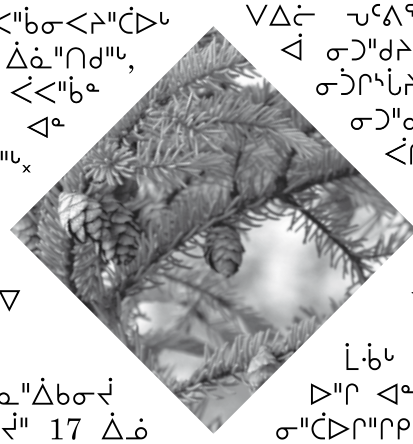
B. ᑎᐹᒋᒨᓯᓇᐦᐃᑳᓐ ᐅᐦᒋ ᐊᓂᑌ ᐋᕐᓈᓯᓐ ᓛᑉ
(ᐙᐙᒪᑲᓂᐲᓯᒼ 2011)

ᐊᓂᒌ ᐊᐌᓂᒌ ᑳ ᐋᐸᑎᓰᐧᑖᐤ ᐅᑌ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᑫᔨᐦᑌᑲᓅᐦᒁᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᔩᐠ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑕᐦᒁᐤ ᓇᓈᐦᑰ ᐁ ᐃᐦᑎᓈᓄᐎᐦᐠ ᑫ ᒌ ᐅᐦᒋ ᒋᐢᑫᔨᐦᑌᑲᓄᐎᐦᐠ ᑫᒁᓐ ᐁ ᐃᐦᑎᑯᐦᐠ ᐁ ᓂᑐᐦᑯᔨᓄᐎᐦᐠ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᐠ ᑲᔦ ᑫ ᒌ ᐋᔨᒧᑌᐦᒁᐤᐦ ᐊᓂᔩᐦ ᐁ ᐃᔑᓈᑯᓂᔨᐦᒁᐤᐦ ᓂᑐᐦᑯᔨᓐᐦ᙮

ᐸᓓᓐᑕᓐ ᐙᓪᐢ-ᕉᓭᓪ (PhD ᒋᐢᑯᑕᒧᐙᑲᓐ)

ᐁᔩᐠ ᑳ ᑲᓄᐙᐱᐦᑌᐦᒃ ᐸᓓᓐᑕᓐ ᐊᓂᔩᐦ ᐸᐢᐠ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑖᓂᑌ ᐁ ᐄᔑ ᐐᒋᐦᐄᐌᐸᔨᐦᒁᐤᐦ ᑫ ᒌ ᓃᒋᐸᔨᐦᐠ ᐁ ᐹᒋᐸᔨᓈᓄᐎᐦᐠ᙮ ᐁᔩᐠ ᑳ ᑲᓄᐙᐱᒫᑦ ᐄᓈᐦᑎᑯᐦ, ᐌᐢ ᐁᐅᐠ ᐆ ᐧᒫᐅᐠ ᑳ ᓃᐦᒋᓰᑦ ᐁ ᓂᑐᐦᑯᔨᓄᐎᑦ ᐊᓐ ᑫ ᒌ ᓃᒋᐸᔨᐦᐠ ᐁ ᐹᒋᐸᔨᓈᓄᐎᐦᐠ ᐅᐦᒋ ᐊᓂᔩᐦ ᒥᓯᐌ ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑳ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᐠ᙮ ᐸᓓᓐᑕᓐ ᑲᔦ ᐯᔭᐠ ᒋᐢᑯᑕᒧᐙᑲᓐ ᐯᐃᓖ ᓗᑦᕓᕐᓐ ᒌ ᐸᐦᑳᓂᐸᔨᐦᑖᐅᐠ ᐊᓂᔩ ᑫᒁᔩ ᐁ ᓂᑐᐦᑯᔨᓅᔨᐠᐦ ᐊᓂᑦ ᐄᓈᐦᑎᑯᐦᐠ, ᐁᐠ ᒦᓐ ᑳ ᓂᑑᒋᐢᑫᔨᐦᑌᐦᒁᐤᐦ ᐊᓂᔩᐦ ᐹᐸᐦᑳᓐ ᑳ ᐃᐦᑎᑯᓂᔨᐠᐦ ᓂᑐᐦᑯᔨᓐᐦ ᐅᐦᒋ ᐊᓐ ᑫ ᒌ ᓃᒋᐸᔨᐦᐠ ᐁ ᐹᒋᐸᔨᓈᓄᐎᐦᐠ᙮ ᐊᓐ ᒫᒃ ᐁ ᐐᒋᐦᐄᐌᐸᔨᐦᐠ, ᐁᐠ ᒦᓐ ᐁᑎᑑ ᑳ ᐸᐦᑳᓂᐸᔨᐦᑖᐧᑖᐤ ᐊᓂᔩᐦ ᐁ ᓂᑐᐦᑯᔨᓅᔨᐠ, ᐁᐠ ᒦᓐ ᑳ ᓂᑑᒋᐢᑫᔨᐦᑌᐦᒁᐤ ᐹᐢᑳᓐ ᒥᐠ ᐁ ᐯᔭᑯᓂᔨᐠ ᑫᒁᔩ ᐊᓂᔩ ᓂᑐᐦᑯᔨᓂᔩ᙮

ᑫᒁᐠ ᑲᔦ ᒪᓯᓇᐦᐊᒼ ᐸᓓᓐᑕᓐ ᒪᓯᓇᐦᐄᑲᓂᔩ ᐅᐦᒋ ᐊᓐ ᑖᓂᑌ ᐁ ᐃᐢᐸᔨᐦᒁᐤᐦ ᐊᓂᔩᐦ 17 ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑦ ᐁ ᐹᒋᐸᔨᓈᓄᐎᐦᐠ ᑖᐧᐯ ᐋᐦᒌᐤᐦ ᐁ ᐃᐢᐸᔨᐦᒁᐤᐦ ᐅᐦᒋ ᓂᐲ ᓅᐢᑦ ᐃᐢᑯᑌᐙᐳ ᐁ ᐋᐸᒋᐦᑖᑲᓄᐎᐦᐠ ᐁ ᑏᐧᔮᐳᐦᑳᓄᐎᐦᐠ᙮ ᓵᐢ ᒌ ᓂᓯᐦᑑᓇᒼ ᐊᓂᔩᐦ ᐸᐢᐠ ᐁ ᐃᐦᑎᑯᓂᔨᐠᐦ ᑫᒁᔩᐦ ᐁ ᓂᑐᐦᑯᔨᓅᔨᐠᐦ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᐠ, ᒥᐠ ᒫᒃ ᒦᓐ ᒋᑳ ᓂᑑᒋᐢᑫᔨᐦᑕᒼ ᑫ ᒌ ᑫᐢᑎᓈᐦᐅᑦ᙮



B. ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓂᑖ ᐋᕐᓈᓯᓐ ᓛᑉ
(ᒋᐢᔮᐢᑯᓂᐲᓯᒻ 2011)

ᐊᓂᒌ ᐊᐙᓂᒌ ᑳ ᐋᐱᑎᓰᐠ ᐅᑖ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐎᐠᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᔦᐎᐠ ᑳ ᐋᐱᑎᔒᐢᑎᐦᐠ ᓂᓈᐦᑰ ᐋ ᐃᐦᑎᓈᓂᐎᐠ ᒑ ᒌ ᐅᐦᒋ ᒋᐢᒑᔨᐦᑖᑭᓂᐎᐠ ᒑᒁ ᐋ ᐃᐦᑎᑯᐦᐠ ᐋ ᓂᑐᐦᑯᔨᓂᐎᐠ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᐠ ᑭᔮ ᒑ ᒌ ᐋᔨᒧᑎᐦᐠ ᐊᓂᔮᐦ ᐋ ᐃᔑᓈᑯᓂᔨᐠᐦ ᓂᑐᐦᑯᔨᓐᐦ᙮

ᐱᓓᓐᑎᓐ ᐙᓪᐢ-ᕉᓭᓪ (PhD ᒋᐢᑯᑎᒧᐙᑭᓐ)

ᐋᔦᐎᐠ ᑳ ᑭᓄᐙᐱᐦᑎᐦᒃ ᐱᓓᓐᑎᓐ ᐊᓂᔮᐦ ᐱᐢᐠ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑖᓂᑖ ᐋ ᐄᔑ ᐐᒋᐦᐄᐙᐱᔨᐠᐦ ᒑ ᒌ ᓃᒋᐱᔨᐠ ᐋ ᐹᒋᐱᔨᓈᓂᐎᐠ᙮ ᐋᔦᐎᐠ ᑳ ᑭᓄᐙᐱᒫᑦ ᐄᔮᐦᑎᑯᐦ, ᐙᐢ ᐋᐅᐠ ᐆ ᒫᐅᐠ ᑳ ᓃᐦᒋᓰᑦ ᐋ ᓂᑐᐦᑯᔨᓂᐎᑦ ᐊᓐ ᒑ ᒌ ᓃᒋᐱᔨᐠ ᐋ ᐹᒋᐱᔨᓈᓂᐎᐠ ᐅᐦᒋ ᐊᓂᐦᐄ ᒥᓯᐗ ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑳ ᓂᑑᒋᐢᒑᔨᐦᑎᒫᐦᐠ᙮ ᐱᓓᓐᑎᓐ ᑭᔮ ᐹᔨᐠ ᒋᐢᑯᑎᒧᐙᑭᓐ ᐯᐃᓖ ᓗᑦᕓᕐᓐ ᒌ ᐱᐦᑳᓂᐱᔨᐦᑖᐅᐠ ᐊᓂᔮ ᒑᒁᔨᐤ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐠᐦ ᐊᓂᑦ ᐄᔮᐦᑎᑯᐦᐠ, ᐋᐠ ᒦᓐ ᑳ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᐠ ᐊᓂᔮᐦ ᐹᐱᐦᑳᓐ ᑳ ᐃᐦᑎᑯᓂᔨᐠᐦ ᓂᑐᐦᑯᔨᓐᐦ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᓃᒋᐱᔨᐠ ᐋ ᐹᒋᐱᔨᓈᓂᐎᐠ᙮ ᐊᓐ ᒫᒃ ᐋ ᐐᒋᐦᐄᐙᐱᔨᐠ, ᐋᐠ ᒦᓐ ᐊᑎᑑ ᑳ ᐱᐦᑳᓂᐱᔨᐦᑖᐤ ᐊᓂᔮᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐠ, ᐋᐠ ᒦᓐ ᑳ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᐠ ᐹᑎᐢ ᒥᐠ ᐋ ᐹᔨᑯᓂᔨᐠ ᒑᒁᔨᐤ ᐊᓂᔮ ᓂᑐᐦᑯᔨᓂᔨᐤ᙮

ᒑᒁᐠ ᑭᔮ ᒥᓯᓂᐦᐊᒻ ᐱᓓᓐᑎᓐ ᒥᓯᓂᐦᐄᑭᓂᔨᐤ ᐅᐦᒋ ᐊᓐ ᑖᓂᑖ ᐋ ᐃᐢᐱᔨᐠᐦ ᐊᓂᐦᐄ 17 ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑦ ᐋ ᐹᒋᐱᔨᓈᓂᐎᐠ ᑖᐧᐹ ᐊᔨᐦᐠ ᐋ ᐃᐢᐱᔨᐠᐦ ᐅᐦᒋ ᓂᐲ ᓈᐢᑦ ᐃᐢᑯᑖᐙᐳᐃ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐎᐠ ᐋ ᑏᐧᔮᐳᐦᑳᓂᐎᐠ᙮ ᓵᐢ ᒌ ᓂᐢᑑᓂᒻ ᐊᓂᔮᐦ ᐱᐢᐠ ᐋ ᐃᐦᑎᑯᓂᔨᐠᐦ ᑳᒁᔨᐤᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐠᐦ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᐠ, ᒥᐠ ᒫᒃ ᒦᓐ ᒋᑭ ᓂᑑᒋᐢᒑᔨᐦᑎᒻ ᑳ ᒌ ᑳᐢᑎᓈᐦᐅᑦ᙮

B. Report for the Arnason lab
(January 2011)

The people in this lab have been working on various methods of identifying and describing the ingredients in the plants.

Brendan Walshe-Roussel (PhD student)

Brendan has been looking at how some plants reduce inflammation. He is focusing on black spruce, because this had the strongest anti-inflammatory effects of the Cree plants we tested. Brendan is trying to find out what ingredients are in black spruce, and which of them fight inflammation. He and honours student Baillie Redfern have been dividing black spruce's ingredients into groups, and testing each group to see if it fights inflammation. If it does, they divide that group into smaller groups, and so on until they narrow down to individual ingredients.

Brendan is also writing an article on how the 17 Cree plants have different effects on inflammation depending on whether you mix them with water or ethanol. He has tentatively identified some of the ingredients in the plants for this work, but plans to re-check his results with a more exact test.

ᐋᒫᕐ ᓵᓖᒼ

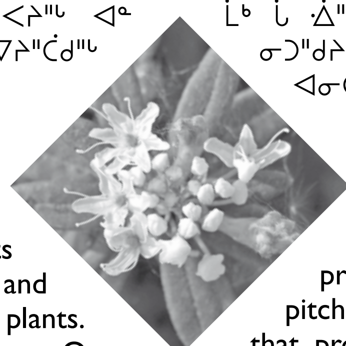
ᐁᔫᒄ ᐁ ᐋᐸᑎᓰᐦᑲᐦᑕᐦᒃ ᐋᒫᕐ ᐊᓂᔫ ᒉ ᒌ ᐅᔑᐦᑖᑦ ᑖᓂᑌ ᒉ ᒌ ᐃᐦᑎᓈᓄᐎᐦᒡ ᐁᑎᑰ ᒉ ᒌ ᒥᔫᐸᔨᐦᒡ ᐁ ᓂᑰᒋᔅᒉᔨᐦᑌᑲᓄᐎᐦᒡ ᒉᒁᓐ᙮ ᐁᔫᒄ ᓲᔥ ᑳ ᐅᔑᐦᑖᑦ ᑲᔦ ᑳ ᒪᓯᓇᐦᐊᐦᒃ 11 ᐁ ᐃᐦᑎᓈᓄᐎᐦᒡ ᐁ ᓂᑰᒋᔅᒉᔨᐦᑌᑲᓅᐦᒁᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐊᓂᔫᐦ 17 ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᒉᒁᓐ ᐋᐸᑎᓰᐦᑲᐦᑕᒻ ᐊᓂᔫᐦ ᑯᑕᒃᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐊᓂᔫ ᐯᔭᒄ ᑳ ᐅᔑᐦᑖᑦ ᐁ ᐄᔑ ᓂᑰᒋᔅᒉᔨᐦᑌᑲᓅᐦᒁᐤᐦ ᑳᒋᒉᐸᒄ ᑲᔦ ᐧᐄᓯᒋᐸᒄ ᐅᐦᒋ ᐊᓐ ᐋᐦᒌᐤᐦ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓄᐎᐦᒡ ᓇᓈᐦᑰ ᐁ ᐊᑕ ᐃᔅᐱᐦᑌᔮᒡ᙮ ᓲᔥ ᒌ ᓂᐦᐁᔨᐦᑖᑲᓅ ᐆ ᒉ ᒪᓯᓇᐦᐄᑲᓄᐎᐦᒡ ᒪᓯᓇᐦᐃᑲᓐ ᐊᓂᑌ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᐦᒡ᙮ ᐁᔫᒄ ᑲᔦ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑕᐦᒃ ᐋᒫᕐ ᐊᓂᔫ ᐧᒫᐅᒡ ᒉ ᒥᔫᐸᔨᓂᔨᒡ ᐁ ᓂᑰᒋᔅᒉᔨᐦᑌᑲᓅᐦᒁᐤᐦ ᒪᔅᑯᒥᓈᓈᐦᑎᒄ ᑲᔦ ᒪᔅᑯᒥᔒ ᐅᐦᒋ ᐊᓂᔫ ᑳ ᐅᑎᓂᐦᒃ ᐋᓈ ᐯᐃᓖ ᐊᓂᔫ ᐁ ᓂᑐᐦᑯᔨᓈᔨᐦᒡ ᒉᒁᔫ ᐅᐦᒋ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ᙮

ᐁᔅᒄ ᒉᒁᒡ ᐋᐸᑎᓰᐦᑲᐦᑕᒧᒡ ᐋᒫᕐ ᑲᔦ ᑳᕐᓛᐃᓈ ᐊᓂᔫ ᑖᓂᑌ ᒉ ᒌ ᐅᐦᒋ ᓂᑰᒋᔅᒉᔨᐦᑌᑲᓅᐦᒁᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐧᐄᒋᐦᐄᐍᐸᔨᐦᒁᐤᐦ ᐁᑳ ᒉ ᒌ ᐙᓈᑎᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓄᐎᐦᒡ᙮ ᐁᐅᒄ ᐆ ᐁ ᐄᔑ ᑯᒋᐦᑖᔮᐦᒡ ᐊᓂᑦ ᐊᔨᑲᑖᔑᐦᒡ, ᐁᐅᒄ ᐊᓐ ᐸᔅᒡ ᐁ ᐃᐦᑎᑯᐦᒡ ᒉᒁᓐ ᐁ ᓂᑐᐦᑯᔨᓄᐎᐦᒡ ᐁ ᐧᐄᒋᐦᐄᐍᐸᔨᐦᒡ ᐁᑳ ᒉ ᒌ ᐙᓈᑎᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓄᐎᐦᒡ ᐊᓂᑦ ᐅᔮᑲᓂᔑᐦᒡ ᐁ ᐅᐦᒋ ᓂᑰᒋᔅᒉᔨᐦᑕᒫᐦᒡ᙮ ᐆ ᒫᒃ ᒉ ᒌ ᒥᔫᐸᔨᐦᒡ ᐊᓂᑦ ᐊᐍᔒᔥ ᐁ ᐃᐦᑖᑦ, ᐁᐅᒄ ᐁ ᓂᑐᐍᔨᐦᑖᑯᐦᒡ ᒉ ᓲᐳᐸᔨᐦᒡ ᐊᓐ ᒉᒁᓐ ᐁ ᓂᑐᐦᑯᔨᓄᐎᐦᒡ ᐅᐦᒋ ᐊᓂᑦ ᒥᑕᐦᒋᔒᐦᒡ ᐊᓂᑌ ᒉ ᒌ ᐃᔅᐸᔨᐦᒡ ᐲᐦᒋᔫ ᐊᓂᑌ ᐄᔑ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓄᐎᐦᒡ ᑲᔦ ᐊᓂᑦ ᐅᑎᐦᐱᐦᒡ ᐊᓐ ᐊᐍᔒᔥ ᓅᔅᑦ ᒫᒃ ᐄᓅ ᐁ ᒦᒋᑦ ᐊᓂᔫ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ᙮ ᐊᓐ ᐁ ᐅᔅᑳᒡ ᐁ ᐄᔑ ᓂᑰᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᒉᒁᓐ, ᔫᐸᒡ ᒋᑳ ᒌ ᒋᔅᒉᔨᐦᑖᑯᓐ ᐊᓐ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓐ ᒉᒁᓐ ᐁ ᓂᑐᐦᑯᔨᓄᐎᐦᒡ ᐋᑦ ᒥᒄ ᓅᔅᒡ ᐊᐱᔒᔥ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑦ ᒥᑎᐦᐱᐦᒡ, ᐁᐅᒄ ᒫᒃ ᒉ ᐧᐄᐦᑕᒫᑯᔮᐦᒡ ᑖᐯ ᐁ ᐃᔅᐸᔨᐦᒡ ᐊᓐ ᒉᒁᓐ ᐁ ᓂᑐᐦᑯᔨᓄᐎᐦᒡ ᐊᓂᑦ ᐁ ᓂᑐᐍᔨᐦᑖᑯᐦᒡ ᒉ ᐃᔅᐸᔨᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ᙮

ᐋᒫᕐ ᓵᓖᒼ

ᐋᔫᐧᐃᒄ ᐋ ᐋᐱᑎᔒᔅᑎᐦᒃ ᐋᒫᕐ ᐊᓂᔭ ᒐ ᒌ ᐅᔑᐦᑖᑦ ᑖᓂᑖ ᒐ ᒌ ᐃᐦᑎᓈᓂᐎᒡ ᐊᑎᑰ ᒐ ᒌ ᒥᔫᐱᔨᒡ ᐋ ᓂᑰᒋᔅᒐᔨᐦᑖᑭᓂᐎᒡ ᒐᒁᓐ᙮ ᐋᔫᐧᐃᒄ ᓲᔥ ᑳ ᐅᔑᐦᑖᑦ ᑭᔭ ᑳ ᒥᓯᓂᐦᐊᐦᒃ 11 ᐋ ᐃᐦᑎᓈᓂᐎᒡ ᐋ ᓂᑰᒋᔅᒐᔨᐦᑖᑭᓂᐎᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐊᓂᐦᐄ 17 ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᒫᒁᒡ ᐋᐱᑎᔒᔅᑎᒧ ᐊᓂᔭᐦ ᑯᑎᒃᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐊᓂᔭ ᐹᔨᒄ ᑳ ᐅᔑᐦᑖᑦ ᐋ ᐄᔑ ᓂᑰᒋᔅᒐᔨᐦᑖᑭᓂᐎᒡᐦ ᑳᒋᒐᐱᒄ ᑭᔭ ᐧᐄᓯᒋᐱᒄ ᐅᐦᒋ ᐊᓐ ᐊᔨᐦᒡ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐎᒡ ᓂᓈᐦᑰ ᐋ ᐊᑎ ᐃᔅᐱᐦᑖᔮᒡ᙮ ᓲᔥ ᒌ ᓂᐦᐋᔨᐦᑖᑭᓂᐤ ᐆ ᒐ ᒥᓯᓂᐦᐄᑭᓂᐎᒡ ᒥᓯᓂᐦᐃᑭᓐ ᐊᓂᑖ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᐦᒡ᙮ ᐋᔫᐧᐃᒄ ᑭᔭ ᑳ ᐋᐱᑎᔒᔅᑎᐦᒃ ᐋᒫᕐ ᐊᓂᔭ ᒫᐅᒡ ᒐ ᒥᔫᐱᔨᔨᒡ ᐋ ᓂᑰᒋᔅᒐᔨᐦᑖᑭᓂᐎᒡᐦ ᒥᔅᑯᒥᓈᓈᐦᑎᒄ ᑭᔭ ᒥᔅᑯᒥᔒ ᐅᐦᒋ ᐊᓂᔭ ᑳ ᐅᑎᓂᐦᒃ ᐋᓈ ᐯᐃᓖ ᐊᓂᔭ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᒡ ᒐᒁᔨᐤ ᐅᐦᒋ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ᙮

ᐋᔅᒄ ᒫᒁᒡ ᐋᐱᑎᔒᔅᑎᒧᒡ ᐋᒫᕐ ᑭᔭ ᑳᕐᓛᐃᓈ ᐊᓂᔭ ᑖᓂᑖ ᒐ ᒌ ᐅᐦᒋ ᓂᑰᒋᔅᒐᔨᐦᑖᑭᓂᐎᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒐ ᒌ ᐧᐄᒋᐦᐄᐚᐱᔨᒡᐦ ᐋᑲ ᒐ ᒌ ᐎᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐎᒡ᙮ ᐋᐅᒄ ᐆ ᐋ ᐄᔑ ᑯᒋᐦᑖᔮᐦᒡ ᐊᓂᑦ ᐊᔨᑭᑖᔑᐦᒡ, ᐋᐅᒄ ᐊᓐ ᐱᔅᒡ ᐋ ᐃᐦᑎᑯᐦᒡ ᒐᒁᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐎᒡ ᐋ ᐧᐄᒋᐦᐄᐚᐱᔨᒡ ᐋᑲ ᒐ ᒌ ᐎᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐎᒡ ᐊᓂᑦ ᐅᔮᑭᓂᔑᐦᒡ ᐋ ᐅᐦᒋ ᓂᑰᒋᔅᒐᔨᐦᑎᒫᐦᒡ᙮ ᐆ ᒫᒃ ᒐ ᒌ ᒥᔫᐱᔨᒡ ᐊᓂᑦ ᐊᐅᐦᑳᓐ ᐋ ᐃᐦᑖᑦ, ᐋᐅᒄ ᐋ ᓂᑐᐚᔨᐦᑖᑯᐦᒡ ᒐ ᓲᐳᐱᔨᒡ ᐊᓐ ᒐᒁᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐎᒡ ᐅᐦᒋ ᐊᓂᑦ ᒥᑎᐦᒋᔒᐦᒡ ᐊᓂᑖ ᒐ ᒌ ᐃᔅᐱᔨᒡ ᐲᐦᒋᔨᐤ ᐊᓂᑖ ᐄᔑ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐎᒡ ᑭᔭ ᐊᓂᑦ ᐅᑎᐦᐱᐦᒡ ᐊᓐ ᐊᐅᐦᑳᓐ ᓈᔅᑦ ᒫᒃ ᐄᔨᔨᐤ ᐋ ᒦᒋᑦ ᐊᓂᔭ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔨᐤ᙮ ᐊᓐ ᐋ ᐅᔅᑳᒡ ᐋ ᐄᔑ ᓂᑰᒋᔅᒐᔨᐦᑎᒫᐦᒡ ᒐᒁᓐ, ᐊᔫᐱᒡ ᒋᑭ ᒌ ᒋᔅᒐᔨᐦᑖᑯᓐ ᐊᓐ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓐ ᒐᒁᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐎᒡ ᐋᑦ ᒥᒄ ᓈᔅᒡ ᐊᐱᔒᔥ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑦ ᒥᑎᐦᐱᐦᒡ, ᐋᐅᒄ ᒫᒃ ᒐ ᐧᐄᐦᑎᒫᑯᔮᐦᒡ ᑖᐧᐸ ᐋ ᐃᔅᐱᔨᒡ ᐊᓐ ᒐᒁᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐎᒡ ᐊᓂᑦ ᐋ ᓂᑐᐚᔨᐦᑖᑯᐦᒡ ᒐ ᐃᔅᐱᔨᒡ ᐊᓂᑖ ᐲᐦᒋᔨᐤ᙮



Ammar Saleem

Ammar works on developing better tests for our project. So far, he has developed and published tests for 11 of the 17 Cree plants. He is now working on the remaining ones. One of the tests he developed allowed us to look at how the ingredients in Labrador tea and marsh Labrador tea vary with the season. An article on this has now been accepted for publication. Ammar also worked on the best methods for testing Anna Baillie's samples of Showy mountain ash and American mountain ash.

Ammar and Carolina are still working on a test to be used with plants that protect nerve cells. We are trying this on pitcher plant, which has some ingredients that protect nerve cells in lab dishes. But to work well in live animals, these ingredients need to move from the stomach up to the nerve cells in the brain after an animal or human eats the plant. Our new test can already detect even tiny amounts of these ingredients in the brain, so it will tell us if the ingredients are getting where they need to be.

ᐧᒑᓇᖶᓐ ᕓᕆᔦᐃ (PhD ᒋᔅᑯᑕᒧᐧᐋᑲᓐ)

ᒉᐧᑳᒡ ᑲᓄᐧᐋᐱᐦᑕᒼ ᐧᒑᓇᖶᓐ ᐄᓂᒥᓈᓐᐦ ᑲᔦ ᐧᐄᔅᒋᒥᓈᓐᐦ ᐅᐦᒋ ᐊᓐ ᒉ ᒌ ᒫᔑᐦᑖᑲᓄᐧᐃᐦᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᑲᓄᐧᐃᐦᒡ᙮ ᐸᔥᒡ ᓂᐦᑖᐅᒋᓐᐦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᐄᓅ ᐊᔅᒌᐦᒡ, ᑲᔦ ᐸᔥᒡ ᐊᓂᑌ ᓂᐦᑖᐅᒋᓐᐦ ᐊᓂᑌ ᑳᓈᑖ ᐊᔅᒌᐦᒡ ᓀᔥᑦ ᒫᒃ ᑯᑕᒃᐦ ᐊᔅᒌᐦ᙮ ᐋᐸᒋᐦᑖᐤ ᐧᒑᓇᖶᓐ ᐁ ᐅᔥᑳᔨᒡ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑌᑲᓅᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᒥᓯᐧᐁ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁᒄ ᒫᒃ ᒉ ᒌ ᒋᔅᑫᔨᐦᑌᑲᓄᐧᐃᐦᒡ ᒉᒄ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᔫᐦ ᐁ ᑲᓄᐧᐋᐱᐦᑌᑲᓅᐦᐧᑳᐤᐦ ᐊᓂᔫ "fingerprint" ᑳ ᐃᔑᓂᐦᑳᑌᔮᒡ᙮ ᐁᐅᒄ ᒉ ᐧᐄᒋᐦᐄᑯᔮᐦᒡ ᒉ ᐅᐦᒋ ᒋᔅᑫᔨᐦᑕᒫᐦᒡ ᒉᒃ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᔫᐦ ᐁ ᑲᓄᐧᐋᐱᐦᑕᒫᐦᒡ, ᑲᔦ ᐁᑯᑦ ᒉ ᐧᐄᐦᑕᒫᑯᔮᐦᒡ ᑖᐱᔥᑯᓐ ᐁ ᐊᑕ ᐃᑌᔮᐦᑖᑯᐦᐧᑳᐤᐦ᙮ ᒉᐧᑳᒡ ᒫᒃ ᒪᓯᓇᐦᐊᒼ ᒪᓯᓇᐦᐄᑲᓂᔫ ᐅᐦᒋ ᐅᔫ ᐁ ᐧᐋᐧᐄᐦᑌᐦᒃ ᑳ ᐄᔑ ᐋᐸᑎᓰᐦᑲᐦᑌᐦᒃ᙮

ᐊᓐ ᐁ ᒌᑰᐸᔮᐦᐧᑳᐤᐦ ᔔᑳᐤ ᑲᔦ ᐧᐃᔦᔅ protein ᑳ ᐃᔑᓂᐦᑳᑌᒡ, ᐁᑯᑦ ᒉ ᒌ ᒪᒋᐸᔨᐦᐄᐧᐁᒡ, ᐧᒉᐦᒡ ᐊᓐ ᐁ ᐧᐋᓈᑎᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓄᐧᐃᐦᒡ ᓀᔥᑦ ᒫᒃ ᒥᑌᐦᐄ ᐃᑖᔅᐱᓀᐧᐃᓐ᙮ ᐊᓂᒌ ᐊᐧᐁᓂᒌ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ, ᐁᔫᒄ ᐅᔫ ᐁ ᐃᐦᑎᐧᑖᐤ ᐁ ᒪᒋᐸᔮᐦᐄᑯᐧᑖᐤ ᒉᐧᑳᔫ, ᐁᔫᒄ ᐁᒄ ᐊᓂᔫ ᐧᐁᔖ ᒥᔥᑕᐦᐄ ᐁ ᐃᐦᑎᑯᓂᔮᒡ ᔔᑳᔫ ᐅᒥᐦᑯᐧᐋᐦᒡ᙮ ᐁᔥᒄ ᒉᐧᑳᒡ ᐋᐸᑎᓰᐦᑲᐦᑕᒼ ᐧᒑᓇᖶᓐ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᒃ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐧᐋᐱᐦᑌᐦᒃ ᑖᐧᐯ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔮᐦᐧᑳᐤ ᒉ ᒌ ᓃᒋᐸᔮᐦᒡ ᐊᓐ ᐁ ᐃᔅᐸᔮᐦᒡ ᐁ ᒌᑰᐸᔮᐦᒡ ᔔᑳᐤ ᑲᔦ ᐧᐃᔦᔅ᙮

ᒦᔐᓪ ᕌᐱᓐᔅᑮ (MSc ᒋᔅᑯᑕᒧᐧᐋᑲᓐ)

ᐊᓐ ᓃᔥᑕᒼ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ, ᐁᐅᒄ ᑳ ᐧᐋᐱᐦᑕᒫᐦᒡ ᐊᓐ ᑳᒋᒉᐸᒄ ᑲᔦ ᐊᔮᑲᑖᔥ ᑖᐱᔥᑯᓐ ᐁ ᒌ ᒫᔑᐦᒉᐸᔮᐦᐧᑳᐤᐦ ᐅᐦᒋ ᐊᓐ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᑲᓄᐧᐃᐦᒡ᙮ ᐁᐅᒄ ᐁ ᐃᑌᔮᐦᑕᒫᐦᒡ ᐅᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒥᔥᑕᐦᐄ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓐ ᒉᐧᑲᓐ ᐁ ᓂᑐᐦᑯᔮᓄᐧᐃᐦᒡ, ᐁᐅᑯᓐᐦ ᐧᒫᐅᒡ ᒉ ᒥᔦᐸᔮᐦᐧᑳᐤᐦ᙮ ᒉᐧᑳᒡ ᒫᒃ ᓂᑑᒋᔅᑫᔨᐦᑕᒼ ᒦᔐᓪ ᒉᐧᑲᔫ ᐊᓂᔫ ᐧᐁᐦᒋ ᐃᔑᓈᑯᓂᔮᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ ᒥᔥᑕᐦᐄ ᒉ ᒌ ᐃᐦᑎᑯᓂᔮᒡ ᒉᐧᑲᔫ ᐁ ᓂᑐᐦᑯᔮᓅᔮᒡ᙮ ᐁᔫᒄ ᐁ ᐋᐸᒋᐦᑖᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᓇᓈᐦᑰ ᐁ ᐅᐦᒋᐸᔮᐦᐧᑳᐤᐦ, ᐊᓂᑌ ᓀᐤ ᓀᔥᑦ ᒫᒃ ᓂᔮᔮᓐ ᐁ ᒌ ᐅᐦᒋ ᒫᐅᐦᑐᓀᑲᓅᐦᐧᑳᐤᐦ

Jonathan Ferrier (PhD student)

Jonathan is looking at the many plants in the blueberry and cranberry family that help fight diabetes. Some of these plants grow in Eeyou Istchee, and some grow in other parts of Canada or in other countries. Jonathan is applying our new method to "fingerprint" all of these plants. This will help us to identify the plants, and tell us if the different types share some family characteristics. He is now working on an article that describes this work.

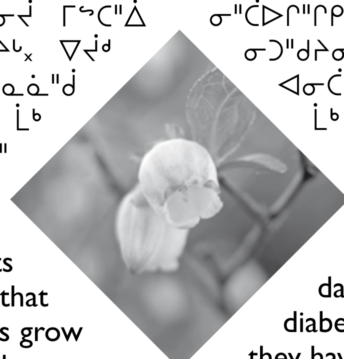
ᐧᒑᓂᖶᓐ ᕓᕆᔦᐃ (PhD ᒋᔅᑯᑎᒧᐧᐋᑭᓐ)

ᒫᐧᑳᒡ ᑭᓄᐧᐋᐱᐦᑎᒻ ᐧᒑᓂᖶᓐ ᐄᔮᒥᓐᐦ ᑭᔮ ᐧᐄᓯᒥᒥᓐᐦ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᒫᔑᐦᑖᑭᓂᐧᐃᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ᙮ ᐱᔥᒡ ᓂᐦᑖᐅᒋᓐᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᐄᔮᔮᐤ ᐊᔅᒌᐦᒡ, ᑭᔮ ᐱᔥᒡ ᐊᓂᑖ ᓂᐦᑖᐅᒋᓐᐦ ᐊᓂᑖ ᑳᓈᑖ ᐊᔅᒌᐦᒡ ᓈᔥᑦ ᒫᒃ ᑯᑎᒃᐦ ᐊᔅᒌᐦ᙮ ᐋᐱᒋᐦᑖᐤ ᐧᒑᓂᖶᓐ ᐋ ᐅᔥᑳᔨᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᐊᓂᔮᐦ ᒥᓯᐧᐋ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋᒄ ᒫᒃ ᒑ ᒌ ᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᒑᒄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᐦᐄ ᐋ ᑭᓄᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡᐦ ᐊᓂᔮ "fingerprint" ᑳ ᐃᔑᓂᐦᑲᑖᔮᒡ᙮ ᐋᐅᒄ ᒑ ᐧᐄᒋᐦᐄᑯᔮᐦᒡ ᒑ ᐅᐦᒋ ᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᒑᒃ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᐦᐄ ᐋ ᑭᓄᐧᐋᐱᐦᑎᒫᐦᒡ, ᑭᔮ ᐋᑯᑦ ᒑ ᐧᐄᐦᑎᒫᑯᔮᐦᒡ ᑖᐱᔥᑯᓐ ᐋ ᐊᑎ ᐃᑖᔮᐦᑖᑯᐦᒡᐦ᙮ ᒫᐧᑳᒡ ᒫᒃ ᒥᓯᓂᐦᐊᒻ ᒥᓯᓂᐦᐄᑭᓂᔮᐤ ᐅᐦᒋ ᐅᔮ ᐊ ᐧᐋᐧᐄᐦᑎᐦᒃ ᑳ ᐄᔑ ᐋᐱᑎᓰᔥᑎᐦᒃ᙮

ᐊᓐ ᐋ ᒌᑰᐱᔮᒡᐦ ᔔᑳᐤ ᑭᔮ ᐧᐄᔮᔅ protein ᑳ ᐃᔑᓂᐦᑳᑖᒡ, ᐋᑯᑦ ᒑ ᒌ ᒥᒋᐱᔮᐦᐋᐧᐋᒡ, ᐧᒫᐦᒡ ᐊᓐ ᐋ ᐧᐄᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ ᓈᔥᑦ ᒫᒃ ᒥᑖᐃᐦ ᐃᑖᔅᐱᓈᐧᐃᓐ᙮ ᐊᓂᒌ ᐊᐧᐋᓂᒌ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᒡ, ᐋᔦᐧᐃᒄ ᐅᔮ ᐋ ᐃᐦᑎᒡ ᐋ ᒥᒋᐱᔮᐦᐋᑯᒡ ᒫᐧᑲᔮᐤ, ᐋᔦᐧᐃᒄ ᐋᒄ ᐊᓂᔮ ᐧᐋᔖ ᒥᔥᑏ ᐋ ᐃᐦᑎᑯᓂᔮᒡ ᔔᑲᔮᐤ ᐅᒥᐦᑯᐧᐋᐦᒡ᙮ ᐋᔥᒄ ᒫᐧᑳᒡ ᐋᐱᑎᓰᔥᑎᒻ ᐧᒑᓂᖶᓐ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐧᐋᐱᐦᑎᐦᒃ ᑖᐧᐸ ᒑ ᒌ ᐧᐄᒋᐦᐋᐧᐋᐱᔮᒡ ᒑ ᒌ ᓃᒋᐱᔮᒡ ᐊᓐ ᐋ ᐃᔅᐱᔮᒡ ᐋ ᒌᑰᐱᔮᒡ ᔔᑳᐤ ᑭᔮ ᐧᐄᔮᔅ᙮

ᒦᔐᓪ ᕌᐱᓐᔅᑮ (MSc ᒋᔅᑯᑎᒧᐧᐋᑭᓐ)

ᐊᓐ ᓃᔥᑎᒻ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᑳ ᐧᐋᐱᐦᑎᒫᐦᒡ ᐊᓐ ᑳᒋᒑᐱᒄ ᑭᔮ ᐊᔮᑭᑖᔥ ᑖᐱᔥᑯᓐ ᐋ ᒌ ᒫᔑᐦᒑᐱᔮᒡᐦ ᐅᐦᒋ ᐊᓐ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ᙮ ᐋᐅᒄ ᐋ ᐃᑖᔮᐦᑎᒫᐦᒡ ᐅᐦᐋ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒥᔥᑏ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓐ ᒑᐧᑲᓐ ᐋ ᓂᑐᐦᑯᔮᓂᐧᐃᒡ, ᐋᐅᑯᓐᐦ ᒫᐅᒡ ᒑ ᒥᔦᐱᔮᒡᐦ᙮ ᒫᐧᑳᒡ ᒫᒃ ᓂᑑᒋᔅᒑᔨᐦᑎᒻ ᒦᔐᓪ ᒑᐧᑲᔮᐤ ᐊᓂᔮ ᐧᐋᐦᒋ ᐃᔑᓈᑯᓂᔮᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔮᐤ ᒥᔥᑏ ᒑ ᒌ ᐃᐦᑎᑯᓂᔮᒡ ᒑᐧᑲᔮᐤ ᐋ ᓂᑐᐦᑯᔮᓂᐧᐃᔮᒡ᙮ ᐋᔦᐧᐃᒄ ᐋ ᐋᐱᒋᐦᑖᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᓂᓈᐦᑰ ᐋ ᐅᐦᒋᐱᔮᒡᐦ, ᐊᓂᑖ ᓈᐤ ᓈᔥᑦ ᒫᒃ ᓂᔮᔮᓐ ᐋ ᒌ ᐅᐦᒋ ᒫᐅᐦᑐᓈᑭᓂᐧᐃᒡᐦ ᐊᓂᐦᐋ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ (ᐋᐅᒄ ᐊᓐ



When sugar and protein react together, they help cause problems like nerve damage and heart disease. People with diabetes get a lot of these problems, because they have so much sugar in their blood. Jonathan is continuing with tests to see which plants might help reduce this sugar-protein reaction.

Michel Rapinski (MSc Student)

In our earlier tests, we had found that Labrador tea and pitcher plant both help fight diabetes. We think that the plants that have the largest proportions of active ingredients will have the most effect. So

ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ (ᐁᐅᑯ ᐊᓐ ᐌᑖᐢ ᒌᐍᓂᐦᐢ ᐁ ᐅᐦᒋ ᒫᐅᐦᑐᓀᑲᓅᐦᒁᐤᐦ)᙮ ᐁᔫᐟ ᐅᔮ ᑳ ᐋᐸᑎᔫᐦᑲᐦᑌᐦᐤ ᑳᒋᒉᐸᑯᔫ᙮ ᐁᔫᐟ ᑳ ᐯᔐᐌᔮᐦᑌᐦᐤ ᐊᓂᔫ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ ᐁᑎᒎ ᒌᐍᑎᓂᐦᐢ ᐁ ᓂᐦᑖᐅᒋᐦᐢ, ᐁᐅᑯ ᐁᑎᒎ ᒥᔅᑕᐦᐄ ᑫ ᐃᐦᑎᑯᐦᐢ ᐊᓐ ᑫᒁᓐ ᐁ ᓂᑐᐦᑯᔨᓈᐐᐦᐢ᙮ ᒥᑯ ᒫᐠ ᑴᔅᑌ ᒌ ᐃᔅᐸᔨᓂᔫ ᐊᓂᔫ ᑳ ᐄᔑ ᐙᐱᐦᑌᐦᐤ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᐤ: ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁᑎᒎ ᓲᐙᓅᑖᐦᐢ ᑳ ᓂᐦᑖᐅᒋᐦᒁᐤᐦ, ᐁᐅᑯᓐᐦ ᐁᑎᒎ ᐁ ᐃᐦᑎᑯᐦᐢ ᐊᓐ ᑫᒁᓐ ᐁ ᓂᑐᐦᑯᔨᓈᐐᐦᐢ᙮

ᓈᓈᒥᒌᒻ ᐊᑎᒫᐲᓯᔾ ᐋ ᐅᐦᒋ ᒫᐅᐦᑐᓈᑭᓂᐗᐢᐦ)᙮ ᐋᔫᐗᐤ ᐅᔮ ᑳ ᐋᐱᑎᔑᐣᑎᐦᐤ ᑳᒋᓛᐱᑯᔨᐤ᙮ ᐋᔫᐗᐤ ᑳ ᐹᔐᐙᔨᐦᑎᐦᐤ ᐊᓂᔮ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔨᐤ ᐊᑎᒎ ᒌᐗᑎᓂᐦᐢ ᐋ ᓂᐦᑖᐅᒋᐦᐢ, ᐋᐅᑯ ᐊᑎᒎ ᒥᔅᑏ ᒑ ᐃᐦᑎᑯᐦᐢ ᐊᓐ ᒑᒁᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐗᐢ᙮ ᒥᑯ ᒫᐠ ᐙᔅᑖ ᒌ ᐃᔅᐱᔨᔨᐤ ᐊᓂᔮ ᑳ ᐄᔑ ᐙᐱᐦᑎᐦᐤ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᐤ: ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᑎᒎ ᐲᔨᐖᓛᐦᑖᐦᐢ ᑳ ᓂᐦᑖᐅᒋᐦᐢᐦ, ᐋᐅᑯᓐᐦ ᐊᑎᒎ ᐋ ᐃᐦᑎᑯᐦᐢ ᐊᓐ ᒑᒁᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐗᐢ᙮

ᐦᐅᓭᐃ ᐋᓐᑐᓂᔫ ᑫᕆᕈ (ᐁᑎᒎ ᔫᐦᑊ ᑳ ᒋᔅᑯᑕᒫᓱᐨ ᓂᑐᐦᑯᔨᓐ)

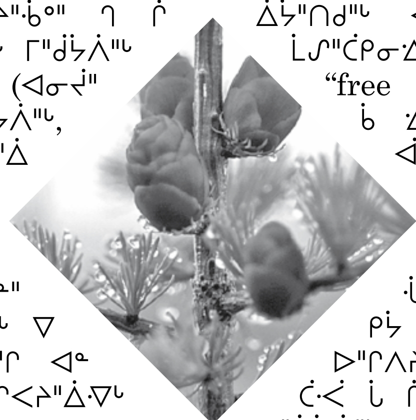
ᐦᐅᓭᐃ ᐋᓐᑐᓂᔫ ᑲᔦ ᓈᓐ ᔖᓐ (ᐅᐦᒋ ᐊᓂᑌ ᐦᐋᑖᐨ ᒑᐸ) ᒌ ᐚᐚᐱᐦᑕᒧᐢ ᐊᓂᔫ ᑫᒁᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᐢ ᐊᓂᐨ ᐚᒋᓈᑲᓂᐦᐢ᙮ ᐁᔫᐟ ᔖᔥ ᒥᑖᐦᑐ ᑫᒁᔫᐦ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒁᐤᐦ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᒁᐤᐦ ᑲᔦ ᐁᔫᐟ ᒥᓯᐌ ᐁ ᐃᔑᓈᑯᓂᔨᐢᐦ ᐁ ᒫᔑᐦᑫᐸᔨᐦᐢ ᐅᐦᒋ ᐊᓐ ᐱᒦ ᐁ ᐃᐦᑎᑯᐦᐢ ᐲᐦᒋᔫ᙮ ᓇᓈᐦᑯ ᐊᑕ ᐃᔑᓈᑯᓐᐦ ᐊᓂᔫᐦ ᑫᒁᔫᐦ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒁᐤᐦ᙮ ᐯᔓᐠ ᐊᓐ ᓈᔥᑏᐢ ᐅᔥᑳᐤ ᐁ ᒋᔅᑫᔨᐦᑌᑲᓄᐎᐦᐢ, ᐁᐅᑯ ᒫᒃ ᐆ ᐁ ᒍᒋᑫᔨᐦᑖᑯᐦᐢ᙮ ᒪᓯᓇᐦᐄᑲᓂᐦᐢ ᒋᑳ ᒪᓯᓇᐦᐄᑲᓅ ᐊᓐ ᑳ ᐄᔑ ᐚᐱᐦᑌᑲᓄᐎᐦᐢ᙮

ᓂᔥᑐ ᑲᔦ ᒌ ᐚᐱᐦᑕᒼ ᐦᐅᓭᐃ ᐋᓐᑐᓂᔫ ᐊᓂᑌ ᐄᓈᐦᑎᑯᐦᐢ ᐊᓂᔫᐦ ᐁ ᐑᒋᐦᐄᐌᐸᔨᐦᒁᐤᐦ ᑫ ᒌ ᒫᔑᐦᑖᑲᓄᐎᐦᐢ ᐊᓐ ᑳ ᐘᓈᒋᐸᔨᐦᐄᐌᐤ ᒥᐦᑰᔮᐲᐦᐢ "free radicals" ᑳ ᐃᔑᓂᐦᑳᑌᐦᒁᐤᐦ᙮ (ᐊᓂᔫᐦ ᑳ ᐘᓈᒋᐸᔨᐦᐄᐌᐸᔨᐦᒁᐤᐦ ᐊᓂᐨ ᒥᐦᑰᔮᐲᐦᐢ, ᐁᑯᐨ ᑲᔦ ᐍᐦᒋᐸᔨᐦᐢ ᐊᓐ ᒥᑌᐦᐄ ᐃᑖᔅᐱᓄᐎᓐ ᑲᔦ ᐊᓐ ᑯᑕᐢ ᑫᒁᓐ ᐁ ᐘᓈᒋᐸᔨᐦᐄᐌᐤ ᒥᔦᐱᒫᑎᓰᐎᓂᐦᐢ᙮) ᑳᓈ "ᐋᓇᐢ ᐄᓚᐸᑎᓰᒪᑲᓅ ᐊᓂᑌ ᓛᓐᐢ ᒑᐸ᙮ ᐁᑎᒎ ᒥᔅᑕᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑲᔦ ᐊᓐ ᑫᒁᓐ ᐊᓂᐨ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᐢ ᐁ ᐅᐦᒋᐸᔨᐦᐢ ᒋᑳ ᓂᑑᒋᔅᑫᔨᐦᑌᑲᓅᐦ ᐅᐦᒋ ᐊᓐ ᑖᐯ ᑫ ᒌ ᒫᔑᐦᑫᐸᔨᐦᐢ ᐊᓐ ᐁ ᐘᓈᒋᐸᔨᐦᐄᐌᐤ ᒥᐦᑰᔮᐲᐦᐢ᙮

ᐦᐅᓭᐃ ᐋᓐᑐᓂᔫ ᑫᕆᕈ (ᐊᑎᒎ ᔫᐦᑊ ᑳ ᒋᔅᑯᑎᒫᓱᐨ ᓂᑐᐦᑯᔨᓐ)

ᐦᐅᓭᐃ ᐋᓐᑐᓂᔫ ᑭᔮ ᓈᓐ ᔖᓐ (ᐅᐦᒋ ᐊᓂᑖ ᐦᐋᑖᐨ ᒑᐸ) ᒌ ᐚᐚᐱᐦᑎᒧᐢ ᐊᓂᔮ ᒑᒁᔨᐤ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐢ ᐊᓂᐨ ᐚᒋᓈᑭᓂᐦᐢ᙮ ᐋᔫᐗᐤ ᔖᔥ ᒥᑖᐦᑐ ᒑᒁᔨᐤᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐗᐦ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᐢ ᑭᔮ ᐋᔫᐗᐤ ᒥᓯᐗ ᐋ ᐃᔑᓈᑯᓂᔨᐢᐦ ᐋ ᒫᔑᐦᒑᐱᔨᐢ ᐅᐦᒋ ᐊᓐ ᐱᒦ ᐋ ᐃᐦᑎᑯᐦᐢ ᐲᐦᒋᔨᐤ᙮ ᓂᓈᐦᑯ ᐊᑎ ᐃᔑᓈᑯᓐᐦ ᐊᓂᐦᐄ ᒑᒁᓂᐦᐄ ᐋ ᓂᑐᐦᑯᔨᓂᐎᐦ᙮ ᐹᔨᐠ ᐊᓐ ᓈᔥᑏᐢ ᐅᔥᑳᐤ ᐋ ᒋᔅᒑᔨᐦᑖᑭᓂᐎᐢ, ᐋᐅᑯ ᒫᒃ ᐆ ᐋ ᒍᒋᒑᔨᐦᑖᑯᐦᐢ᙮ ᒥᓯᓂᐦᐄᑭᓂᐦᐢ ᒋᑭ ᒥᓯᓂᐦᐄᑭᓂᐤ ᐊᓐ ᑳ ᐄᔑ ᐚᐱᐦᑖᑭᓂᐎᐢ᙮

ᓂᔥᑐ ᑭᔮ ᒌ ᐚᐱᐦᑎᐟ ᐦᐅᓭᐃ ᐋᓐᑐᓂᔫ ᐊᓂᑖ ᐄᔮᐦᑎᑯᐦᐢ ᐊᓂᐦᐄ ᐋ ᐑᒋᐦᐄᐚᐱᔨᐦᐢ ᓚ ᒌ ᒫᔑᐦᑖᑭᓂᐎᐢ ᐊᓐ ᑳ ᐙᓈᒋᐱᔨᐦᐄᐚᐤ ᒥᐦᒁᔮᐲᐦᐢ "free radicals" ᑳ ᐃᔑᓂᐦᑳᑖᐦ᙮ (ᐊᓂᐦᐄ ᑳ ᐙᓈᒋᐱᔨᐦᐄᐚᐱᔨᐦᐢ ᐊᓂᐨ ᒥᐦᒁᔮᐲᐦᐢ, ᐋᑯᐨ ᑭᔮ ᐚᐦᒋᐱᔨᐦᐢ ᐊᓐ ᒥᑖᐃᐦ ᐃᑖᔅᐱᓈᐎᓐ ᑭᔮ ᐊᓐ ᑯᑎᐢ ᒑᐚᓐ ᐋ ᐙᓈᒋᐱᔨᐦᐄᐚᐤ ᒥᔦᐱᒫᑎᓰᐎᓂᐦᐢ᙮) ᑳᓈ "ᐋᓇᐢ ᐄᓚᐱᑎᓰᒫᑭᓂᐤ ᐊᓂᑖ ᓛᓐᐢ ᒑᐸ᙮ ᐊᑎᒎ ᒥᔅᑏ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑭᔮ ᐊᓐ ᒑᒁᓐ ᐊᓂᐨ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᐢ ᐋ ᐅᐦᒋᐱᔨᐦᐢ ᒋᑭ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐤᐦ ᐅᐦᒋ ᐊᓐ ᑖᐹ ᒑ ᒌ ᒫᔑᐦᒑᐱᔨᐦᐢ ᐊᓐ ᐋ ᐙᓈᒋᐱᔨᐦᐄᐚᐤ ᒥᐦᒁᔮᐲᐦᐢ᙮



Michel is trying to find out what makes a plant high in active ingredients. He is using plants that were collected at four or five different latitudes (that is, further and further north). So far, he has been working mainly on Labrador tea. He expected that the further north the plant grew, the more active ingredients it would have. But his tests are showing the opposite: the more southerly plants seem to be stronger in active ingredients.

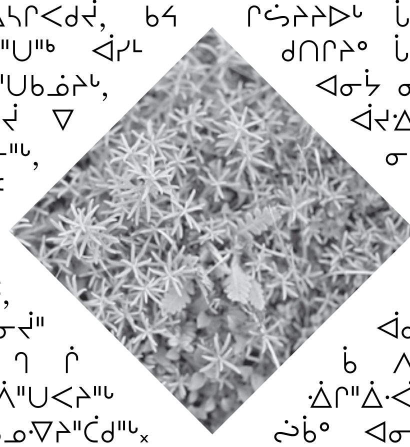
Jose Antonio Guerrero (Post doctoral fellow)

Jose Antonio and Nan Shang (from the Haddad lab) have been looking at the ingredients in tamarack. They have now been able to narrow down to ten ingredients that all seem to have fat-fighting effects. These ingredients are from several different families of chemicals. One of them is completely new, which is exciting. The results will be put into a scientific paper.

Jose Antonio has also been able to identify three ingredients in black spruce that seem to be mostly responsible for the way spruce bark is able to fight

ᐋᓯᒼ ᒧᐦᐋᒫᒡ (ᐁᑎᑑ ᓃᐦᒃ ᑳ ᒋᔅᑯᑕᒫᓱᒡ ᓂᑐᐦᑯᔨᓐ)

ᒫᐦᒋᔥᑕᐃ ᑳ ᐊᑯᒋᐦᒃ ᐚᐱᑯᓂᐲᓯᒼ, ᐁᔫᒄ ᑳ ᐃᑌᑘᐤ ᒋᖓᐄᓅᒡ ᑫ ᑲᓄᐚᐱᐦᑖᑲᓄᐏᐦᒡ ᐑᓴᒋᐸᑯᔫ, ᑲᔦ ᑯᑕᒋᔫ ᑫᒀᔫ᙮ ᐁᔫᒄ ᑳ ᐋᐸᑎᓲᐦᑲᐦᑌᐦᒃ ᐋᓯᒼ ᐊᓂᔫ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ ᑫ ᓂᑑᒋᔅᑫᔨᐦᑌᑲᓅᔨᒡ, ᐁᔫᒄ ᐊᓂᔫ ᑳ ᐸᐦᑳᓂᐸᔨᐦᑖᑦ ᑫᒀᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᒡ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ, ᐁᔫᒄ ᓂᔮᓈᓅᐤ ᑳ ᐄᔑ ᐸᐦᑳᓂᐸᔨᐦᑖᑦ ᐊᓂᔫ ᑫᒀᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᒡ᙮ ᐁᔫᒄ ᑫᒃ ᑳ ᒥᔮᑦ ᐊᓂᔫᐦ ᑳ ᐸᐦᑳᓂᐸᔨᐦᑖᑦ ᐊᓂᑌ ᐦᐋᑖᑦ ᓈᐸ, ᐁᑯᑦ ᒫᒃ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑌᑲᓅᐦᒀᐤᐦ ᐊᓂᔫᐦ ᑳ ᐸᐦᑳᓂᐸᔨᐦᑖᑲᓅᐦᒀᐤᐦ ᓂᑐᐦᑯᔨᓐᐦ ᑫ ᒌ ᐑᒋᐦᐄᐍᐸᔨᐦᒀᐤᐦ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᑫ ᒌ ᐲᐦᑌᐸᔨᐦᒡ ᓅᑳᐤ ᐊᓂᑌ ᐲᐦᒋᔫ ᑫ ᐅᐦᒋ ᑲᓄᐍᔨᐦᑖᑯᐦᒡ᙮ ᐊᓂᑌ ᒫᒃ ᐦᐋᑖᑦ ᓈᐸ, ᐁᐅᒄ ᑳ ᐚᐱᐦᑌᑲᓄᐏᐦᒡ ᐯᔮᒄ ᐊᓐ ᓂᔮᓈᓅᐤ ᑳ ᐸᐦᑳᓂᐸᔨᐦᑖᑲᓄᐏᐦᒡ ᑫᒀᓐ ᐁ ᓂᑐᐦᑯᔨᓄᐏᐦᒡ ᐆ ᑖᐍ ᐁ ᒌ ᐃᔅᐸᔨᐦᒡ᙮ ᒦᓐ ᒫᒃ ᐁᑎᑑ ᓂᐸᐦᑳᓂᐸᔨᐦᑖᓈᓐ ᐊᓐ ᑫᒀᓐ ᐁ ᐊᑕ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑦ ᐁ ᓂᑐᐦᑯᔨᓄᐏᐦᒡ ᑫ ᒌ ᐹᐦᐯᔮᑯᐦᒡ᙮ ᐁᔫᒄ ᑲᔦ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᒃ ᓵᓐ ᐊᓂᔫᐦ ᑳ ᐸᐦᑳᓂᐸᔨᐦᑖᑲᓅᐦᒀᐤᐦ ᑫᒀᔫᐦ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒀᐤᐦ ᑖᐍ ᑫ ᒌ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒀᐤᐦ ᐊᓂᑌ ᐲᐦᒋᔫ ᐅᐦᒋ ᐊᓐ ᐁ ᐃᔅᐸᔨᐦᒡ ᒦᒋᒼ ᐁ ᒦᒋᓈᓄᐏᐦᒡ ᓅᑳᐤ ᑫ ᒌ ᐅᐦᒋ ᐅᔑᐦᐆᒪᑲᐦᒡ᙮



ᐋᓯᒼ ᒧᐦᐋᒫᒡ (ᐊᑎᑑ ᓃᐦᒃ ᑳ ᒋᔅᑯᑎᒫᓱᒡ ᓂᑐᐦᑯᔨᓐ)

ᒫᐦᒋᒡ ᑳ ᐊᑯᒋᐦᒃ ᒧᓵᐧᐋᐦᔮᐅᐲᓯᒧ, ᐋᔦᐎᒄ ᑳ ᐃᑖᒡ ᒋᓵᐳᐳᐅᒡ ᒫ ᑭᓄᐚᐱᐦᑖᑭᓂᐎᒡ ᐑᓯᒋᐸᑯᔮᐤ, ᑭᔮ ᑯᑎᒋᔮᐤ ᒫᒀᔮᐤ᙮ ᐋᔦᐎᒄ ᑳ ᐋᐱᑎᓲᔥᑎᐦᒃ ᐋᓯᒼ ᐊᓂᔮ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔮᐤ ᒉ ᓂᑑᒋᔅᒉᔮᐦᑖᑭᓂᐎᔮᒡ, ᐋᔦᐎᒄ ᐊᓂᔮ ᑳ ᐱᐦᑳᓂᐱᔮᐦᑖᒡ ᒉᒀᔮᐤ ᐋ ᓂᑐᐦᑯᔮᓂᐎᔮᒡ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ, ᐋᔦᐎᒄ ᓂᔮᓈᓈᐤ ᑳ ᐄᔑ ᐱᐦᑳᓂᐱᔮᐦᑖᒡ ᐊᓂᔮ ᒉᒀᔮᐤ ᐋ ᓂᑐᐦᑯᔮᓂᐎᔮᒡ᙮ ᐋᔦᐎᒄ ᒫᒃ ᑳ ᒥᔮᒡ ᐊᓂᔮᐦ ᑳ ᐱᐦᑳᓂᐱᔮᐦᑖᒡ ᐊᓂᑖ ᐦᐋᑖᒡ ᓈᐸ, ᐋᑯᒡ ᒫᒃ ᑳ ᓂᑑᒋᔅᒉᔮᐦᑖᑭᓂᐎᒡᐦ ᐊᓂᐦᐄ ᑳ ᐱᐦᑳᓂᐱᔮᐦᑖᑭᓂᐎᒡᐦ ᓂᑐᐦᑯᔮᓐᐦ ᒉ ᒌ ᐑᒋᐦᐄᐚᐱᔮᒡᐦ ᐊᑎᑑ ᒥᔥᑏ ᒉ ᒌ ᐲᐦᑖᐱᔮᒡ ᓅᑳᐤ ᐊᓂᑖ ᐲᐦᒋᔮᐤ ᒉ ᐅᐦᒋ ᑭᓄᐚᔮᐦᑖᑯᐦᒡ᙮ ᐊᓂᑖ ᒫᒃ ᐦᐋᑖᒡ ᓈᐸ, ᐋᐅᒄ ᑳ ᐚᐱᐦᑖᑭᓂᐎᒡ ᐹᔮᒄ ᐊᓐ ᓂᔮᓈᓈᐤ ᑳ ᐱᐦᑳᓂᐱᔮᐦᑖᑭᓂᐎᒡ ᒉᒀᓐ ᐋ ᓂᑐᐦᑯᔮᓂᐎᒡ ᐆ ᑖᐚ ᐋ ᒌ ᐃᔅᐱᔮᒡ᙮ ᒦᓐ ᒫᒃ ᐊᑎᑑ ᓂᐱᐦᑳᓂᐱᔮᐦᑖᓈᓐ ᐊᓐ ᒉᒀᓐ ᐋ ᐊᑎ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑦ ᐋ ᓂᑐᐦᑯᔮᓂᐎᒡ ᒉ ᒌ ᐹᐦᐹᔮᑯᐦᒡ᙮ ᐋᔦᐎᒄ ᑭᔮ ᐋ ᓂᑑᒋᔅᒉᔮᐦᑎᐦᒃ ᓵᓐ ᐊᓂᔮᐦ ᑳ ᐱᐦᑳᓂᐱᔮᐦᑖᑭᓂᐎᒡᐦ ᒉᒀᓂᐦᐄ ᐋ ᓂᑐᐦᑯᔮᓂᐎᒡᐦ ᑖᐚ ᒉ ᒌ ᑖᐦᑭᐦᐄᒉᐱᔮᒡᐦ ᐊᓂᑖ ᐲᐦᒋᔮᐤ ᐅᐦᒋ ᐊᓐ ᐋ ᐃᔅᐱᔮᒡ ᒦᒋᒼ ᐋ ᒦᒋᓈᓂᐎᒡ ᓅᑳᐤ ᒉ ᒌ ᐅᐦᒋ ᐅᔑᐦᐆᒥᑭᐦᒡ᙮

ᒪᓯᓇᐦᐄᑲᓐᐦ ᓵᔥ ᑳ ᒪᓯᓇᐦᐄᑲᓅᐦᒀᐤᐦ ᓅᔥᑦ ᒫᒃ ᐚᐸᒡ ᑫ ᒪᓯᓇᐦᐄᑲᓅᐦᒀᐤᐦ

ᐃᔅᐱᓐ ᒫᐦᒋᔥᑕᐃ ᓂᒪᓯᓇᐦᐄᑲᓂᓈᓐ, ᓃᔓ ᒦᓐ ᒪᓯᓇᐦᐄᑲᓐᐦ ᓂᒌ ᒪᓯᓇᐦᐄᑲᓅᐦ ᓅᔥᑦ ᒫᒃ ᒌ ᓇᔅᑯᒧᓈᓅ ᑫ ᒌ ᒪᓯᓇᐦᐄᑲᓅᐦᒀᐤᐦ ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓂᐦᒡ:

1. ᐦᐅᓭᐃ ᐋᓐᑐᓂᔫ ᑫᕈᕿ-ᐋᓈᓪᑰ, ᐋᒫᕐ ᓵᓖᒼ, ᐹᑦᒪ ᒫᑎᕐᒎ, ᐋᓯᒼ ᒧᐦᐋᒫᒡ, ᑐᓃ ᑎᕐᔅᑦ, ᐱᔦᕐ ᐦᐋᑖᒡ, ᑲᔦ ᒘᓐ ᑞᕐ ᐋᕐᓈᓯᓐ᙮ “Bioassay-guided Isolation of the Antidiabetic Principle from *Sorbus decora* (Rosaceae) used traditionally by the Eeyou Istchee Cree First Nation”

ᒥᓯᓂᐦᐄᑭᓐᐦ ᓵᔥ ᑳ ᒥᓯᓂᐦᐄᑭᓂᐎᒡᐦ ᓈᔥᑦ ᒫᒃ ᐚᐱᒡ ᒫ ᒥᓯᓂᐦᐄᑭᓂᐎᒡᐦ

ᐃᔅᐱᓐ ᒫᐦᒋᒡ ᓂᒥᓯᓂᐦᐄᑭᓂᓈᓐ, ᓃᔓ ᒦᓐ ᒥᓯᓂᐦᐄᑭᓐᐦ ᓂᒌ ᒥᓯᓂᐦᐄᑭᓈᐤ ᓈᔥᑦ ᒫᒃ ᒌ ᓂᔅᑯᒧᓈᓂᐤ ᒫ ᒌ ᒥᓯᓂᐦᐄᑭᓂᐎᒡᐦ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓂᐦᒡ:

1. ᐦᐅᓭᐃ ᐋᓐᑐᓂᔫ ᑫᕈᕿ-ᐋᓈᓪᑰ, ᐋᒫᕐ ᓵᓖᒼ, ᐹᑦᒪ ᒫᑎᕐᒎ, ᐋᓯᒼ ᒧᐦᐋᒫᒡ, ᑐᓃ ᑎᕐᔅᑦ, ᐱᔦᕐ ᐦᐋᑖᒡ, ᑭᔮ ᒘᓐ ᑞᕐ ᐋᕐᓈᓯᓐ᙮ “Bioassay-guided Isolation of the Antidiabetic Principle from *Sorbus decora* (Rosaceae) used traditionally by the Eeyou Istchee Cree First Nation”

“free radicals.” (Free radicals are particles that damage our veins and help cause heart disease and other problems.) This work was done with Cory Harris in the Johns lab. More plants and plant ingredients will be tested for their ability to fight free radicals.

Asim Muhammad (Post doctoral fellow)

Last June, the Elders said we should look at marsh Labrador tea, among others. Asim prepared the plant for testing, and divided its ingredients into eight groups. He passed the samples on to the Haddad lab, which tested the groups to see if they help cells to take in more sugar. The Haddad lab found that one of the eight groups did this. Now we are breaking that group down further, to try to identify its individual ingredients. San has also tested the groups to see if they might have an effect on the process by which our bodies turn some foods into sugar.

Articles published or ready to be published

Since our last report, two articles from this lab have been either published or accepted for publication:

1. José A. Guerrero-Analco, Ammar Saleem, Padma Madiraju, Asim Muhammad, Tony Durst, Pierre Haddad, and John Thor Arnason. “Bioassay-guided

ᑭ ᐃᔨᓂᐤᑲᑌᓱ, ᐁᐅᐣ ᐊᐣ ᒪᓯᓀᐃᑲᓄ ᐅᐢᑭ ᐊᐣ ᒪᔭᔪᒋᓀᐃᓄᔪ ᐁ ᑎᐳᑐᑌᔭ ᐁ ᑎᐱᐃᐁᐢᐣ ᖃ ᑭ ᐃᔨᓂᐤᑲᑌᓄᐢ ᐁ ᔑᐦᐊᒋᐢᑲᑌᓄᐢ ᐊᓂᓱ ᐁ ᐃᔨ ᐊᐳᑭᐢᑲᐦᐣ ᐃᓀᑲ ᐊᓂᑌ ᐃᓀ ᐊᔭᑭᐢᐣ ᐁᔪᑌ ᑲ ᒪᓯᓀᐃᑲᓄᐢ *Journal of Natural Products* ᑲ ᐃᔨᓂᐤᑲᑌᓄᐢ ᑎᐳᒧᔨᓀᐃᑲᓐᓵ

ᐊᐣ ᐃᐢ ᐊᐱᔨᔭ ᑲ ᒪᓯᓀᐃᑲᓂᐤᑲᑌᓄᐢ ᒪᓯᓀᐃᑲᓐᓵ, ᐁᐅᐣ ᐊᐣ “ᐁ ᐃᐧ ᑭᔭᐢᑌᑲᓂᐤᑲᑌᓄᐢ ᖃᑲᑲ ᐁ ᐃᐧᑎᔨᐢ ᐁ ᓂᑐᔪᐃᓂᐤᑲᑌᓄᐢ ᐊᓂᐢ ᒪᔭᔪᒋᓀᐃᑲᓐᓵᔨᐢ” ᑲ ᐃᔨᓂᐤᑲᑌᓱᐧ

2. ᐱᓫᑲ P, ᐦᓫᒪ A, ᑕᓐᓵᔭᐢ A, ᑭᔨᐢ BW, ᐊᔭᐧᐃᓯᓐ JT, “Seasonal variation of phytochemical constituents, antioxidants and antiinflammatory activities of Northern Labrador tea *Rhododendron tomentosum* ssp. subarcticum” ᑭ ᐃᔨᓂᐤᑲᑌᓱ ᐊᓂᔪ ᒪᓯᓀᐃᑲᓂᔪᐧ ᐁᐅᐣ ᑲ ᓀᔭᔪᒧᐃᓀᐃᓄᐢ ᖃ ᑭ ᒪᓯᓀᐃᑲᓐᓵᔨᐢ ᐊᓂᐢ *Planta Medica* ᑲ ᐃᔨᓂᐤᑲᑌᓄᐢ ᑎᐱᑭᒧᓯᓀᐃᑲᓐᓵ, ᐁᐅᐣ ᐊᐣ ᑎᐱᑭᒧᓯᓀᐃᑲᓐᓵ ᐁ ᒪᓯᐃᓀᐢᑲᑌᓄᐢ ᐅᔭᐢᑲᑌᓄᐢ ᐁ ᓂᔭᔪᐃᓂᐤᑲᑌᓄᐢ ᐊᓂᐢ ᐊᐣ ᐊᐱᔨᔭ ᑲ ᐃᔨᓂᐤᑲᑌᓱᐧ

ᐊᐣ ᐃᐢ ᐊᐱᔨᔭ ᑲ ᒪᓯᓀᐃᑲᓂᐤᑲᑌᓄᐢ ᒪᓯᓀᐃᑲᓐᓵ, ᐁᐅᐣ ᐊᐣ “ᐁᐣ ᐁ ᐃᔨᓂᐤᑲᑌᓄᐢ ᐊᐣᐢᑲᑌᓄᐢ ᐁ ᐃᔨᓂᐤᑲᑌᓄᐢ ᐊᐣᐢᑲᑌᓄᐢ ᐁᐣ ᐁᔭᔪᐃᓂᐤᑲᑌᓄᐢ ᐊᓂᐢ ᐊᐣ ᐊᐱᔨᔭ ᑲ ᐃᔨᓂᐤᑲᑌᓱᐧ

2. ᐱᓫᑲ P, ᐦᓫᒪ A, ᑕᓐᓵᔭᐢ A, ᑭᔨᐢ BW, ᐊᔭᐧᐃᓯᓐ JT, “Seasonal variation of phytochemical constituents, antioxidants and antiinflammatory activities of Northern Labrador tea *Rhododendron tomentosum* ssp. subarcticum” ᑭ ᐃᔨᓂᐤᑲᑌᓱ ᐊᓂᔪ ᒪᓯᓀᐃᑲᓂᔪᐧ ᐁᐅᐣ ᑲ ᓀᔭᔪᒧᐃᓀᐃᓄᐢ ᖃ ᑭ ᒪᓯᓀᐃᑲᓐᓵᔨᐢ ᐊᓂᐢ *Planta Medica* ᑲ ᐃᔨᓂᐤᑲᑌᓄᐢ ᑎᐱᑭᒧᓯᓀᐃᑲᓐᓵ, ᐁᐅᐣ ᐊᐣ ᑎᐱᑭᒧᓯᓀᐃᑲᓐᓵ ᐁ ᒪᓯᐃᓀᐢᑲᑌᓄᐢ ᐅᔭᐢᑲᑌᓄᐢ ᐁ ᓂᔭᔪᐃᓂᐤᑲᑌᓄᐢ ᐊᓂᐢ ᐊᐣ ᐊᐱᔨᔭ ᑲ ᐃᔨᓂᐤᑲᑌᓱᐧ

ᒪᓯᓀᐃᑲᓐᓵ ᒣᐧᑲ ᐁ ᒪᓯᓀᐃᑲᓂᐧᑲᓐᓵ

ᐧᓄᓀᓐ ᐯᓀᔦᐃᐃ, ᑭᒪᐱᐟᓗ L. ᐧᑲᔨᓯ, ᐧᓄᓕᐧᐊ M. ᐧᐃᑲᐣ, ᐸᐟᐢᓯ ᑭᔨᑌᐃ, ᐦᐱᐧᓘ ᕀᐟᑭᑲ, ᓯᓗᒪᓐ ᓄᔨᓍᑲ, ᐊᓗᓂᐃ ᑯᓀᔦᐃ, ᓘᓐᓗᐃ J. ᐸᓗᑲ, ᐊᓗᓂᐃ ᑯᓀᔦᐃ, ᐧᓄᓐ T. ᐊᐟᓘᔨᓐᔪ “Identification of *Vaccinium spp. L.* (Ericaceae) natural health products from North Eastern North America and Europe by nuclear magnetic resonance (1H NMR) spectroscopy” ᐃᔨᓂᐤᑲᑌᓱᐧ

ᒥᔨᓂᐤᐃᑭᓐᓵ ᓘᐧᑲ ᐊ ᒥᔨᓂᐤᐃᑭᓂᐃᑲᑌᓄᐢ

ᐧᓄᓀᓐ ᐯᓀᔦᐃᐃ, ᑭᒪᐱᐟᓗ L. ᐧᑲᔨᓯ, ᐧᓄᓕᐧᐊ M. ᐧᐃᑲᐣ, ᐱᐧᐟᑭᑲ, ᓯᓗᒪᓐ ᓄᔨᓍᑲ, ᐊᓗᓂᐃ ᑯᓀᔦᐃ, ᓘᓐᓗᐃ J. ᐸᓗᑲ, ᐊᓗᓂᐃ ᑯᓀᔦᐃ, ᓘᓐ T. ᐊᐟᓘᔨᓐᔪ “Identification of *Vaccinium spp. L.* (Ericaceae) natural health products from North Eastern North America and Europe by nuclear magnetic resonance (1H NMR) spectroscopy” ᐃᔨᓂᐤᑲᑌᓱᐧ

Isolation of the Antidiabetic Principle from *Sorbus decora* (Rosaceae) used traditionally by the Eeyou Istchee Cree First Nation.” This was published in the *Journal of Natural Products*.

The plain-language summary of this article was called “Identifying the active ingredients in showy mountain ash.”

2. Black P, Saleem A, Dunford A, Russell BW, Arnason JT, “Seasonal variation of phytochemical constituents, antioxidants and antiinflammatory activities of Northern Labrador tea R*hododendron tomentosum* ssp. subarcticum.” This has been accepted by a journal called *Planta Medica.*

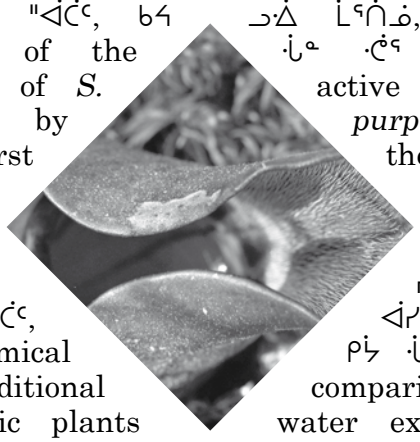
The plain-language summary was called “How the healing strength of Labrador tea varies with the season.”

Articles being prepared

Jonathan Ferrier, Kimberly L. Colson, Joshua M. Hicks, Brian Killday, Sabina Trakić, Sulejman Redžić, Alain Cuerrier, Michael J. Balick, Alain Cuerrier, John T. Arnason. “Identification of *Vaccinium* spp. L. (Ericaceae) natural health products from North Eastern North America and Europe by nuclear magnetic resonance (1H NMR) spectroscopy.”

ᓴᐤ ᓄᔪᐤ, "ᐅᓴᐃᐧ ᐊᐤᑐᓂᓱ ᑫᓄᑭ, ᐊᒧᒡ ᓴᓪᒻ, ᐱᔪᒡ ᓴᓪᒻ "ᐊᑦᑦ, ᐄᓐ ᐧᑭᒡ ᐊᒡᐅᓯᐤ "Aldose reductase inhibition by antidiabetic plants ued by the Eeyou Istchee Cree First Nation" ᐃᔑᓂ"ᑲᑌᓱᓵ

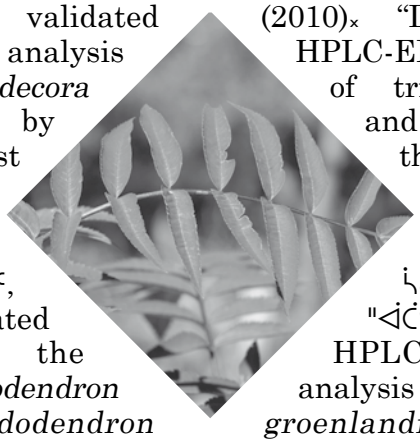
ᐊᓯᒪ ᒧ"ᐊᒧᒡ, "ᐅᓴᐃ ᑫᓄᑭ-ᐊᐅᓪᓂᑯ, ᐸᒡᒪ ᒪᑎᑦᒍ, ᓂᐧᐃ ᒪᒡᑏᓄ, ᐊᒧᒡ ᓴᓪᒻ, ᐱᔪᒡ "ᐊᑦᑦ, ᑲᔪ ᐄᓐ ᐧᑭᒡ ᐊᒡᐅᓯᐤ "Isolation of the active antidiabetic principles of *S. purpureae* used traditionally by the Eeyou Istchee Cree First Nation" ᐃᔑᓂ"ᑲᑌᓱᓵ



<ᓄᵊᑕᓄ ᐧᐊᒡᓵ ᑭᓴᒡ, ᑲᒡᓯᐃᐅᓄ ᓯᓂᔦᑲ, ᐊᒧᒡ ᓴᓪᒻ, ᐸᒡᒪ ᒪᑎᑦᒍ, ᐊᓯᒪ ᒧ"ᐊᒧᒡ, ᑐᓄ ᑎᓂᐦ, ᐱᔪᒡ "ᐊᑦᑦ, ᑲᔪ ᐄᓐ ᐧᑭᒡ ᐊᒡᐅᓯᐤ "Phytochemical comparison of alcohol and traditional water extracts of antidiabetic plants used by the Eeyou Istchee Cree First Nation" ᐃᔑᓂ"ᑲᑌᓱᓵ

ᐱᓄᵊᑎᓄ ᐧᐊᒡᓵ ᑭᓴᒡ, ᑲᒡᓯᐃᐅᓄ ᓯᓂᔦᑲ, ᐊᒧᒡ ᓴᓪᒻ, ᐸᒡᒪ ᒪᑎᑦᒍ, ᐊᓯᒪ ᒧ"ᐊᒧᒡ, ᑐᓄ ᑎᓂᐦ, ᐱᔪᒡ "ᐊᑦᑦ, ᑲᔪ ᐄᓐ ᐧᑭᒡ ᐊᒡᐅᓯᐤ "Phytochemical comparison of alcohol and traditional water extracts of antidiabetic plants used by the Eeyou Istchee Cree First Nation" ᐃᔑᓂ"ᑲᑌᓱᓵ

ᓴᓂᒪ, ᑫᓄᑭ-ᐊᐅᓪᓂᑯ, ᐯᐃᓂ, ᓂᐤ, "ᐊᑦᑦ, ᐊᒡᐅᓯᓄ (2010)ᓵ "Development of a validated HPLC-ELSD method for the analysis of triterpenes in *Sorbus decora* and *Sorbus americana* used by the Eeyou Istchee Cree First Nations for treating diabetic symptoms" ᐃᔑᓂ"ᑲᑌᓱᓵ



ᓴᓂᒪ, ᑫᓄᑭ-ᐊᐅᓪᓂᑯ, ᐯᐃᓂ, ᓂᐤ, "ᐊᑦᑦ, ᐊᒡᐅᓯᓄ (2010)ᓵ "Development of a validated HPLC-ELSD method for the analysis of triterpenes in *Sorbus decora* and *Sorbus americana* used by the Eeyou Istchee Cree First Nations for treating diabetic symptoms" ᐃᔑᓂ"ᑲᑌᓱᓵ

ᓴᓂᒪ, ᑫᓄᑭ-ᐊᐅᓪᓂᑯ, ᓂᐤ, ᒧ"ᐊᒧᒡ, "ᐊᑦᑦ, ᐊᒡᐅᓯᓄ (2010)ᓵ "A validated HPLC-DAD method for the analysis of phenolics in *Rhododendron groenlandicum* and *Rhododendron tomentosum* used by the Eeyou Istchee Cree First Nations for treating diabetic symptoms" ᐃᔑᓂ"ᑲᑌᓱᓵ

ᓴᓂᒪ, ᑫᓄᑭ-ᐊᐅᓪᓂᑯ, ᓂᐤ, ᒧ"ᐊᒧᒡ, "ᐊᑦᑦ, ᐊᒡᐅᓯᓄ (2010)ᓵ "A validated HPLC-DAD method for the analysis of phenolics in *Rhododendron groenlandicum* and *Rhododendron tomentosum* used by the Eeyou Istchee Cree First Nations for treating diabetic symptoms" ᐃᔑᓂ"ᑲᑌᓱᓵ

San Nguyen, Jose Antonio Guerrero, Ammar Saleem, Pierre Haddad, John Thor Arnason. "Aldose reductase inhibition by antidiabetic plants ued by the Eeyou Istchee Cree First Nation."

Asim Muhammad, Jose Guerrero-Analco, Padma Madiraju, Louis Martineau, Ammar Saleem, Pierre Haddad, and John Thor Arnason. "Isolation of the active antidiabetic principles of *S. purpureae* used traditionally by the Eeyou Istchee Cree First Nation."

Brendan Walshe-Roussel, Carolina Cerniak, Ammar Saleem, Padma Madiraju, Asim Muhammad, Tony Durst, Pierre Haddad, and John Thor Arnason. "Phytochemical comparison of alcohol and traditional water extracts of antidiabetic plants ued by the Eeyou Istchee Cree First Nation."

Saleem, Guerrero-Analco, Bailie, Liu, Haddad, Arnason(2010). "Development of a validated HPLC-ELSD method for the analysis of triterpenes in *Sorbus decora* and *Sorbus americana* used by the Eeyou Istchee Cree First Nations for treating diabetic symptoms."

Saleem, Guerrero-Analco, Liu, Muhammad, Haddad, Arnason (2010). "A validated HPLC-DAD method

"ᐅᓴᐃ ᑫᓄᑭ-ᐊᐢᓵᑦᑯᑦ, ᐢᓂᵒ ᑐᵒ, ᐊᒧᒡᐣ ᐃᓯᓪᒪ, ᐊᓂᓕ ᒧᐦᐊᒪᒡ, ᓴᓇᵒᑕᵒ ·ᐊᑦᔅ-ᑭᓴᑦ, ᐊᓐᐅᐃ ᑯᓚᓴᐃ, ᐱᓴᐃ "ᐊᑮᑦ, ᖃᓴ ·ᐄᵒ ·ᑮᑫ ᐊᖏᐢᓂᵒ (2011)ₓ "Adipogenetic constituents from the bark of *Larix laricina* (Pinaceae), a valuable medicinal plant used traditionally by the Eeyou Istchee Cree First Nation" ᐃᔑᓂᐦᑲᑌᔨₓ

"ᐅᓴᐃ ᑫᓄᑭ-ᐊᐢᓵᑦᑯᑦ, ᐢᓂᵒ ᑐᵒ, ᐊᒧᒡᐣ ᐃᓯᓪᒪ, ᐊᓂᓕ ᒧᐦᐊᒪᒡ, ᐃᓯᓪᒪ, ᐱᓴᐃ "ᐊᑮᑦ, ᑭᒃ ·ᐄᵒ ·ᑮᑫ ᐊᖏᐢᓂᵒ (2011)ₓ "Adipogenetic constituents from the bark of *Larix laricina* (Pinaceae), a valuable medicinal plant used traditionally by the Eeyou Istchee Cree First Nation" ᐃᔑᓂᐦᑲᑦᐢᵒₓ

ᐊᐸᑭᐦᐊᖃᓂᐦᐣ ᐁ ᐊᐦᑭᐦᐊᖃᓄ·ᑦᐢ

ᐃᐢᓂ ᓄᔭᓂ ᑭ ᐸᑭᔑᕿᒪ ᐅᒪᓯᓇᐦᐃᖃᓂ ᐊᓂᔨ ᐲᓯᔭ ᑲ ᐃᔑᓂᐦᑲᑌᔨᐣ ᖃᔭ ·ᐃ·ᐃᑎᒣ ᐊᓂᐢ ᔨᓂᕒᔑᑭᑎ ᑭᔑᔨᒪᑭᐅᖃᐦᐣ ᐊᐸᑎᓯᐢₓ ·ᐃᓂ ᐯᓴᔭᐃ ᑭ ᐅᑎᓀᖃᓄᑦ ᐁᓂᐢ ᐊᐦᑭᐦᐊᖃᓄᑦ ᐊᓂᔨ PhD ᑭᔑᔨᒪᑭᐅᐃᓂᐦᐣₓ ᑭᖏᐢ ᕀᐱᓀᑭ ᑭ ᐊᐦᑭᐦᐊᓯᐢ ᐁᓂᓕ ᐃᓂᐢᔨᐦᐃᐢ ᑭ ᐊᐦᑭᐦᐊᓯᐢ ᐁᓂᓕ ᐃᓂᐢᔨᐦᐃᐢ ᐁᓂᐢ ᐁ ᐊᐦᑭᐦᐊᓯᐢₓ

ᐁᐅᔨ ᐅ ᐊᐱᔑᔭ ᐁ ᒪᓯᓀᑌᐣ ᑎᐸᑭᔨᓀᐦᐃᓀᔨ ᐅᐦᑭ ᐊᔨ ᐁᑎᑐ ᒥᔭᑕᐦᐃ ᑲ ᒪᓯᓀᐦᐃᓀᐦᐃᓀᑌᐣ ᑎᐸᑭᔨᓯᓀᐦᐃᓀᔨ ᐊᓂᑌ ᐊᖏᐢᓯᓀᔨ ᓴᐢ ᐁᓂᐢᔨᐦᐃᐢ ᐊᓂᑌ ᔨᓂᔭᑌ ᐊᓂᑌ ᔨᓇᓀᐃ ᓴᐢ ᐁ ᐊᐸᑎᓯᐢₓ

ᐁᐅᔨ ᐅ ᐊᐱᔑᔭ ᐊ ᒥᓯᓀᒌ ᑎᐸᑭᔨᓀᐦᐃᓀᔨ ᐅᐦᑭ ᐊᔨ ᐁᑎᑐ ᒥᔭᑕᐦᐃ ᑲ ᒪᓯᓀᐦᐃᓀᐦᐃᓀᑌᐣ ᑎᐸᑭᔨᓯᓀᐦᐃᓀᔨ ᐊᓂᑌ ᐊᖏᐢᓯᓀᔨ ᓴᐢ ᐁᓂᐢᔨᐦᐃᐢ ᐊᓂᑌ ᔨᓂᔭᑌ ᐊᓂᑌ ᔨᓇᓀᐃ ᓴᐢ ᐁ ᐊᐸᑎᓯᐢₓ

for the analysis of phenolics in *Rhododendron groenlandicum* and *Rhododendron tomentosum* used by the Eeyou Istchee Cree First Nations for treating diabetic symptoms."

Jose Guerrero-Analco, Nan Shang, Ammar Saleem, Asim Muhammad, Lina Musalam, Brendan Walshe-Roussel, Alain Cuerrier, Pierre Haddad, and John Thor Arnason (2011). "Adipogenetic constituents from the bark of *Larix laricina* (Pinaceae), a valuable medicinal plant used traditionally by the Eeyou Istchee Cree First Nation."

Staff Changes

San Nguyen has submitted his thesis and is working outside the university. Jon Ferrier was accepted into the PhD program. Michel Rapinski has moved from the Ottawa lab to the Cuerrier lab.

This text is a simplified summary of a more technical report from the Arnason lab.

C. ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓂᑌ ᐦᐋᒌᑦ ᓛᑉ
(ᐚᐑᒪᑲᓂᐲᓯᒼ 2011)

ᐁ ᐋᔨᒧᑌᔨᒡ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᒃ ᑌᔅᐲᓈ ᐦᐋᕐᐱᓛᔅ ᐁ ᐃᔅᐸᔨᓂᔨᒡᐦ ᐋᐱᑯᔒᔥᐦ ᐁ ᒥᔫᑦ ᒦᑐᔅᐦ, ᐚᒋᓈᑲᓐᐦ, ᑲᔦ ᒪᔅᑯᒥᓈᓈᐦᑎᔫ

ᐁ ᓂᑑᒋᔅᑫᔨᒫᑲᓅᑙᐤ ᐋᐱᑯᔒᔑᒡ ᐁ ᐋᐸᒋᐦᐋᑙᐤ ᒦᑐᔅᐦ

ᓵᔥ ᒌ ᓂᑑᒋᔅᑫᔨᐦᑕᒼ ᑌᔅᐲᓈ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᓂᔨᒡ ᒦᑐᔅᐦ ᐊᓂᔫ ᐁ ᐃᔥᐱᔑ ᑖᐦᒋᐳᔨᒡᐦ ᑲᔦ ᐁ ᔒᐚᑲᒥᐦᑴᔨᒡᐦ ᐋᐱᑯᔒᔥᐦ᙮ ᐅᑌ ᒫᒃ ᑎᐦᑐ ᐲᓯᒼᐦ ᐄᔑ ᐅᑖᐦᒡ, ᐁᔫᒄ ᔮᐸᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᒃ, ᒥᒄ ᒫᒃ ᐊᓂᔫ ᒌ ᐋᐸᒋᐦᑖᐤ ᐯᔮᒄ ᑫᑿᔫ ᐁ ᐅᐦᒋᐸᔨᓂᔨᒡ ᐊᓂᑦ ᒦᑐᓯᐦᒡ, ᐁᐅᒄ ᐊᓐ ᓵᓚᑙᕐᑎᓐ Salicortin ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮ ᐁᔫᒄ ᑳ ᐑᐦ ᐚᐱᐦᑌᐦᒃ ᐊᓂᔫ ᐁ ᐃᔅᐸᔨᐦᐄᐍᔨᒡ ᓵᓚᑿᕐᑎᓐ ᐃᔥᐱᔑ ᐑ ᐊᓐ ᒥᔨᐍ ᒥᔥᑎᒄ ᐁ ᐋᐸᒋᐦᐊᑲᓄᐏᑦ᙮ ᐁᔫᒄ ᑳ ᐚᐱᐦᑌᐦᒃ ᐊᓐ ᓵᓚᑿᕐᑎᓐ ᐁ ᐑᒋᐦᐄᑯᑙᐤ ᐋᐱᑯᔒᔑᒡ ᐁᑳ ᓈᔥᒡ ᑫ ᐃᔥᐱᔑ ᑖᐦᒋᐳᑙᐤ, ᐁ ᐊᒎᐸᔨᓐᔨᒡ ᐁ ᐃᔥᐱᔑ ᑲᓄᐍᔨᐦᑖᑯᓂᔨᒡ ᐱᒦᔫ ᐊᓂᑦ ᒥᔅᑯᓂᐦᒡ, ᑲᔦ ᐁᑎᑑ ᐁ ᒥᔫᐸᔨᓂᔨᒡ ᐊᓂᔫ ᑳᒦᓄᐚᑲᒥᐦᐄᑫᐸᔨᓂᔨᒡ, ᒥᒄ ᒫᒃ ᓇᒧᐃ ᐅᐦᒋ ᐑᒋᐦᐄᐍᐸᔫ ᓃᐦᑖᐦᒡ ᑫ ᒌ ᐃᔅᐸᔨᐦᒡ ᓵᑳᐤ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑦ ᒥᔅᑯᓂᐦᒡ᙮ ᐁᔥᒄ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᐑᐦ ᓂᑑᒋᔅᑫᔨᐦᑕᒼ ᐊᓂᔫ ᓵᓚᑿᕐᑎᓐ ᑲᔦ ᐊᓂᔫ ᒥᔨᐍ ᒦᑐᔅ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐊᓂᑦ ᐋᐱᑯᔒᔥ ᐅᔅᑯᓂᐦᒡ, ᐏᔫᓂᐦᒡ, ᑲᔦ ᐅᐱᒦᒥᐦᒡ᙮ ᐁᑯᑦ ᑫᒃ ᑫ ᑯᔨᔅᑯᓯᓇᐦᐊᐦᒃ ᐊᓂᔫ ᐅᒪᓯᓇᐦᐄᑲᓐ ᑳ ᐅᔑᐦᑖᑦ ᐅᐦᒋ ᐊᓐ ᐁ ᒪᓯᓈᑌᒡ ᐁ ᐃᔅᐸᔨᑦ ᒦᑐᔅ ᑲᔦ ᐊᓐ ᓵᓚᑿᕐᑎᓐ ᐅᐦᒋ ᐊᓐ ᑫ ᐅᔥᑳᒡ ᒋᔅᑫᔨᐦᑕᒧᐏᓐ᙮

ᐁ ᓂᑑᒋᔅᑫᔨᒫᑲᓅᑙᐤ ᐋᐱᑯᔒᔑᒡ ᐁ ᐋᐸᒋᐦᐋᑙᐤ ᐚᒋᓈᑲᓐᐦ

ᐁᔫᒄ ᔮᐸᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᒃ ᑌᔅᐲᓈ ᐊᓂᔫ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᒃ ᐁ ᐃᔅᐸᔨᓂᔨᒡᐦ ᐚᒋᓈᑲᓐᐦ᙮ ᐊᓂᔫ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᒃ, ᐁᐅᒄ ᐁ ᐑᒋᐦᐄᐍᐸᔨᑦ ᐚᒋᓈᑲᓐ ᓃᐦᑖᐦᒡ ᑫ ᒌ ᐃᔅᐸᔨᐦᒡ ᓵᑳᐤ ᒥᐦᑯᐦᒡ ᑲᔦ ᐁᑎᑑ ᑫ ᒌ ᒥᔫᐸᔨᐦᒡ ᐁ ᐋᐸᑎᓰᒪᑲᐦᒡ ᑳᒦᓄᐚᑲᒥᐦᐄᑫᐸᔨᐦᒡ ᐊᓂᑦ ᐋᐱᑯᔒᔑᒡ ᐏᔫᐚᐦᒡ᙮ ᐅ ᒫᒃ ᑳ ᐱᒥᐸᔨᐦᒡ ᐁ

C. ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓂᑖ ᐦᐋᒌᑦ ᓛᑉ
(ᒋᓵᔮᔅᑯᓂᐲᓯᒽ 2011)

ᐋ ᐋᔨᒧᑖᔨᒡ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᑌᔅᐲᓈ ᐦᐋᕐᐱᓛᔅ ᐋ ᐃᔅᐱᔨᔨᒡᐦ ᐋᐱᑯᔒᔥᐦ ᐋ ᒥᔫᑦ ᒦᑐᔅᐦ, ᐚᒋᓈᑭᓐᐦ, ᑭᔮ ᒥᔅᑯᒥᓈᓈᐦᑎᔨᐤ

ᐋ ᓂᑑᒋᔅᒑᔨᒫᑭᓂᐏᒡ ᐋᐱᑯᔒᔑᒡ ᐋ ᐋᐱᒋᐦᐋᒡ ᒦᑐᔅᐦ

ᓵᔥ ᒌ ᓂᑑᒋᔅᒑᔨᐦᑎᒽ ᑌᔅᐲᓈ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᔨᒡ ᒦᑐᔅᐦ ᐊᓂᔮ ᐋ ᐃᔥᐱᔑ ᑖᐦᒋᐳᔨᒡᐦ ᑭᔮ ᐋ ᔒᐘᑭᒥᐦᑿᔨᒡᐦ ᐋᐱᑯᔒᔥᐦ᙮ ᐅᑖ ᒫᒃ ᑎᐦᑐ ᐲᓯᒽᐦ ᐄᔑ ᐅᑖᐦᒡ, ᐋᔨᐏᒄ ᐊᔮᐱᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ, ᒥᒄ ᒫᒃ ᐊᓂᔮ ᒌ ᐋᐱᒋᐦᑖᐤ ᐹᔮᒄ ᒑᑿᔨᐤ ᐋ ᐅᐦᒋᐱᔨᔨᒡ ᐊᓂᑦ ᒦᑐᓯᐦᒡ, ᐋᐅᒄ ᐊᓐ ᓵᓚᑙᕐᑎᓐ Salicortin ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮ ᐋᔨᐏᒄ ᑳ ᐑᐦ ᐚᐱᐦᑎᐦᒃ ᐊᓂᔮ ᐋ ᐃᔅᐱᔨᐦᐄᐚᔨᒡ ᓵᓚᑿᕐᑎᓐ ᐃᔥᐱᔑ ᐑ ᐊᓐ ᒥᔨᐘ ᒥᔥᑎᒄ ᐋ ᐋᐱᒋᐦᐋᑭᓂᐏᑦ᙮ ᐋᔨᐏᒄ ᑳ ᐚᐱᐦᑎᐦᒃ ᐊᓐ ᓵᓚᑿᕐᑎᓐ ᐋ ᐑᒋᐦᐄᑯᒡ ᐋᐱᑯᔒᔑᒡ ᐋᑳ ᓈᔥᒡ ᒐ ᐃᔥᐱᔑ ᑖᐦᒋᐳᒡ, ᐋ ᐊᒋᐏᐱᔨᔨᒡ ᐋ ᐃᔥᐱᔑ ᑭᓄᐚᔨᐦᑖᑯᓂᔨᒡ ᐱᒦᔨᐤ ᐊᓂᑦ ᒥᔅᑯᓂᐦᒡ, ᑭᔮ ᐊᑎᑑ ᐋ ᒥᔫᐱᔨᔨᒡ ᐊᓂᔮ ᑳᒦᓄᐚᑭᒥᐦᐄᒑᐱᔨᔨᒡ, ᒥᒄ ᒫᒃ ᓂᒧᔨ ᐅᐦᒋ ᐑᒋᐦᐄᐚᐱᔨᐤ ᓃᐦᑖᐦᒡ ᒐ ᒌ ᐃᔅᐱᔨᒡ ᓵᑳᐤ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑦ ᒥᔅᑯᓂᐦᒡ᙮ ᐋᔥᒄ ᐊᑎᑑ ᒥᔥᑏ ᐑᐦ ᓂᑑᒋᔅᒑᔨᐦᑎᒽ ᐊᓂᔮ ᓵᓚᑿᕐᑎᓐ ᑭᔮ ᐊᓂᔮ ᒥᔨᐘ ᒦᑐᔅ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐊᓂᑦ ᐋᐱᑯᔒᔥ ᐅᔅᑯᓂᐦᒡ, ᐅᓵᐲᐅᑖᓂᐦᒡ, ᑭᔮ ᐅᐱᒦᒥᐦᒡ᙮ ᐋᑯᑦ ᒑᒃ ᒐ ᑯᔨᔅᑯᔨᓯᓂᐦᐊᐦᒃ ᐊᓂᔮ ᐅᒥᓯᓂᐦᐄᑭᓐ ᑳ ᐅᔑᐦᑖᑦ ᐅᐦᒋ ᐊᓐ ᐋ ᒥᓯᓈᑖᒡ ᐋ ᐃᔅᐱᔨᑦ ᒦᑐᔅ ᑭᔮ ᐊᓐ ᓵᓚᑿᕐᑎᓐ ᐅᐦᒋ ᐊᓐ ᒐ ᐅᔥᑳᒡ ᒋᔅᒑᔨᐦᑎᒧᐏᓐ᙮

ᐋ ᓂᑑᒋᔅᒑᔨᒫᑭᓂᐏᒡ ᐋᐱᑯᔒᔑᒡ ᐋ ᐋᐱᒋᐦᐋᒡ ᐚᒋᓈᑭᓐᐦ

ᐋᔨᐏᒄ ᐊᔮᐱᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᑌᔅᐲᓈ ᐊᓂᔮ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐋ ᐃᔅᐱᔨᔨᒡᐦ ᐚᒋᓈᑭᓐᐦ᙮ ᐊᓂᔮ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ, ᐋᐅᒄ ᐋ ᐑᒋᐦᐄᐚᐱᔨᑦ ᐚᒋᓈᑭᓐ ᓃᐦᑖᐦᒡ ᒐ ᒌ ᐃᔅᐱᔨᔨᒡ ᓵᑳᐤ ᒥᐦᑯᐦᒡ ᑭᔮ ᐊᑎᑑ ᒐ ᒌ ᒥᔫᐱᔨᔨᒡ ᐋ ᐋᐱᑎᓰᒥᑭᐦᒡ ᑳᒦᓄᐚᑭᒥᐦᐄᒑᐱᔨᔨᒡ ᐊᓂᑦ ᐋᐱᑯᔒᔑᒡ ᐏᔫᐚᐦᒡ᙮ ᐅ ᒫᒃ ᑳ ᐱᒥᐱᔨᔨᒡ ᐋ

C. Report for the Haddad lab
(January 2011)

Update on Despina Harbilas's studies of balsam poplar, tamarack, and speckled alder in mice

Studies of balsam poplar in mice

Despina had previously tested how balsam poplar affects weight and diabetes in mice. In recent months, she has been doing the same tests, but using just one key ingredient from balsam poplar, called Salicortin. She wants to see how the effects of Salicortin alone compare to those of the whole tree. She has found that Salicortin helps mice gain less weight, store less fat in their livers, and have better insulin levels, but it does not lower their blood sugars directly. She still wants to do more comparisons of how Salicortin alone and balsam poplar work inside the mice's livers, muscles, and fat tissue. Then she will revise her existing article on balsam poplar and salicortin to include this new information.

Studies of tamarack in mice

Despina also did the same kind of tests using tamarack. In this study, tamarack helped lower blood sugars and improve how the mice's cells responded

ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓄᐎᐦᒡ, ᐁᑎᑑ ᒌ ᒥᔪᐸᔫ ᐃᔥᐱᔑ ᐐ ᐊᓐ ᐅᑖᐦᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑌᐦᒃ ᐅᐦᒋ ᐊᓂᔫ ᑳ ᑲᓄᐙᐱᐦᑌᐦᒃ ᑌᔅᐲᓈ ᑖᐻ ᒉ ᒌ ᐐᒋᐦᐄᐌᐸᔨᑦ ᐙᒋᓈᑲᓐ ᒉ ᓇᑳᐦᐄᒉᐸᔨᐦᒡ ᐁ ᑖᐦᒋᐳᓈᓄᐎᐦᒡ ᑲᔦ ᐊᓐ ᓈᔥᒡ ᐄᔥᐱᒥᐦᒡ ᐁ ᐃᔅᐸᔨᐦᒡ ᔔᑳᐤ ᒥᐦᑯᐦᒡ᙮ ᒬᐦᒡ ᒫᒃ ᐊᓐ ᒦᑐᔅ ᑳ ᐄᔑ ᓂᑑᒋᔅᒉᔨᒫᑲᓄᐎᑦ, ᐁᔫᒄ ᑳ ᐐᐦ ᒋᔅᒉᔨᐦᑌᐦᒃ ᑌᔅᐲᓈ ᑖᓂᑌ ᓈᐦᐋᐤ ᐊᓐ ᐁ ᐄᔑ ᐋᐸᑎᓯᑦ ᐆ ᒥᔥᑎᒄ ᐊᓂᑌ ᐲᐦᒡ ᒥᔅᑯᓂᐦᒡ, ᐐᔮᓂᐦᒡ, ᑲᔦ ᐱᒦᐦᒡ᙮ ᒉᒃ ᒫᒃ ᒋᑳ ᒌᑰᓇᒼ ᐊᓂᔫ ᑳ ᐄᔑ ᐙᐱᐦᑌᐦᒃ ᐅᐦᒋ ᐊᓂᔫ ᒪᓯᓇᐦᐄᑲᓂᔫ ᐊᓂᔫ ᓃᔥᑕᒼ ᑳ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑌᐦᒃ ᐊᓐ ᑳ ᐐᐦ ᓇᑳᐦᐄᑲᓄᐎᐦᒡ ᒉᒁᓐ᙮

ᐅᑑᔅᐲ

ᐊᓐ ᔮᐸᒡ ᑳ ᐄᔑ ᐱᒥᐸᔨᐦᑖᑲᓄᐎᐦᒡ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑌᑲᓄᐎᐦᒡ ᐅᑑᔅᐲ, ᐁᐅᒄ ᑳ ᔔᑯᐦᒡ ᒫᔥᑯᒡ ᒉ ᒌ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᒡ ᐅᐦᒋ ᐊᓐ ᐁ ᐃᔥᐱᔑ ᑖᐦᒋᐳᓈᓄᐎᐦᒡ, ᑲᔦ ᒋᐦᒋᐌ ᐁ ᐐᒋᐦᐄᐌᐸᔨᐦᒡ ᐊᓐ ᐁ ᐃᔥᐱᔑ ᐃᐦᑎᑯᐦᒡ ᔔᑳᐤ ᒥᐦᑯᐦᒡ ᑲᔦ ᐊᓐ ᐁ ᐃᔥᐱᔑ ᒥᔪᐸᔨᐦᒡ ᐁ ᐋᐸᑎᓯᒪᑲᐦᒡ ᑳᒦᓄᐙᑲᒥᐦᐄᒉᐸᔨᐦᒡ᙮ ᐊᓐ ᒫᒃ ᒬᐦᒡ ᐁ ᐃᔑᓈᑯᐦᒡ ᐊᓂᔫᐦ ᓃᔓ ᐄᔥᐱᒥᐦᒡ ᑳ ᒪᓯᓇᑌᐦᒁᐤᐦ ᑳ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑌᑲᓄᐎᐦᒡ, ᐁᔥᒄ ᐁᑎᑑ ᓂᒌ ᐐᐦ ᒋᔅᒉᔨᐦᑖᓈᓐ ᑖᓂᑌ ᐆ ᐌᐦᒋ ᐃᔅᐸᔨᑦ ᐆ ᒥᔥᑎᒄ᙮ ᒋᑳ ᒪᓯᓇᐦᐊᒼ ᑌᔅᐲᓈ ᒪᓯᓇᐦᐄᑲᓂᔫ ᐅᐦᒋ ᐊᓂᔫ ᒉ ᐄᔑ ᒥᔅᑫᑲᓄᐎᐦᒡ ᒉᒁᓐ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑌᑲᓄᐎᐦᒡ᙮ ᐅᔫᐦ ᒫᒃ ᓂᔥᑐ ᒪᓯᓇᐦᐄᑲᓐᐦ, ᐁᔫᒄ ᒉ ᐋᐸᒋᐦᑖᑦ ᐊᓂᔫ PhD ᕡᓯᔅ ᑳ ᐃᔑᓂᐦᑳᑌᔨᑦᐦ ᐅᒪᓯᓇᐦᐄᑲᓐᐦ ᒉ ᐅᐦᒋ ᑳᓂᔫᑦ ᐊᓂᔫ ᒉ ᓂᑐᐦᑯᔨᓄᐎᑦ᙮

ᐁ ᑎᐹᑐᑌᔨᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᒉᔨᒫᑦ ᒣᓇᔭᒼ ᐅᒡᑯᓐ ᐋᐱᑯᔒᔥᐦ ᐁ ᐋᐸᒋᐦᑖᐦᑲᐦᐋᑦ ᑳᒋᒉᐸᑯᔫ

ᐁᔫᒄ ᔮᐸᒡ ᑳ ᐃᐦᑎᒃ ᒣᓇᔭᒼ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᒫᑦ ᐋᐱᑯᔒᔥᐦ ᐅᐦᒋ ᐊᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᒡ ᑳᒋᒉᐸᒄ᙮ ᐁᔫᒄ ᑳ ᐙᐱᒫᑦ ᐊᓂᔫᐦ ᐋᐱᑯᔒᔥᐦ ᑳ ᒥᔮᑦ ᑳᒋᒉᐸᑯᔫ:

- 6% ᓃᐦᑖᐦᒡ ᐁ ᒌ ᐃᔅᐸᔨᓂᔨᒡ ᐊᓂᔫ ᐁᑳ ᐅᐦᒋ ᐃᔥᐱᔑ ᑖᐦᒋᐳᔨᒡᐦ᙮

ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐎᒡ, ᐊᑎᑑ ᒌ ᒥᔪᐱᔨᐤ ᐃᔥᐱᔑ ᐐ ᐊᓐ ᐅᑖᐦᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐅᐦᒋ ᐊᓂᔮ ᑳ ᑭᓄᐙᐱᐦᑎᐦᒃ ᑌᔅᐲᓈ ᑖᐘ ᒑ ᒌ ᐐᒋᐦᐄᐙᐱᔨᑦ ᐙᒋᓈᑭᓐ ᒑ ᓂᑲᐦᐄᒑᐱᔨᒡ ᐋ ᑖᐦᒋᐳᓈᓂᐎᒡ ᑭᔮ ᐊᓐ ᓈᔥᒡ ᐄᔥᐱᒥᐦᒡ ᐋ ᐃᔅᐱᔨᒡ ᔔᑳᐤ ᒥᐦᑯᐦᒡ᙮ ᒹᐦᒡ ᒫᒃ ᐊᓐ ᒦᑐᔅ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᒫᑭᓂᐎᑦ, ᐋᔪᐎᒄ ᑳ ᐐᐦ ᒋᔅᒑᔨᐦᑎᐦᒃ ᑌᔅᐲᓈ ᑖᓂᑖ ᓈᐦᐋᐤ ᐊᓐ ᐋ ᐄᔑ ᐋᐱᑎᓯᑦ ᐆ ᒥᔥᑎᒄ ᐊᓂᑖ ᐲᐦᒡ ᒥᔅᑯᓂᐦᒡ, ᐅᔮᐲᐅᑖᓂᐦᒡ, ᑭᔮ ᐱᒦᐦᒡ᙮ ᒐᒃ ᒫᒃ ᒋᑭ ᒌᑰᓂᒼ ᐊᓂᔮ ᑳ ᐄᔑ ᐙᐱᐦᑎᐦᒃ ᐅᐦᒋ ᐊᓂᔮ ᒥᓯᓂᐦᐄᑭᓂᔨᐤ ᐊᓂᔮ ᓃᔥᑎᒼ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐊᓐ ᑳ ᐐᐦ ᓂᑲᐦᐄᑭᓂᐎᒡ ᒐᒁᓐ᙮

ᐅᑑᔅᐲ

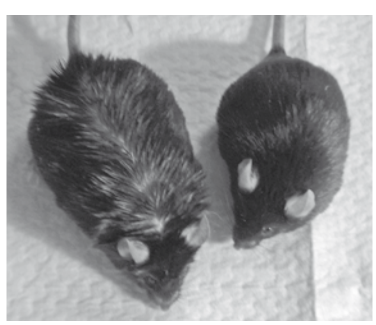
ᐊᓐ ᐊᔮᐱᒡ ᑳ ᐄᔑ ᐱᒥᐱᔨᐦᑖᑭᓂᐎᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐎᒡ ᐅᑑᔅᐲ, ᐋᐅᒄ ᑳ ᔔᑯᐦᒡ ᒁᔔᓐ ᒐ ᒌ ᑖᐦᑭᐦᐄᒐᐱᔨᒡ ᐅᐦᒋ ᐊᓐ ᐋ ᐃᔥᐱᔑ ᑖᐦᒋᐳᓈᓂᐎᒡ, ᑭᔮ ᒋᐦᒋᐙ ᐋ ᐐᒋᐦᐄᐙᐱᔨᒡ ᐊᓐ ᐋ ᐃᔥᐱᔑ ᐃᐦᑎᑯᐦᒡ ᔔᑳᐤ ᒥᐦᑯᐦᒡ ᑭᔮ ᐊᓐ ᐋ ᐃᔥᐱᔑ ᒥᔪᐱᔨᒡ ᐋ ᐋᐱᑎᓰᒥᑭᐦᒡ ᑳᒦᓄᐙᑭᒥᐦᐄᒐᐱᔨᒡ᙮ ᐊᓐ ᒫᒃ ᒹᐦᒡ ᐋ ᐃᔑᓈᑯᐦᒡ ᐊᓂᔮᐦ ᓃᔓ ᐄᔥᐱᒥᐦᒡ ᑳ ᒥᓯᓂᑖᒡᐦ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐎᒡ, ᐋᔥᒄ ᐊᑎᑑ ᓂᒌ ᐐᐦ ᒋᔅᒑᔨᐦᑖᓈᓐ ᑖᓂᑖ ᐅ ᐙᐦᒋ ᐃᔅᐱᔨᑦ ᐆ ᒥᔥᑎᒄ᙮ ᒋᑭ ᒥᓯᓂᐦᐊᒼ ᑌᔅᐲᓈ ᒥᓯᓂᐦᐄᑭᓂᔨᐤ ᐅᐦᒋ ᐊᓂᔮ ᒑ ᐄᔑ ᒥᔅᑳᑭᓂᐎᒡ ᒐᒁᓐ ᐅ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐎᒡ᙮ ᐅᐦᐄ ᒫᒃ ᓂᔥᑐ ᒥᓯᓂᐦᐄᑭᓐᐦ, ᐋᔪᐎᒄ ᒐ ᐋᐱᒋᐦᑖᑦ ᐊᓂᔮ PhD ᕡᓯᔅ ᑳ ᐃᔑᓂᐦᑳᑖᔨᒡᐦ ᐅᒥᓯᓂᐦᐄᑭᓐᐦ ᒑ ᐅᐦᒋ ᐱᑯᐦᑖᑦ ᐊᓂᔮ ᒑ ᓂᑐᐦᑯᔨᓂᐎᑦ᙮

ᐋ ᑎᐹᑐᑖᔨᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᒫᑦ ᒣᓇᔨᒼ ᐅᒡᑯᓐ ᐋᐱᑯᔒᔥᐦ ᐋ ᐋᐱᒋᐦᑖᐦᑭᐦᐋᑦ ᑳᒋᒑᐱᑯᔨᐤ

ᐋᔪᐎᒄ ᐊᔮᐱᒡ ᑳ ᐃᐦᑎᒃ ᒣᓇᔨᒼ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᒫᑦ ᐋᐱᑯᔒᔥᐦ ᐅᐦᒋ ᐊᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᑳᒋᒑᐱᒄ᙮ ᐋᔪᐎᒄ ᑳ ᐙᐱᒫᑦ ᐊᓂᔮᐦ ᐋᐱᑯᔒᔥᐦ ᑳ ᒥᔮᑦ ᑳᒋᒑᐱᑯᔨᐤ:

- 6% ᓃᐦᑖᐦᒡ ᐋ ᒌ ᐃᔅᐱᔨᔨᒡ ᐊᓂᔮ ᐋᑳ ᐅᐦᒋ ᐃᔥᐱᔑ ᑖᐦᒋᐳᔨᒡᐦ᙮

to insulin. In fact, the results this time were better than in the earlier study where Despina looked at whether tamarack could prevent weight gain and high sugars. As with balsam poplar, Despina wants to look more closely at exactly how the plant works inside the liver, muscles, and fat tissue. Then she will combine the results from this study and the one on prevention into a single article.



Speckled alder

The same kinds of tests on speckled alder suggest that it may have some effect on weight, and definitely improves blood sugars and insulin response. As with the preceding two studies, we still want to know exactly how the tree does this. Despina will put the results from this study into a third article. Together, these three articles will form the core of her PhD thesis.

- ᓃᐦᑖᐦᒡ ᐁ ᒌ ᐃᔅᐸᔨᓂᔨᒡ ᔔᑳᔫ ᒥᐦᑯᐦᒡ (13% ᒌ ᐃᔅᐸᔫ)
- ᓃᐦᑖᐦᒡ ᒌ ᐃᔅᐸᔨᓂᔫ ᐊᓂᔫ ᑳᒦᓅᐧᐋᑲᒥᐦᐄᑫᐸᔨᓂᔨᒡ ᐊᓂᒡ ᐅᒥᐦᑯᐧᐋᐦᒡ (65% ᒌ ᐃᔅᐸᔫ)᙮
- ᓇᒧᐃ ᐅᐦᒋ ᐃᔥᐱᔑ ᐲᐦᑌᐸᔨᓂᔫ ᐱᒦᔫ ᐊᓂᒡ ᐅᔅᑯᓂᐧᐋᐦᒡ (42% ᒌ ᐃᔅᐸᔫ)᙮ ᐁᐅᒄ ᒫᒃ ᑳ ᐃᔅᐸᔨᐦᒡ ᐁᑳ ᐅᐦᒋ ᐃᔥᐱᔑ ᐹᒋᐸᔨᓂᔨᐦᐧᑳᐤᐦ ᐅᔅᑯᓂᐧᐋᐤᐦ᙮

ᑖᓂᑌ ᐧᐁᐦᒋ ᐃᔅᐸᔨᐦᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ? ᐊᓂᒡ ᐧᐄᔮᓂᐦᒡ, ᐁᔫᒄ ᑳ ᐧᐋᐱᐦᑌᐦᒃ ᒉᓇᔭᒻ ᐊᓂᔫ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ ᐁᑎᑑ ᑫ ᒌ ᒥᔪᐸᔨᓂᔨᒡ ᐊᓂᔫ ᑳᒦᓅᐧᐋᑲᒥᐦᐄᑫᐸᔨᓂᔨᒡ ᐅᐦᒋ ᐊᓐ ᐁᑎᑑ ᑫ ᒥᐦᑫᑎᐧᑖᐤ “ᐅᑖᐹᓂᒡ” (GLUT transporters) ᐊᓐ ᑫ ᒌ ᔒᐳᐸᔨᐦᒡ ᐊᓐ ᔔᑳᐤ ᑳ ᐃᐦᑎᑯᐦᒡ ᒥᐦᑯᐦᒡ ᐊᓂᑌ ᑫ ᒌ ᐲᐦᑌᐸᔨᐦᒡ ᐧᐄᔮᓂᐦᒡ᙮ ᐊᓂᑌ ᒥᔅᑯᓂᐦᒡ, ᓃᔓᔨᒡ ᐃᔅᐸᔫ, ᐁᐅᒄ ᐊᓐ ᐯᔮᒄ ᑳᒦᓅᐧᐋᑲᒥᐦᐄᑫᐸᔨᐦᒡ, ᐊᓐ ᒦᓐ ᑯᑕᒃ ᓇᒧᐃ ᐋᐸᑎᓐ ᑳᒦᓅᐧᐋᑲᒥᐦᐄᑫᐸᔨᐦᒡ᙮ ᐁᑯᒡ ᐅᔮ ᐁ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐊᓂᒡ ᒥᔅᑯᓂᐦᒡ ᑲᔦ ᐧᐄᔮᓂᐦᒡ; ᓇᒧᐃ ᓈᔅᒡ ᐅᐦᒋ ᑖᐦᑲᐦᐄᑫᐸᔫ ᐊᓂᒡ ᐱᒦᐦᒡ᙮

ᒉᓇᔭᒻ ᒌ ᐸᒋᔅᑎᓇᒻ ᐅᒪᓯᓇᐦᐄᑲᓐ ᒫᔅᑎᔅ ᑮᓯᔅ ᑳ ᐃᔑᓂᐦᑳᑌᔨᒡ ᐲᐦᑫᒪᑲᓂᐲᓯᒻ 21, 2010 ᑳ ᐃᔅᐸᔨᓂᔨᒡ᙮ ᐁᔫᒄ ᑲᔦ ᓃᔓ ᒪᓯᓇᐦᐄᑲᓐᐦ ᑳ ᒪᓯᓇᐦᐁᐦᒃ, ᑲᔦ ᒉᐧᑳᓐ ᐧᐋᐧᐋᐱᐦᑖᑲᓄᐧᐃᔫᐦ:

1. “A combination of Catechin, Epicatechin and Quercetin underlies the *in vitro* adipogenic action of *Rhododendron groenlandicum*, an antidiabetic medicinal plant of the Eastern James Bay Cree pharmacopeia” FRP-024-1-09 ᐃᔑᓂᐦᑳᑌᔫ᙮ (ᐊᓐ ᐊᐱᔒᔥ ᑳ ᒪᓯᓇᑌᒡ, ᐁᐅᒄ ᐊᓐ “Ingredients in Labrador tea that affect how our bodies store fat” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮ ᐁᐅᒄ ᐊᓐ ᐁ ᒪᓯᓈᑌᒡ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓐ ᑫᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓄᐧᐃᐦᒡ ᐊᓂᒡ ᑳᒋᑫᐸᑯᐦᒡ ᐁ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᐅᐦᒋ ᐊᓐ ᐁ ᑲᓄᐧᐁᔨᐦᑖᑯᐦᒡ ᐱᒦ ᐊᓂᑌ ᐲᐦᒋᔫ᙮)

Update on Meriem Ouchfoun’s study of Labrador tea in mice

Meriem did the same kind of studies on mice as Despina to find out how Labrador tea produces its effects. She found that the mice that were given Labrador tea:

- Gained 6% less weight.
- Had lower levels of blood sugar (by 13%).
- Had lower levels of insulin in the blood (by 65%).
- Accumulated less fat in their livers (by 42%). As a result, their livers were less inflamed.

- ᓃᐦᑖᐦᒡ ᐋ ᒌ ᐃᔅᐱᔨᔨᒡ ᔔᑳᔨᐤ ᒥᐦᑯᐦᒡ (13% ᒌ ᐃᔅᐱᔨᐤ)
- ᓃᐦᑖᐦᒡ ᒌ ᐃᔅᐱᔨᔨᐤ ᐊᓂᔮ ᑳᒦᓅᐧᐋᑭᒥᐦᐄᒑᐱᔨᔨᒡ ᐊᓂᒡ ᐅᒥᐦᑯᐧᐋᐦᒡ (65% ᒌ ᐃᔅᐱᔨᐤ)᙮
- ᓂᒧᔨ ᐅᐦᒋ ᐃᔥᐱᔑ ᐲᐦᑖᐱᔨᔨᐤ ᐱᒦᔨᐤ ᐊᓂᒡ ᐅᔅᑯᓂᐧᐋᐦᒡ (42% ᒌ ᐃᔅᐱᔨᐤ)᙮ ᐋᐅᒄ ᒫᒃ ᑳ ᐃᔅᐱᔨᒡ ᐋᑳ ᐅᐦᒋ ᐃᔥᐱᔑ ᐹᒋᐱᔨᔨᒡᐦ ᐅᔅᑯᓂᐧᐋᐤᐦ᙮

ᑖᓂᑖ ᐧᐋᐦᒋ ᐃᔅᐱᔨᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ? ᐊᓂᒡ ᐅᓵᐲᐅᑖᓂᐦᒡ, ᐋᔦᐧᐃᒄ ᑳ ᐧᐋᐱᐦᑎᐦᒃ ᒉᓇᔨᒻ ᐊᓂᔮ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔨᐤ ᐊᑎᑑ ᒑ ᒌ ᒥᔦᐱᔨᔨᒡ ᐊᓂᔮ ᑳᒦᓅᐧᐋᑭᒥᐦᐄᒑᐱᔨᔨᒡ ᐅᐦᒋ ᐊᓐ ᐊᑎᑑ ᒑ ᒥᐦᒑᑎᒡ “ᐅᑖᐹᓂᒡ” (GLUT transporters) ᐊᓐ ᒑ ᒌ ᔒᐳᐱᔨᒡ ᐊᓐ ᔔᑳᐤ ᑳ ᐃᐦᑎᑯᐦᒡ ᒥᐦᑯᐦᒡ ᐊᓂᑖ ᒑ ᒌ ᐲᐦᑖᐱᔨᒡ ᐅᓵᐲᐅᑖᓂᐦᒡ᙮ ᐊᓂᑖ ᒥᔅᑯᓂᐦᒡ, ᓃᔓᔨᒡ ᐃᔅᐱᔨᐤ, ᐋᐅᒄ ᐊᓐ ᐹᔨᒄ ᑳᒦᓅᐧᐋᑭᒥᐦᐄᒑᐱᔨᒡ, ᐊᓐ ᒦᓐ ᑯᑎᒃ ᓂᒧᔨ ᐋᐱᑎᓐ ᑳᒦᓅᐧᐋᑭᒥᐦᐄᒑᐱᔨᒡ᙮ ᐋᑯᒡ ᐅᔮ ᐊ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐊᓂᒡ ᒥᔅᑯᓂᐦᒡ ᑭᔮ ᐅᓵᐲᐅᑖᓂᐦᒡ; ᓂᒧᔨ ᓈᔅᒡ ᐅᐦᒋ ᑖᐦᑭᐦᐄᒑᐱᔨᐤ ᐊᓂᒡ ᐱᒦᐦᒡ᙮

ᒉᓇᔨᒻ ᒌ ᐱᒋᔅᑎᓂᒻ ᐅᒥᓯᓂᐦᐄᑭᓐ ᒫᔅᑎᔅ ᑮᓯᔅ ᑳ ᐃᔑᓂᐦᑳᑖᔨᒡ ᒥᑯᔒᒌᔑᑭᓂᐲᓯᒼ 21, 2010 ᑳ ᐃᔅᐱᔨᔨᒡ᙮ ᐋᔦᐧᐃᒄ ᑭᔮ ᓃᔓ ᒥᓯᓂᐦᐄᑭᓐᐦ ᑳ ᒥᓯᓂᐦᐊᐦᒃ, ᑭᔮ ᒑᐧᑳᓐ ᐧᐋᐧᐋᐱᐦᑖᑭᓄᐧᐃᔨᐤᐦ:

1. “A combination of Catechin, Epicatechin and Quercetin underlies the *in vitro* adipogenic action of *Rhododendron groenlandicum*, an antidiabetic medicinal plant of the Eastern James Bay Cree pharmacopeia” FRP-024-1-09 ᐃᔑᓂᐦᑳᑖᔨᐤ᙮ (ᐊᓐ ᐊᐱᔒᔥ ᑳ ᒥᓯᓂᑖᒡ, ᐋᐅᒄ ᐊᓐ “Ingredients in Labrador tea that affect how our bodies store fat” ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮ ᐋᐅᒄ ᐊᓐ ᐋ ᒥᓯᓈᑖᒡ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓐ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐊᓂᒡ ᑳᒋᒑᐱᑯᐦᒡ ᐋ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐅᐦᒋ ᐊᓐ ᐋ ᑭᓄᐧᐋᔨᐦᑖᑯᐦᒡ ᐱᒦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ᙮)

How does the plant do this? In the muscles, Meriem found that the plant uses the insulin path to increase the number of “trucks” (GLUT transporters) that carry sugar from the blood into the muscle. In the liver, it uses two different pathways: the insulin one, and another one that does not involve insulin. The plant seemed to act mostly on the liver and muscles; it had few effects on fat tissue.

Meriem submitted her master’s thesis December 21, 2010. She has also written two articles that are now going through the review process:

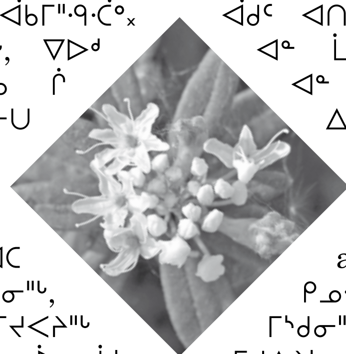
1. “A combination of Catechin, Epicatechin and Quercetin underlies the *in vitro* adipogenic action

2. “*Rhododendron groenlandicum*, an antidiabetic plant of the Eastern James Bay Cree, attenuates insulin resistance in a diet-induced obesity mouse model” ᐃᔑᓂᐦᑳᑌᔫ᙮ FRP-025-1-10᙮ (ᐊᓐ ᐊᐱᔑᔅ ᑳ ᒪᓯᓇᑌᐢ, ᐁᐅᒡ ᐊᓐ “How Labrador tea affects diabetes in mice” ᑳ ᐃᔑᓂᐦᑳᑌᐢ᙮ ᐁᐅᒡ ᐊᓐ ᐁ ᒪᓯᓈᑌᐢ ᒑᓐ ᐁ ᐄᔑ ᒑᐦᑲᐦᐆᑯᒑᐤ ᐁ ᔒᐚᑲᒥᐦᑫᒑᐤ ᐋᐱᑯᔒᔑᐢ ᐊᓂᔫ ᑳᒋᑫᐸᑯᔫ᙮)

ᓵᔅ ᒋᒋᐢᑫᔦᐦᑌᓈᓅ ᐊᓐ ᐁ ᒑᐦᒋᐳᒑᐤ ᐊᐧᐁᓂᒌ, ᐁᑯᐨ ᐁᑎᑑ ᐁ ᐃᔑᓈᑯᓂᔦᐢ ᑫ ᒌ ᔒᐚᑲᒥᐦᑫᒑᐤ᙮ ᐊᓐ ᒫᒃ ᐯᔮᑯᔦᐢ ᐁ ᐃᑌᔦᐦᑌᑲᓄᐃᐦᐢ, ᐁᐅᒡ ᐊᓐ ᐌᐦᒋ ᔒᐚᑲᒥᐦᑫᐨ ᐊᐧᐁᓐ ᐁᑳ ᒌ ᐃᔅᐱᔑ ᐅᔑᐦᐆᒪᑲᓂᔦᐢ ᐱᒦᔫ ᐊᓂᑌ ᐄᔮᐦᐢ ᐅᐦᒋ ᐊᓂᔫ ᒥᔅᑕᐦᐋ ᐁ ᒦᒋᓱᐨ᙮ ᐊᓐ ᒫᒃ ᐸᔅᐢ ᐁ ᐃᔑᓈᑯᐦᐢ ᐱᒦ ᐁ ᐃᐦᑎᑯᐦᐢ ᐊᓂᑌ ᐲᐦᒋᔫ (free fatty acids ᑳ ᐃᔑᓂᐦᑳᑌᐦᑳᐤᐦ) ᐁᐅᒡ ᐁ ᐊᑕ ᑲᓄᐁᔦᐦᑖᑯᐦᐢ ᐊᓂᑌ ᐄᔮᓂᐦᐢ ᑲᔪ ᒥᐢᑯᓂᐦᐢ, ᑲᔪ ᐁᐅᒡ ᑫᒃ ᐌᐦᒋ ᐃᐢᐸᔦᐦᐢ ᐁᑳ ᒌ ᒥᔪᐸᔦᐦᐢ ᐁ ᐋᐸᑎᓰᒪᑲᐦᐢ ᑳᒦᓄᐋᑲᒥᐦᐄᑫᐸᔦᐦᐢ᙮ ᐆ ᒫᒃ ᐁ ᐃᑌᔦᐦᑌᑲᓄᐃᐦᐢ, ᐊᓐ ᑫᐧᑳᓐ ᐁ ᐄᒋᐦᐄᐧᐁᐸᔦᐦᐢ ᑫ ᒌ ᐅᔑᐦᐆᒪᑲᐦᐢ ᐱᒦ ᐊᓂᑌ ᐲᐦᒋᔫ ᑲᔪ ᑫ ᒌ ᐅᐦᒋ ᐄᒋᐦᐄᐧᐁᐸᔦᐦᐢ ᐁ ᑲᓄᐁᔦᐦᑖᑯᐦᐢ ᐱᒦ ᐊᓂᑌ ᐲᐦᒋᔫ, ᐁᐅᒡ ᒋᐸᐦ ᐄᒋᐦᐄᐧᐁᐸᔫ ᑫ ᒌ ᓃᒋᐸᔦᐦᐢ ᐁ ᔒᐚᑲᒥᐦᑳᓄᐃᐦᐢ᙮ ᐊᓐ ᐸᔅᐢ ᐌᒥᔅᑎᑯᔒᐤ ᔒᐚᑲᒥᐦᑫᐤ ᓂᑐᐦᑯᔦᓐᐦ—ᒀᐦᐢ ᐊᓐ ᐹᓯᑲᓚᒑᐸᐅᓐ Rosiglitazone (ᐋᕚᓐᑎᔮ Avandia) ᑳ ᐃᔑᓂᐦᑳᑌᐢ—ᐁᑯᑌ ᐅᑌ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᐢ᙮ ᐊᓐ ᒫᒃ ᐸᐦᑳᓐ ᐁ ᐱᒥᐸᔦᐦᐢ ᐁ ᐄᔑ ᓂᑑᒋᐢᑫᔦᐦᒑᑲᓄᐃᐦᐢ, ᐁᔫᒡ ᑳ ᐄᓚᐸᑎᓰᒫᐨ ᒉᓇᔦᓫ ᐊᓂᔫᐦ ᐊᐧᐁᔫᐦ ᐊᓂᑌ ᐋᕐᓈᓯᓐ ᓵᐸ ᑫ ᒌ ᐅᐦᒋ ᒋᐢᑫᔦᐦᑌᐦᑳᐤ ᑫᐧᑳᔫ ᐁ ᐃᐦᑎᑯᓂᔦᐢ ᐁ ᓂᑐᐦᑯᔦᓅᔦᐢ ᐊᓂᐨ ᐄᔅᒋᐸᑯᔑᐦᐢ ᐊᓐ ᐁ ᐄᒋᐦᐄᐧᐁᐸᔦᐦᐢ ᑫ ᒌ ᑲᓄᐁᔦᐦᑖᑯᐦᐢ ᑳ ᒥᐧᔮᐢ ᐱᒦ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐁᐅᒡ ᐆ ᐊᓐ ᑯᑕᒃ ᒪᓯᓇᐦᐄᑲᓐ ᑫ ᐅᐦᒋ ᒪᓯᓇᐦᐄᑲᓄᐃᐦᐢ᙮

2. “*Rhododendron groenlandicum*, an antidiabetic plant of the Eastern James Bay Cree, attenuates insulin resistance in a diet-induced obesity mouse model” ᐃᔑᓂᐦᑳᒑᔦᐤ᙮ FRP-025-1-10᙮ (ᐊᓐ ᐊᐱᔒᔅ ᑳ ᒥᓯᓂᒑᐢ, ᐋᐅᒡ ᐊᓐ “How Labrador tea affects diabetes in mice” ᑳ ᐃᔑᓂᐦᑳᒐᐢ᙮ ᐋᐅᒡ ᐊᓐ ᐋ ᒥᓯᓈᒑᐢ ᒑᓐ ᐋ ᐄᔑ ᒑᐦᑭᐦᐆᑯᐢ ᐋ ᔒᐋᑭᒥᐦᑳᐢ ᐋᐱᑯᔒᔑᐢ ᐊᓂᔮ ᑳᒋᓛᐱᑯᔦᐤ᙮)

ᓵᔅ ᒋᒋᐢᓚᔦᐦᒑᓈᓂᐤ ᐊᓐ ᐋ ᒑᐦᒋᐳᐢ ᐊᐧᐋᓂᒌ, ᐋᑯᐨ ᐊᑎᑑ ᐋ ᐃᔑᓈᑯᓂᔦᐢ ᓚ ᒌ ᔒᐋᑭᒥᐦᑳᐢ᙮ ᐊᓐ ᒫᒃ ᐹᔦᑯᔦᐢ ᐋ ᐃᒑᔦᐦᒑᑭᓂᐧᐃᐢ, ᐋᐅᒡ ᐊᓐ ᐧᐋᐦᒋ ᔒᐋᑭᒥᐦᑳᑦ ᐊᐧᐋᓐ ᐋᑳ ᒌ ᐃᔅᐱᔑ ᐅᔑᐦᐆᒥᑭᓂᔦᐢ ᐱᒦᔦᐤ ᐊᓂᒑ ᐄᔮᐦᐢ ᒥᔅᑎᐦ ᐋ ᒦᒋᓱᐨ᙮ ᐊᓐ ᒫᒃ ᐱᔅᐢ ᐋ ᐃᔑᓈᑯᐦᐢ ᐱᒦ ᐋ ᐃᐦᑎᑯᐦᐢ ᐊᓂᒑ ᐲᐦᒋᔦᐤ (free fatty acids ᑳ ᐃᔑᓂᐦᑳᒑᐢᐦ) ᐋᐅᒡ ᐋ ᐊᑎ ᑭᓄᐧᐋᔦᐦᒑᑯᐦᐢ ᐊᓂᒑ ᐅᔮᐄᐅᒑᓂᐦᐢ ᑭᔮ ᒥᐢᑯᓂᐦᐢ, ᑭᔮ ᐋᐅᒡ ᓛᒃ ᐧᐋᐦᒋ ᐃᐢᐱᔦᐢ ᐋᑳ ᒌ ᒥᔪᐱᔦᐢ ᐋ ᐋᐱᑎᓰᒥᑭᐦᐢ ᑳᒦᓄᐋᑭᒥᐦᐄᓛᐱᔦᐢ᙮ ᐆ ᓛᒃ ᐋ ᐃᒑᔦᐦᒑᑭᓂᐧᐃᐢ, ᐊᓐ ᓛᐧᑳᓐ ᐋ ᐄᒋᐦᐄᐧᐋᐱᔦᐢ ᓚ ᒌ ᐅᔑᐦᐆᒥᑭᐦᐢ ᐱᒦ ᐊᓂᒑ ᐲᐦᒋᔦᐤ ᑭᔮ ᓚ ᒌ ᐅᐦᒋ ᐄᒋᐦᐄᐧᐋᐱᔦᐢ ᐋ ᑭᓄᐧᐋᔦᐦᒑᑯᐦᐢ ᐱᒦ ᐊᓂᒑ ᐲᐦᒋᔦᐤ, ᐋᐅᒡ ᒋᐱᐦ ᐄᒋᐦᐄᐧᐋᐱᔦᐤ ᓚ ᒌ ᓃᒋᐱᔦᐢ ᐋ ᔒᐋᑭᒥᐦᑳᓂᐧᐃᐢ᙮ ᐊᓐ ᐱᔅᐢ ᐧᐋᒥᔅᑎᑯᔒᐤ ᔒᐋᑭᒥᐦᑳᐤ ᓂᑐᐦᑯᔦᓐᐦ—ᒍᐦᐢ ᐊᓐ ᐹᓯᑲᓚᒑᐸᐅᓐ Rosiglitazone (ᐋᕚᓐᑎᔮ Avandia) ᑳ ᐃᔑᓂᐦᑳᒐᐢ—ᐋᑯᒑ ᐅᒑ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᐢ᙮ ᐊᓐ ᒫᒃ ᑎᐹᓐ ᐋ ᐱᒥᐱᔦᐢ ᐋ ᐄᔑ ᓂᑑᒋᐢᓚᔦᐦᒑᑭᓂᐧᐃᐢ, ᐋᔦᐧᐃᒡ ᑳ ᐄᓚᐱᑎᓰᒫᐨ ᒉᓇᔦᓫ ᐊᓂᔮᐦ ᐊᐧᐋᔦᐤᐦ ᐊᓂᒑ ᐋᕐᓈᓯᓐ ᓵᐸ ᓚ ᒌ ᐅᐦᒋ ᒋᐢᓚᔦᐦᑎᐦᐢ ᓛᐧᑳᔦᐤ ᐋ ᐃᐦᑎᑯᓂᔦᐢ ᐋ ᓂᑐᐦᑯᔦᓂᐧᐃᔦᐢ ᐊᓂᐨ ᐄᔑᒋᐱᑯᔑᐦᐢ ᐊᓐ ᐋ ᐄᒋᐦᐄᐧᐋᐱᔦᐢ ᓚ ᒌ ᑭᓄᐧᐋᔦᐦᒑᑯᐦᐢ ᑳ ᒥᐧᔮᐢ ᐱᒦ ᐊᓂᒑ ᐲᐦᒋᔦᐤ᙮ ᐋᐅᒡ ᐆ ᐊᓐ ᑯᑎᒃ ᒥᓯᓂᐦᐄᑭᓐ ᓚ ᐅᐦᒋ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᐢ᙮



of *Rhododendron groenlandicum*, an antidiabetic medicinal plant of the Eastern James Bay Cree pharmacopeia” FRP-024-1-09. (The plain-language summary is called “Ingredients in Labrador tea that affect how our bodies store fat.”)

2. “*Rhododendron groenlandicum*, an antidiabetic plant of the Eastern James Bay Cree, attenuates insulin resistance in a diet-induced obesity mouse model”. FRP-025-1-10. (The plain-language summary is called “How Labrador tea affects diabetes in mice.”)

We know that being obese raises people’s risk of getting diabetes. Yet one theory about diabetes says that it is partly caused by a person not being able to make enough fat cells to store all the calories they are taking in. Instead, some kinds of fats (called free fatty acids) accumulate in muscle cells and liver, and this helps create insulin resistance. According to this theory, things that help fat cells to reproduce and to store more fats would actually help with diabetes. Some of the standard diabetes drugs—including Rosiglitazone (Avandia)—work on this principle. So in a separate project, Meriem worked with people in the Arnason lab to try to identify the ingredients in

ᐦᐅᑖ ᐄᑦ ᑳ ᓂᑑᒋᐢᒉᔨᐦᑌᐦᒃ ᐊᓂᔩ ᐐᓴᒋᒥᓈᓐᐦ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᓂᔨᒡᐦ ᐊᓂᑌ ᐲᐦᒋᔩ

ᐋᑦ ᔮᐸᒡ ᐁ ᒌ ᒌᔥᑖᑦ ᐦᐅᑖ ᐊᓂᔩ ᐁ ᒋᐢᑯᑕᒫᓱᑦ PhD ᓈᐱᓂᔨᒡ, ᔮᐸᒡ ᐁᔥᑯ ᒌ ᐃᐦᑖᐤ ᒦᓐ ᑎᐦᑐ ᐲᓯᒼᐦ ᒉ ᒌ ᒌᔥᑖᑦ ᐊᓂᔩ ᐁ ᓂᑑᒋᐢᒉᔨᐦᑌᐦᒃ ᐐᓴᒋᒥᓈᓐᐦ᙮ ᐊᓂᔩ ᑳ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑌᐦᒃ, ᐁᔩᒄ ᔮᐸᒡ ᑳ ᐋᐸᒋᐦᐋᑦ ᐋᐱᑯᔒᔥᐦ ᓈᔥᒡ ᐁ ᑑᒫᔨᒡ ᒦᒋᒥᔩ ᐁ ᒌ ᔑᒫᑲᓅᔨᒡᐦ᙮ ᐋᐦᒌᐤᐦ ᒫᒃ ᐃᔅᐸᔩ ᐅᐦᒋ ᐊᓐ ᓃᔥᑕᒼ ᑳ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑕᒫᐦᒡ, ᐆ ᑳ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑕᒫᐦᒡ, ᓇᒧᐃ ᐅᐦᒋ ᐐᒋᐦᐄᑰᒡ ᐋᐱᑯᔒᔑᒡ ᐊᓂᔩ ᐐᓴᒋᒥᓈᓐᐦ ᒉ ᒌ ᐊᒎᐸᔨᑘᐤ᙮ ᐆ ᒫᒃ ᑳ ᐱᒥᐸᔨᐦᒡ, ᐁᐅᒄ ᑳ ᐋᐸᒋᐦᐄᒋᐦᑘᐤ ᐋᐱᑯᔒᔑᒡ ᐁ ᒌ ᒥᔨᐸᔨᑘᐤ, ᐊᓐ ᐍᔥ ᓃᔥᑕᒼ ᑳ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑕᒫᐦᒡ, ᐁᐅᒄ ᑳ ᐋᐸᒋᐦᐄᒋᐦᑘᐤ ᐋᐱᑯᔒᔑᒡ ᐁᑳ ᐅᐦᒋ ᒥᔨᐸᔨᑘᐤ—ᐁᐅᑯᓂᒡ ᐊᓂᒌ ᐁᑳ ᑯᔨᐢᒄ ᐅᐦᒋ ᐃᔨᓈᑯᔨᑘᐤ ᐊᓂᑌ ᐲᐦᒋᔩ, ᐁᔩᒄ ᐊᓂᔩ ᐁᑳ ᐅᐦᒋ ᒥᔨᐸᔨᓂᔨᒡ ᒉ ᒌ ᐐᐦᑕᒫᒉᒪᑲᓂᔨᒡ ᐎᔮᐙᐤᐦ ᐁ ᒌᔥᐳᑘᐤ᙮ ᒫᔥᑯᒡ ᐃᔑᓈᑯᓅᒉ ᐊᓐ ᐐᓴᒋᒥᓈᓐ ᒥᒄ ᐁ ᐐᒋᐦᐄᑯᑘᐤ ᐊᐍᔒᔑᒡ ᒉ ᒌ ᐊᒎᐸᔨᑘᐤ ᐊᓂᔩ ᐁᑳ ᒌ ᐐᒋᐦᐄᓱᑘᐤ ᐁ ᐃᔥᐱᔑ ᒦᒋᓱᑘᐤ᙮ ᒥᒄ ᒫᒃ ᐆ ᒉᒁᒡ ᑳ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓅᐎᐦᒡ, ᔮᐸᒡ ᒌ ᐐᒋᐦᐄᐍᐸᔩᐦ ᐊᓂᔩᐦ ᐐᓴᒋᒥᓈᓐᐦ:

- ᓃᐦᑖᐦᒡ ᒉ ᒌ ᐃᔅᐸᔨᐦᒡ ᔔᑳᐤ ᒥᐦᑯᐦᒡ (11% ᒌ ᐃᔅᐸᔩ)
- ᒌ ᐊᒎᐸᔩ ᐁ ᐃᔥᐱᔑ ᑲᓅᐍᔨᐦᑖᑯᐦᒡ ᐱᒦ ᐊᓂᑌ ᒥᔅᑯᐦᒡ (44% ᒌ ᐃᔅᐸᔩ)

ᐊᓂᔩ ᑳ ᓂᑑᒋᐢᒉᔨᐦᑌᐦᒃ ᐦᐅᑖ, ᐁᔩᒄ ᑳ ᓅᑯᓂᔨᒡ ᐊᓂᔩ ᐐᓴᒋᒥᓈᓐᐦ ᐁ ᒌ ᐐᒋᐦᐄᐍᐸᔨᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᐋᐸᑎᓰᒪᑲᐦᒡ ᑳᒦᓄᐙᑲᒥᐦᐄᒉᐸᔨᐦᒡ, ᐁᐅᒄ ᐊᓐ ᐁᑎᑑ ᒉ ᒥᐦᒉᑎᑘᐤ ᐊᓂᒌ "ᐅᑖᐹᓂᒡ" ᒉ ᒌ ᓵᐳᐸᔨᐦᒡ ᐊᓐ ᔔᑳᐤ ᐊᓂᑌ ᒉ ᒌ ᐲᐦᑌᐸᔨᐦᒡ ᐎᔫᓂᐦᒡ᙮ ᐊᓂᑌ ᒫᒃ ᒥᔅᑯᓂᐦᒡ, ᓃᔓᔨᒡ ᐄᔑ ᐱᒥᐸᔫ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ, ᐁᐅᒄ ᐊᓐ ᐁ ᐅᐦᒋ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐊᓂᑦ ᑳᒦᓄᐙᑲᒥᐦᐄᒉᐸᔨᐦᒡ ᑲᔦ ᐊᓐ ᑯᑌᒃ ᒉ ᐅᐦᒋ ᐐᒋᐦᐄᓱᒪᑲᐦᒡ ᐊᓐ ᒉ ᐅᐦᒋ ᐐᒋᐦᐄᐍᐸᔨᐦᒡ᙮ ᒉᒁᒡ ᒪᓯᓇᐦᐊᒼ ᐦᐅᑖ ᒪᓯᓇᐦᐄᑲᓂᔩ ᐅᐦᒋ ᐅᔩ ᑳ ᐄᔑ ᐚᐱᐦᑌᐦᒃ᙮

ᐦᐅᑖ ᐄᑦ ᑳ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᒃ ᐊᓂᔮ ᐐᓯᒋᒥᓐᐦ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᓂᔨᒡᐦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ

ᐋᑦ ᐊᔮᐱᒡ ᐋ ᒌ ᒌᔥᑖᑦ ᐦᐅᑖ ᐊᓂᔮ ᐋ ᒋᐢᑯᑎᒫᓱᑦ PhD ᓈᐱᓂᔨᒡ, ᐊᔮᐱᒡ ᐋᔥᑯ ᒌ ᐃᐦᑖᐤ ᒦᓐ ᑎᐦᑐ ᐲᓯᒧᐦ ᒑ ᒌ ᒌᔥᑖᑦ ᐊᓂᔮ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᒃ ᐐᓯᒋᒥᓐᐦ᙮ ᐊᓂᔮ ᑳ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᒃ, ᐋᔩᐎᒄ ᐊᔮᐱᒡ ᑳ ᐋᐱᒋᐦᐋᑦ ᐋᐱᑯᔒᔥᐦ ᓈᔥᒡ ᐋ ᑑᒫᔨᒡ ᒦᒋᒥᔨᐤ ᐋ ᒌ ᔑᒫᑭᓂᐎᔨᒡᐦ᙮ ᐊᔨᐦᒡ ᒫᒃ ᐃᔅᐱᔨᐤ ᐅᐦᒋ ᐊᓐ ᓃᔥᑎᒼ ᑳ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑎᒫᐦᒡ, ᐆ ᑳ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑎᒫᐦᒡ, ᓂᒧᔨ ᐅᐦᒋ ᐐᒋᐦᐄᑰᒡ ᐋᐱᑯᔒᔑᒡ ᐊᓂᔮ ᐐᓯᒋᒥᓐᐦ ᒑ ᒌ ᐊᒋᐎᐱᔨᒡ᙮ ᐆ ᒫᒃ ᑳ ᐱᒥᐱᔨᒡ, ᐋᐅᒄ ᑳ ᐋᐱᒋᐦᐄᒋᐦᒡ ᐋᐱᑯᔒᔑᒡ ᐋ ᒌ ᒥᔨᐱᔨᒡ, ᐊᓐ ᐙᔥ ᓃᔥᑎᒼ ᑳ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᑳ ᐋᐱᒋᐦᐄᒋᐦᒡ ᐋᐱᑯᔒᔑᒡ ᐋᑳ ᐅᐦᒋ ᒥᔨᐱᔨᒡ—ᐋᐅᑯᓂᒡ ᐊᓂᒌ ᐋᑳ ᑯᔨᐢᒄ ᐅᐦᒋ ᐃᔨᓈᑯᔨᒡ ᐊᓂᑖ ᐲᐦᒋᔨᐤ, ᐋᔩᐎᒄ ᐊᓂᔮ ᐋᑳ ᐅᐦᒋ ᒥᔨᐱᔨᔨᒡ ᒑ ᒌ ᐐᐦᑎᒫᒑᒥᑭᓂᔨᒡ ᐎᔮᐙᐤᐦ ᐋ ᒌᔥᐳᒡ᙮ ᒁᐧᓵᓐ ᐃᔑᓈᑯᓅᒑ ᐊᓐ ᐐᓯᒋᒥᓐ ᒥᒄ ᐋ ᐐᒋᐦᐄᑯᒡ ᐊᐙᔒᔑᒡ ᒑ ᒌ ᐊᒎᐱᔨᒡ ᐊᓂᔮ ᐋᑳ ᒌ ᐐᒋᐦᐄᓱᒡ ᐋ ᐃᔥᐱᔑ ᒦᒋᓱᒡ᙮ ᒥᒄ ᒫᒃ ᐆ ᒫᒁᒡ ᑳ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐎᒡ, ᐊᔮᐱᒡ ᒌ ᐐᒋᐦᐄᐙᐱᔨᐤᐦ ᐊᓂᔮᐦ ᐐᓯᒋᒥᓐᐦ:

- ᓃᐦᑖᐦᒡ ᒑ ᒌ ᐃᔅᐱᔨᒡ ᔔᑳᐤ ᒥᐦᑯᐦᒡ (11% ᒌ ᐃᔅᐱᔨᐤ)
- ᒌ ᐊᒎᐱᔨᐤ ᐋ ᐃᔥᐱᔑ ᑭᓅᐙᔨᐦᑖᑯᐦᒡ ᐱᒦ ᐊᓂᑖ ᒥᔅᑯᐦᒡ (44% ᒌ ᐃᔅᐱᔨᐤ)

ᐊᓂᔮ ᑳ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᒃ ᐦᐅᑖ, ᐋᔩᐎᒄ ᑳ ᓅᑯᓂᔨᒡ ᐊᓂᔮ ᐐᓯᒋᒥᓐᐦ ᐋ ᒌ ᐐᒋᐦᐄᐙᐱᔨᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᐋᐱᑎᓰᒥᑭᐦᒡ ᑳᒦᓄᐙᑭᒥᐦᐄᒑᐱᔨᒡ, ᐋᐅᒄ ᐊᓐ ᐊᑎᑑ ᒑ ᒥᐦᒑᑎᒡ ᐊᓂᒌ "ᐅᑖᐹᓂᒡ" ᒑ ᒌ ᓵᐳᐱᔨᒡ ᐊᓐ ᔔᑳᐤ ᐊᓂᑖ ᒑ ᒌ ᐲᐦᑖᐱᔨᒡ ᐅᔅᐲᐅᑖᓂᐦᒡ᙮ ᐊᓂᑖ ᒫᒃ ᒥᔅᑯᓂᐦᒡ, ᓃᔓᔨᒡ ᐄᔑ ᐱᒥᐱᔨᐤ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ, ᐋᐅᒄ ᐊᓐ ᐋ ᐅᐦᒋ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐊᓂᑦ ᑳᒦᓄᐙᑭᒥᐦᐄᒑᐱᔨᒡ ᑭᔮ ᐊᓐ ᑯᑖᒃ ᒑ ᐅᐦᒋ ᐐᒋᐦᐄᓱᒥᑭᐦᒡ ᐊᓐ ᒑ ᐅᐦᒋ ᐐᒋᐦᐄᐙᐱᔨᒡ᙮ ᒫᒁᒡ ᒥᓯᓂᐦᐊᒧ ᐦᐅᑖ ᒥᓯᓂᐦᐄᑭᓂᔨᐤ ᐅᐦᒋ ᐅᔮ ᑳ ᐄᔑ ᐙᐱᐦᑎᐦᒃ᙮

northern Labrador tea that make fat cells store the "good" fats. This will be the subject of a third paper.

Hoda Eid's study of how mountain cranberries work inside the body

Even though Hoda finished her PhD last summer, she stayed on for a few months to finish looking at how mountain cranberries work. Her study, like the ones above, used mice that were fed a high-fat diet. In contrast to our earlier study, in this one the mountain cranberries did *not* help the mice to take off weight. But the current study used normal mice, while the earlier one used a special kind of mice—ones that have a genetic problem so their bodies don't send them the usual signals to make them feel full and stop eating. Perhaps mountain cranberries only reduce weight in animals that have this particular type of appetite-control problem. However, in the current study, mountain cranberries still did other good things:

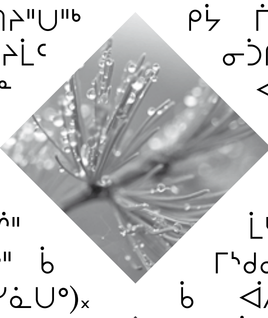
- They lowered blood sugars (by 11%)
- They reduced the amount of fat that got stored in the liver (by 44%)

Hoda's tests showed that cranberries do this by using the insulin pathway to increase the number of

ᐊᓐ ᑎᐹᒋᒎᓯᓇᐦᐄᑲᓐ, ᓇᒍᐃ ᐅᐦᒋ ᓂᐦᐁᔦᐦᑖᑯᓂᔩ ᐊᓂᔩ ᓃᔥᑕᒻ ᐅᒪᓯᓇᐦᐄᑲᓐ ᑳ ᒪᓯᓈᑌᔮᒡ ᐐᓴᒋᒥᓈᓐᐦ, ᒥᒄ ᒫᒃ ᒋᑳ ᐋᐦᑎᓯᓇᐦᐊᒻ ᐊᓂᔩ ᐅᒪᓯᓇᐦᐄᑲᓐ ᐁᒄ ᒦᓐ ᒉ ᐃᑎᔑᐦᐊᐦᒃ ᐊᓂᑌ ᑎᐹᒋᒎᓯᓇᐦᐄᑲᓂᐦᒡ᙮ (ᐁᐅᒄ ᐊᓐ "*Vaccinium vitis-idaea*, a medicinal plant of the Eastern James Bay Cree, mobilizes L6 muscle Glut4 transporters and exerts anti-obesity and antidiabetic effects *in vivo*" ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᑳ ᒪᓯᓈᑌᒡ, ᐁᐅᒄ ᐊᓐ "Lowbush Cranberries as a way to fight weight and diabetes: results from some studies on mice" ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮ ᐁᐅᒄ ᐊᓐ ᐋ ᒪᓯᓈᑌᒡ ᐁ ᐄᔑ ᐐᒋᐦᐄᐌᐸᔦᐦᒡ ᐐᓴᒋᒥᓈᓐ ᐊᓐ ᐁᑳ ᒉ ᒌᐦᒋᐳᓈᓄᐏᐦᒡ ᑲᔦ ᐁᑳ ᒉ ᔒᐙᑲᒥᐦᒁᓄᐏᐦᒡ, ᑳ ᐄᔑ ᐙᐱᐦᑌᑲᓄᐏᐦᒡ ᑳ ᓂᑑᒋᔅᒉᔦᒫᑲᓅᑧᐤ ᐋᐱᑯᔒᔑᒡ᙮)

ᑳᕽᓛᐃᓐ ᐌᓗᑦ ᑳ ᓂᑑᒋᔅᒉᔦᐦᑌᐦᒃ ᑖᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᒉᐸᔦᐦᒁᐤᐦ ᐙᒋᓈᑲᓐ ᑲᔦ ᒦᑐᔅ ᐅᐦᒋ ᐊᓐ ᐁ ᐃᔅᐸᔦᐦᒡ ᐱᒦ ᐊᓂᑌ ᒥᔅᑯᓂᐦᒡ ᑲᔦ ᒥᑕᐦᒋᔒᐦᒡ

ᒌ ᐐᐦᑕᒧᒡ ᒋᔖᐄᓅᒡ ᒉ ᑲᓄᐙᐱᒫᑲᓅᑧᐤ ᐙᒋᓈᑲᓐ ᑲᔦ ᒦᑐᔅ, ᐁᔩᒄ ᑲᔦ ᑳ ᐄᔑ ᐐᐦᑕᒫᑯᒡ ᑳ ᓂᑑᒋᔅᒉᔦᐦᑌᐦᒃ ᓚᑎᔮ ᓂᔅᑧᕽ᙮ ᐁᔩᒄ ᒫᒃ ᒉᒁᒡ ᐁ ᓂᑑᒋᔅᒉᔦᒫᑦ ᑳᕽᓛᐃᓐ ᐊᓂᔩᐦ ᓃᔓ ᒥᔅᑎᒄᐦ ᐅᐦᒋ ᐊᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᒉᐸᔦᐦᒡ ᒥᔅᑯᓂᐦᒡ, ᑲᔦ ᐁ ᐃᔅᐸᔦᐦᒡ ᐱᒦ ᐊᓂᑌ ᒥᑕᐦᒋᔑᐦᒡ ᑲᔦ ᐊᓐ ᐁ ᐃᔥᐱᔑ ᒎᒫᑲᒥᒡ ᒥᐦᒄ᙮ ᐅᔩ ᒫᒃ ᒉ ᒌ ᐃᐦᑎᒃ, ᐁᔩᒄ ᐁ ᐋᐸᒋᐦᑖᑦ ᒥᔅᑯᓂᔩ ᑲᔦ ᒥᑕᐦᒋᔒᐦ ᐅᐦᒋ ᐊᓂᔩᐦ ᐋᐱᑯᔒᔥᐦ ᑳ ᐋᐸᒋᐦᐋᑲᓅᔮᒡᐦ ᑳ ᐄᔑ ᓂᑑᒋᔅᒉᔦᐦᑌᐦᒃ ᑌᔅᐲᓈ (ᐄᔥᐱᒥᐦᒡ ᒪᓯᓈᑌᐤ)᙮ ᐁᔩᒄ ᑲᔦ ᐁ ᑲᓄᐙᐱᐦᑌᐦᒃ ᐊᓂᔩ ᐋᐦᒌᐤᐦ ᐁ ᐃᔅᐸᔦᓂᔦᒡ ᐱᒦᔩ ᐁ ᐅᔑᐦᐆᒪᑲᓂᔦᒡ ᑲᔦ ᐊᓂᑌ ᐁ ᐄᔑ ᐲᐦᑌᐸᔦᓂᔦᒡ ᐲᐦᒋᔩ᙮ ᐁᔩᒄ ᐁ ᐄᔑ ᐸᑯᓵᔦᐦᑌᐦᒃ ᑳᕽᓛᐃᓐ ᒉ ᒌᔒᐦᑫᐦᒃ ᐁ ᐄᔑ ᐋᐸᑎᓲᐦᑲᐦᑌᐦᒃ ᒫᔅᑎᕽᔅ ᓂᔅᒋᐲᓯᒻ 2011 ᐃᔅᐸᔦᐦᒉ, ᐁᔩᒄ ᐊᓂᔩ ᒉ ᒌ ᑳᓂᔩᑦ ᓂᑑᐦᑯᔦᓐ ᐁ ᐄᔑ ᒋᔅᑯᑕᒫᓱᑦ᙮



"trucks" that move sugar into muscles. In the liver, the plant uses both the insulin path and the other one to produce its effects. Hoda is now writing an article about this.

The journal turned down her earlier article on mountain cranberries, but she is revising it and will try again. (The article was titled "*Vaccinium vitis-idaea*, a medicinal plant of the Eastern James Bay Cree, mobilizes L6 muscle Glut4 transporters and exerts anti-obesity and antidiabetic effects *in vivo*." The plain-language summary is called "Lowbush Cranberries as a way to fight weight and diabetes: results from some studies on mice.")

ᐊᓐ ᑎᐹᒋᒎᓯᓂᐦᐄᑭᓐ, ᓂᒎᔦ ᐅᐦᒋ ᓂᐦᐋᔦᐦᑖᑯᓂᔦᐤ ᐊᓂᔮ ᓃᔥᑎᒻ ᐅᒥᓯᓂᐦᐄᑭᓐ ᑳ ᒥᓯᓈᑖᔦᒡ ᐐᓯᒋᒥᓐᐦ, ᒥᒄ ᒫᒃ ᒋᑭ ᐋᐦᑎᓯᓂᐦᐊᒻ ᐊᓂᔮ ᐅᒥᓯᓂᐦᐄᑭᓐ ᐋᒄ ᒦᓐ ᒐ ᐃᑎᔑᐦᐊᐦᒃ ᐊᓂᑖ ᑎᐹᒋᒎᓯᓂᐦᐄᑭᓂᐦᒡ᙮ (ᐋᐅᒄ ᐊᓐ "*Vaccinium vitis-idaea*, a medicinal plant of the Eastern James Bay Cree, mobilizes L6 muscle Glut4 transporters and exerts anti-obesity and antidiabetic effects *in vivo*" ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᑳ ᒥᓯᓈᑖᒡ, ᐋᐅᒄ ᐊᓐ "Lowbush Cranberries as a way to fight weight and diabetes: results from some studies on mice" ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮ ᐋᐅᒄ ᐊᓐ ᐋ ᒥᓯᓈᑖᒡ ᐋ ᐄᔑ ᐐᒋᐦᐄᐙᐱᔦᒡ ᐐᓯᒋᒥᓐ ᐊᓐ ᐋᑲ ᒐ ᒌᐦᒋᐳᓈᓂᐏᒡ ᑭᔮ ᐋᑲ ᒐ ᔒᐙᑭᒥᐦᒁᓂᐏᒡ, ᑳ ᐄᔑ ᐙᐱᐦᑖᑭᓂᐏᒡ ᑳ ᓂᑑᒋᔅᒐᔦᒫᑭᓂᐏᒡ ᐋᐱᑯᔒᔑᒡ᙮)

ᑳᕽᓛᐃᓐ ᐌᓗᑦ ᑳ ᓂᑑᒋᔅᒐᔦᐦᑎᐦᒃ ᑖᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒐᐱᔦᒡᐦ ᐙᒋᓈᑭᓐ ᑭᔮ ᒦᑐᔅ ᐅᐦᒋ ᐊᓐ ᐋ ᐃᔅᐱᔦᒡ ᐱᒦ ᐊᓂᑖ ᒥᔅᑯᓂᐦᒡ ᑭᔮ ᒥᑎᐦᒋᔒᐦᒡ

ᒌ ᐐᐦᑎᒧᒡ ᒋᔖᔦᔦᐅᒡ ᒐ ᑭᓄᐙᐱᒫᑭᓂᐏᒡ ᐙᒋᓈᑭᓐ ᑭᔮ ᒦᑐᔅ, ᐋᔦᐏᒄ ᑭᔮ ᑳ ᐄᔑ ᐐᐦᑎᒫᑯᑦ ᑳ ᓂᑑᒋᔅᒐᔦᐦᑎᐦᒃ ᓚᑎᔮ ᓂᔅᑧᕽ᙮ ᐋᔦᐏᒄ ᒫᒃ ᒫᒁᒡ ᐋ ᓂᑑᒋᔅᒐᔦᒫᑦ ᑳᕽᓛᐃᓐ ᐊᓂᔮᐦ ᓃᔓ ᒥᔅᑎᒄᐦ ᐅᐦᒋ ᐊᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒐᐱᔦᒡ ᒥᔅᑯᓂᐦᒡ, ᑭᔮ ᐋ ᐃᔅᐱᔦᒡ ᐱᒦ ᐊᓂᑖ ᒥᑎᐦᒋᔑᐦᒡ ᑭᔮ ᐊᓐ ᐋ ᐃᔥᐱᔑ ᒎᒫᑭᒥᒡ ᒥᐦᒄ᙮ ᐅᔮ ᒫᒃ ᒑ ᒌ ᐃᐦᑎᒃ, ᐋᔦᐏᒄ ᐋ ᐋᐱᒋᐦᑖᑦ ᒥᔅᑯᓂᔮᐤ ᑭᔮ ᒥᑎᐦᒋᔒᐦ ᐅᐦᒋ ᐊᓂᔮᐦ ᐋᐱᑯᔒᔥᐦ ᑳ ᐋᐱᒋᐦᐋᑭᓂᐏᔮᒡᐦ ᑳ ᐄᔑ ᓂᑑᒋᔅᒐᔦᐦᑎᐦᒃ ᑌᔅᐲᓈ (ᐄᔥᐱᒥᐦᒡ ᒥᓯᓈᑖᐤ)᙮ ᐋᔦᐏᒄ ᑭᔮ ᐋ ᑭᓄᐙᐱᐦᑎᐦᒃ ᐊᓂᔮ ᐊᔦᐦᒡ ᐋ ᐃᔅᐱᔦᔦᒡ ᐱᒦᔦᐤ ᐋ ᐅᔑᐦᐆᒥᑭᓂᔦᒡ ᑭᔮ ᐊᓂᑖ ᐋ ᐄᔑ ᐲᐦᑖᐱᔦᔦᒡ ᐲᐦᒋᔦᐤ᙮ ᐋᔦᐏᒄ ᐋ ᐄᔑ ᐱᑯᓵᔦᐦᑎᐦᒃ ᑳᕽᓛᐃᓐ ᒑ ᒌᔒᐦᑭᐦᒃ ᐋ ᐄᔑ ᐋᐱᑎᓲᐦᑎᐦᒃ ᒫᔅᑎᕽᔅ ᓂᔅᒋᐲᓯᒧ 2011 ᐃᔅᐱᔦᐦᒑ, ᐋᔦᐏᒄ ᐊᓂᔮ ᒑ ᒌ ᐱᑯᐦᑖᑦ ᓂᑑᐦᑯᔦᓐ ᐋ ᐄᔑ ᒋᔅᑯᑎᒫᓱᑦ᙮

Caroline Ouellet's study of how tamarack and balsam poplar affect the way the liver and gut handle fats

The Elders recommended that we look at tamarack and balsam poplar, and Lidia Nistor's studies said the same thing. So now Caroline is looking at how these two trees affect the way our livers and guts handle fats and cholesterol. To do this, she is using the livers and guts from the mice in Despina's study (described above). She is also looking at some other aspects of how fat gets made and carried into the cells. Caroline plans to finish her Master's work in April 2011.

ᐋᐱᕐ ᓈᔖᕐ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑌᐦᒃ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᒁᐤᐦ ᐊᓂᑦ ᒉ ᐃᔅᐱᔑ ᐅᔑᐦᐆᒪᑲᐦᒡ ᓲᑳᐤ ᒥᔅᑯᓂᐦᒡ

ᐊᓐ ᑳᒦᓄᐚᑲᒥᐦᐄᒉᐸᔨᐦᒡ ᑲᔦ ᐸᔅᒡ ᓂᑐᐦᑯᔨᓐᐦ ᐐᒋᐦᐄᐍᐸᔫᐦ ᐁᑳ ᒉ ᐃᔅᐱᔑ ᐅᔑᐦᐆᒪᑲᐦᒡ ᓲᑳᐤ ᐊᓂᑦ ᒥᔅᑯᓂᐦᒡ, ᑲᔦ ᐁᑎᑑ ᒥᔅᑕᐦᐄ ᒉ ᒌ ᑲᓄᐍᔨᐦᑖᑯᐦᒡ ᓲᑳᐤ ᐊᓐ ᐁ ᒌ ᐅᔑᐦᐆᒪᑲᐦᒡ᙮ ᐁᐅᒄ ᒫᒃ ᐆ ᐁ ᐐᒋᐦᐄᐍᐸᔨᐦᒡ ᓃᐦᑖᐦᒡ ᒉ ᒌ ᐃᔅᐸᔨᐦᒡ ᓲᑳᐤ ᐊᓂᑦ ᒥᐦᑯᐦᒡ᙮ ᒥᔨᐍ ᐊᓂᔫᐦ 17 ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᓂᑑᒋᔅᒉᔨᐦᑕᒻ ᐋᐱᕐ ᐊᓂᔫ ᑖᐧᐯ ᒉ ᒌ ᐄᔑ ᐐᒋᐦᐄᐍᐸᔨᓂᔨᐦᒁᐤᐦ᙮ ᐄᓈᔅᑦ ᐧᒫᐅᐤ ᒎᐦᒋᔩᒪᑲᓐ ᐁ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᒡ ᐊᓂᑦ ᒥᔅᑯᓂᐦᒡ, ᐁᔫᒄ ᒫᒃ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑌᐦᒃ ᐋᐱᕐ ᒉᒁᔫ ᐊᓂᔫ ᐁ ᐃᐦᑎᑯᓂᔨᐤ ᐊᓂᑦ ᐄᓈᔅᑎᐦᐤ ᐅᔫ ᐍᐦᒋ ᐃᔅᐸᔨᓂᔨᐤ᙮ ᒌ ᐸᐦᑳᓂᐸᔨᐦᑖᐤ ᐊᓂᔫ ᒉᒁᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᐤ, ᑲᔦ ᒦᓐ ᑳ ᐊᑕ ᓂᑑᒋᔅᒉᔨᐦᑌᐦᒃ ᐊᓂᔫᐦ ᐸᐦᑳᓐ ᑳ ᐃᐦᑎᑯᓂᔨᐤᐦ ᒉᒁᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᐤ᙮ ᓵᔅ ᒫᒃ ᓂᔅᑐ ᒉᒁᔫᐦ ᐁ ᓂᑐᐦᑯᔨᓅᔨᐤᐦ ᒌ ᐚᐱᐦᑕᒻ ᐁ ᐐᒋᐦᐄᐍᐸᔨᓂᔨᐤ ᐁᑳ ᒉ ᐃᔅᐱᔑ ᐅᔑᐦᐆᒪᑲᐦᒡ ᓲᑳᐤ ᐊᓂᑦ ᒥᔅᑯᓂᐦᒡ ᑲᔦ ᐁᑎᑑ ᒥᔅᑕᐦᐄ ᒉ ᒌ ᐅᐦᒋ ᑲᓄᐍᔨᐦᑖᑯᐦᒡ ᐊᓐ ᓲᑳᐤ ᑳ ᐅᔑᐦᐆᒪᑲᐦᒡ᙮

2 ᐅᐦᒋ ᐊᓂᔫᐦ 11 ᒉᒁᔫᐦ ᐁ ᓂᑐᐦᑯᔨᓅᔨᐤᐦ ᒌ ᑲᓄᐚᐱᐦᑕᒻ ᐋᐱᕐ ᐅᐦᒋ ᐊᓐ ᑳ ᐸᐦᑳᓂᐸᔨᐦᑖᑲᓄᐎᐦᒡ ᐊᓂᑦ ᐊᔨᑲᑖᔑᐦᒡ (ᐯᔮᒄ ᐊᓐ ᓈᔅᑏᔅ ᐅᔅᑳᐤ)᙮ ᐊᓐ ᓃᔅᑕᒻ ᓈᔅᑖᐧᐯ ᒎᐦᒋᔩᒪᑲᓐ ᐁ ᓂᑐᐦᑯᔨᓄᐎᐦᒡ᙮

ᐋᐱᕐ ᒌ ᐄᔑ ᐋᐦᒋᐦᑖᐤ ᐊᓂᔫ PhD ᑳ ᐃᔅᒁᑯᒋᓂᔨᐤᐦ ᐲᐦᒉᒪᑲᓂᐲᓯᒻ 2010᙮

ᓈᓐ ᓵᓐ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑌᐦᒃ ᐊᓂᔫ ᐁ ᐃᐦᑎᑯᓂᔨᐤ ᒉᒁᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᐤ ᐚᒋᓈᑲᓂᐦᒡ

ᐧᒣᐦᐤ ᒫᒃ ᐊᓐ ᑳᒋᒉᐸᒄ, ᐐᒋᐦᐄᐍᐸᔫ ᐚᒋᓈᑲᓐ ᒉ ᒌ ᐅᔑᐦᐆᒪᑲᐦᒡ ᐱᒦ ᐊᓂᑌ ᐲᐦᒋᔫ ᐁᒄ ᒫᒃ ᒉ ᒌ ᑲᓄᐍᔨᐦᑖᑯᐦᒡ ᐊᓐ ᐱᒦ ᐊᓂᑌ ᐲᐦᒋᔫ ᑲᔦ ᐁᐅᒄ ᐆ ᐁ ᐐᒋᐦᐄᐍᐸᔨᐦᒡ ᒉ ᒌ ᓃᒋᐸᔨᐦᒡ ᐁ ᔒᐚᑲᒥᐦᒁᓄᐎᐦ᙮ ᐁᔫᒄ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑌᐦᒃ ᓈᓐ ᒉᒁᔫ ᐊᓂᔫ ᐁ ᐃᐦᑎᑯᓂᔨᐤ ᐊᓂᑦ ᐚᒋᓈᑲᓂᐦᒡ ᐅᔫ ᐍᐦᒋ ᐃᔅᐸᔨᓂᔨᐤ᙮ ᓵᔅ ᒌ ᒥᔅᑲᒻ ᐸᔅᒡ ᐊᓂᔫᐦ ᐁ

ᐋᐱᕐ ᓈᔖᕐ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᐤᐦ ᐊᓂᑦ ᒑ ᐃᔅᐱᔑ ᐅᔑᐦᐆᒥᑭᐦᒡ ᓲᑳᐤ ᒥᔅᑯᓂᐦᒡ

ᐊᓐ ᑳᒦᓄᐚᑭᒥᐦᐄᒑᐱᔨᐤ ᑭᔦ ᐱᔅᒡ ᓂᑐᐦᑯᔨᓐᐦ ᐐᒋᐦᐄᐙᐱᔨᐤᐦ ᐋᑲ ᒑ ᐃᔅᐱᔑ ᐅᔑᐦᐆᒥᑭᐦᒡ ᓲᑳᐤ ᐊᓂᑦ ᒥᔅᑯᓂᐦᒡ, ᑭᔦ ᐊᑎᑑ ᒥᔅᑏ ᒑ ᒌ ᑭᓄᐚᔨᐦᑖᑯᐦᒡ ᓲᑳᐤ ᐊᓐ ᐋ ᒌ ᐅᔑᐦᐆᒥᑭᐦᒡ᙮ ᐋᐅᒄ ᒫᒃ ᐆ ᐋ ᐐᒋᐦᐄᐚᐱᔨᐤ ᓃᐦᑖᐦᒡ ᒑ ᒌ ᐃᔅᐱᔨᐤ ᓲᑳᐤ ᐊᓂᑦ ᒥᐦᑯᐦᒡ᙮ ᒥᔨᐚ ᐊᓂᔮᐦ 17 ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᓂᑑᒋᔅᒑᔨᐦᑎᒻ ᐋᐱᕐ ᐊᓂᔮ ᑖᐧᐸ ᒑ ᒌ ᐄᔑ ᐐᒋᐦᐄᐚᐱᔨᔨᔨᐤᐦ᙮ ᐄᔮᔅᑦ ᒫᐅᐤ ᒎᐦᒋᔩᒥᑭᓐ ᐋ ᑖᐦᑭᐦᐄᒑᐱᔨᐤ ᐊᓂᑦ ᒥᔅᑯᓂᐦᒡ, ᐋᔫᐎᒄ ᒫᒃ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐋᐱᕐ ᒑᒁᔨᐤ ᐊᓂᔮ ᐋ ᐃᐦᑎᑯᓂᔨᔨᐤ ᐊᓂᑦ ᐄᔮᔅᑎᐦᐤ ᐅᔮ ᐙᐦᒋ ᐃᔅᐱᔨᔨᔨᐤ᙮ ᒌ ᑎᐹᓂᐱᔨᐦᑖᐤ ᐊᓂᔮ ᒑᒁᔨᐤ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐤ, ᑭᔦ ᒦᓐ ᑳ ᐊᑎ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐊᓂᔮᐦ ᑎᐹᓐ ᑳ ᐃᐦᑎᑯᓂᔨᔨᐤᐦ ᒑᒁᔨᐤ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐤ᙮ ᓵᔅ ᒫᒃ ᓂᔅᑐ ᒑᒁᓂᐦᐄ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐤᐦ ᒌ ᐙᐱᐦᑎᒻ ᐋ ᐐᒋᐦᐄᐚᐱᔨᔨᔨᐤ ᐋᑲ ᒑ ᐃᔅᐱᔑ ᐅᔑᐦᐆᒥᑭᐦᒡ ᓲᑳᐤ ᐊᓂᑦ ᒥᔅᑯᓂᐦᒡ ᑭᔦ ᐊᑎᑑ ᒥᔅᑏ ᒑ ᒌ ᐅᐦᒋ ᑭᓄᐚᔨᐦᑖᑯᐦᒡ ᐊᓐ ᓲᑳᐤ ᑳ ᐅᔑᐦᐆᒥᑭᐦᒡ᙮

2 ᐅᐦᒋ ᐊᓂᔮᐦ 11 ᒑᒁᓂᐦᐄ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐤᐦ ᒌ ᑭᓄᐚᐱᐦᑎᒻ ᐋᐱᕐ ᐅᐦᒋ ᐊᓐ ᑳ ᑎᐹᓂᐱᔨᐦᑖᑭᓂᐎᐤ ᐊᓂᑦ ᐊᔨᑭᑖᔑᐦᒡ (ᐹᔨᒄ ᐊᓐ ᓈᔅᑏᔅ ᐅᔅᑳᐤ)᙮ ᐊᓐ ᓃᔅᑎᒻ ᓈᔅᑖᐧᐹ ᒎᐦᒋᔩᒥᑭᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐎᐤ᙮

ᐋᐱᕐ ᒌ ᐄᔑ ᐋᐦᒋᐦᑖᐤ ᐊᓂᔮ PhD ᑳ ᐃᔅᒁᑯᒋᓂᔨᐤᐦ ᒥᑯᔖᒌᔑᑭᓂᐲᓯᒼ 2010᙮

ᓈᓐ ᓵᓐ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐊᓂᔮ ᐋ ᐃᐦᑎᑯᓂᔨᐤ ᒑᒁᓂᐦᐄ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐤ ᐚᒋᓈᑭᓂᐦᒡ

ᐧᒫᐦᐤ ᒫᒃ ᐊᓐ ᑳᒋᒑᐱᒄ, ᐐᒋᐦᐄᐚᐱᔨᐤ ᐚᒋᓈᑭᓐ ᒑ ᒌ ᐅᔑᐦᐆᒥᑭᐦᒡ ᐱᒦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ ᐋᒄ ᒫᒃ ᒑ ᒌ ᑭᓄᐚᔨᐦᑖᑯᐦᒡ ᐊᓐ ᐱᒦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ ᑭᔦ ᐋᐅᒄ ᐆ ᐋ ᐐᒋᐦᐄᐚᐱᔨᐤ ᒑ ᒌ ᓃᒋᐱᔨᐤ ᐋ ᔒᐚᑭᒥᐦᒁᓂᐎᔨᐤ᙮ ᐋᔫᐎᒄ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᓈᓐ ᒑᒁᔨᐤ ᐊᓂᔮ ᐋ ᐃᐦᑎᑯᓂᔨᐤ ᐊᓂᑦ ᐚᒋᓈᑭᓂᐦᒡ ᐅᔮ ᐙᐦᒋ ᐃᔅᐱᔨᔨᔨᐤ᙮ ᓵᔅ ᒌ ᒥᔅᑭᒼ ᐱᔅᒡ ᐊᓂᔮᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐤᐦ

Abir Nachar's study of how the plants affect how much sugar the liver makes

Insulin and some other drugs help our livers to make less sugar, and store more of the sugar they do make. This lowers the amount of sugar that gets into the blood. Abir is screening all 17 Cree plants to see if they might do the same thing. Balsam fir seems to have strong effects on the liver, so Abir has been trying to find out which ingredients in balsam fir do this. She has been breaking the ingredients into smaller and smaller groups, and testing each group. She has found three ingredients that are very good at making liver cells produce less sugar and store more of it.

Abir has also been looking at 2 of the 11 ingredients that we separated out from pitcher plant (one of which is completely new). The first ingredient seems to have strong effects.

Abir transferred to the PhD program at the end of December 2010.

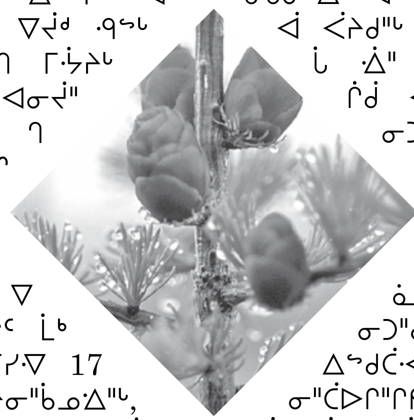
ᓂᑐᐦᑯᓯᓈᓯᒡᐦ ᒉᐧᑳᔩᐦ ᐅᐦᒋ ᐆ ᐌᐦᒋ ᐃᐢᐸᓯᐦᒡ, ᑲᔦ ᐯᔮᑦ ᐊᓐ ᓈᔅᑌᔅ ᐁ ᐅᔅᑳᒡ ᒉᐧᑳᓐ ᐁ ᓂᑐᐦᑯᓯᓈᐧᐄᐦᒡ᙮ ᒥᑦ ᒫᒃ ᐁᔦᐧᐄᑦ ᑳ ᐄᔑ ᐧᐋᐱᐦᑌᐦᒃ ᐁᑎᑑ ᐁ ᒥᔦᐸᓯᐦᒡ ᐁ ᓂᑐᐦᑯᓯᓈᐧᐄᐦᒡ ᐁᑳ ᐸᐦᑳᓐ ᐁ ᐃᐦᑎᑯᐦᐧᑳᐤᐦ ᐊᓂᔩᐦ ᒉᐧᑳᔩᐦ ᐁ ᓂᑐᐦᑯᓯᓈᐦᐧᑳᐤᐦ, ᐃᔅᐱᔑ ᐧᐄ ᒥᑦ ᐊᓐ ᐁ ᐯᔮᑯᐦᒡ ᒉᐧᑳᓐ ᐁ ᓂᑐᐦᑯᓯᓈᐧᐄᐦᒡ᙮ ᐁᔦᐧᐄᑦ ᐧᑫᔅᒡ ᒉ ᐧᐄᐦ ᒋᐢᒉᓯᐦᑌᐦᒃ ᐊᓂᔩ ᐧᒫᐅᒡ ᒉ ᒥᐧᔫᓯᒡ ᒌᑰ ᐁ ᐄᔑ ᐋᐸᑎᓲᒪᑲᓂᓯᒡᐦ ᐊᓂᔩᐦ ᐁ ᓂᑐᐦᑯᓯᓈᓯᒡᐦ ᒉᐧᑳᔩᐦ, ᐁᑦ ᒫᒃ ᒉ ᒪᓯᓇᐦᐊᐦᒃ ᒪᓯᓇᐦᐄᑲᓂᔩ ᐊᓂᔩ ᑳ ᐄᔑ ᓂᑑᒋᐢᒉᓯᐦᑌᐦᒃ᙮

ᐊᓂᔩ ᒦᓐ ᑳ ᐄᔑ ᓂᑑᒋᐢᒉᓯᐦᑌᐦᒃ ᓈᓐ, ᐁᔦᐧᐄᑦ ᐊᓂᔩ ᑳ ᑎᐱᐦᑕᑖᑦ ᐁ ᓂᑐᐦᑯᓯᓂᐦᑳᓇᐧᐄᐦᒡ ᐊᓂᑦ ᓂᐲᐦᒡ ᓅᔅᑦ ᒫᒃ ᐃᔅᑯᑌᐧᐋᐆᐦᒡ᙮ ᒋᑳ ᑯᒋᐦᑖᐤ ᐊᓂᔩᐦ ᒥᓯᐧᐁ 17 ᓂᐦᒌᐅᒋᐦᒋᑲᓐᐦ ᓃᓱᓯᒡ ᐁ ᐄᔑ ᓂᑐᐦᑯᓯᓂᐦᑳᓇᐧᐄᐦᒡ, ᑲᔦ ᒉ ᓂᑑᒋᐢᒉᓯᐦᑌᐦᒃ ᑖᐧᐯ ᐋᐦᒌᐤᐦ ᐁ ᐄᔑ ᓂᑐᐦᑯᓯᓈᐦᐧᑳᐤᐦ ᐊᓐ ᐯᔮᑯᓯᒡ ᓂᐦᒌᐅᐦᐃᒋᑲᓐ ᓃᓱᓯᒡ ᐁ ᐄᔑ ᑏᐧᔮᐳᐦᑳᓇᐧᐄᐦᒡ:

- ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᓯᐦᒡ ᐊᓐ ᒉ ᒌ ᑲᓇᐧᐁᓯᐦᑖᑯᐦᒡ “ᑳ ᒥᐧᔫᒡ” ᐱᒦ ᐊᓂᑌ ᐲᐦᒋᔩ
- ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᓯᐦᒡ ᒉ ᒌ ᐲᐦᑌᐸᓯᐦᒡ ᓲᑳᐤ ᐊᓂᑌ ᐧᐄᔮᓂᐦᒡ
- ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᓯᐦᒡ ᐁᑳ ᒉ ᐃᔅᐱᔑ ᐅᔑᐦᐆᒪᑲᐦᒡ ᓲᑳᐤ ᐊᓂᑦ ᒥᐢᑯᓂᐦᒡ ᓅᔅᑦ ᒫᒃ ᐁᑎᑑ ᒥᔅᑕᐦᐄ ᒉ ᒌ ᑲᓇᐧᐁᓯᐦᑖᑯᐦᒡ ᓲᑳᐤ ᐊᓂᑦ ᒥᐢᑯᓂᐦᒡ᙮

ᑖᓂᔦᒼ ᐢᐴᑉ ᑳ ᐋᐸᑎᓲᐦᑲᐦᑌᐦᒃ ᐊᓂᔩᐦ ᐁ ᑎᐱᒋᔅᐧᑫᑦ ᐊᓂᔩ ᒉ ᒌ ᓂᓯᑐᐦᑖᑲᓇᐧᐄᐦᒡ ᐊᓐ ᒥᓯᐧᐁ ᒉᐧᑳᓐ ᓵᔅ ᑳ ᐄᔑ ᐧᐋᐱᐦᑌᐦᑲᓇᐧᐄᐦᒡ

ᓵᔅ ᒌ ᒫᒨᓇᒻ ᑖᓂᔦᒼ ᐊᓂᔩ ᑳ ᐄᔑ ᒥᐢᑫᐦᒃ ᐊᓂᔩ ᒥᓯᐧᐁ ᑳ ᐄᔑ ᓂᑑᒋᐢᒉᓯᐦᑌᐦᑲᓈᐦᐧᑳᐤᐦ ᓂᐦᒌᐅᒋᐦᒋᑲᓐᐦ ᒉ ᐅᐦᒋ ᒫᔑᐦᑖᑲᓇᐧᐄᐦᒡ ᐁ ᔑᐧᐋᑲᒥᐦᐧᑳᓇᐧᐄᐦᒡ, ᑲᔦ ᒥᓯᐧᐁ ᒪᓯᓇᐦᐊᒻ ᐊᓂᑦ ᑳ ᒪᓯᓇᐧᐋᔅᑌᓯᓇᐦᐄᒐᐸᓯᓂᓯᒡ᙮ ᐋᒧᐃ ᑰᓇᔦᐃ ᐧᐄᒋᐦᐄᑰ, ᐁᔦᐧᐄᑦ ᒫᒃ ᐊᒋᔅᑖᓯᓐ ᐁ



ᒑᐧᑳᓂᐦᐄ ᐅᐦᒋ ᐆ ᐧᐋᐦᒋ ᐃᐢᐱᓯᒡ, ᑮᔮ ᐹᓯᑦ ᐊᓐ ᓈᔅᑌᔅ ᐋ ᐅᔅᑳᒡ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᓯᓂᐧᐃᒡ᙮ ᒥᑦ ᒫᒃ ᐋᔦᐧᐃᑦ ᑳ ᐄᔑ ᐧᐋᐱᐦᑎᕼ ᐊᑎᑑ ᐋ ᒥᔦᐱᓯᒡ ᐋ ᓂᑐᐦᑯᓯᓂᐧᐃᒡ ᐋᑳ ᑎᐹᓐ ᐋ ᐃᐦᑎᑯᐦᒡᐦ ᐊᓂᔮᐦ ᒑᐧᑳᓂᐦᐄ ᐋ ᓂᑐᐦᑯᓯᓂᐧᐃᒡᐦ, ᐃᔅᐱᔑ ᐧᐄ ᒥᑦ ᐊᓐ ᐋ ᐹᓯᑯᐦᒡ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᓯᓂᐧᐃᒡ᙮ ᐋᔦᐧᐃᑦ ᐧᑳᔅᒡ ᒑ ᐧᐄᐦ ᒋᐢᒑᓯᐦᑎᕼ ᐊᓂᔮ ᒫᐅᒡ ᒑ ᒥᐧᔮᓯᒡ ᒌᑰ ᐋ ᐄᔑ ᐋᐱᑎᓲᒥᑭᓂᓯᒡᐦ ᐊᓂᔮᐦ ᐋ ᓂᑐᐦᑯᓯᓂᐧᐃᓯᒡᐦ ᒑᐧᑳᓂᐦᐄ, ᐋᑦ ᒥᒃ ᒑ ᒥᓯᓂᐦᐊᕼ ᒥᓯᓂᐦᐄᑭᓂᓯᐤ ᐊᓂᔮ ᑳ ᐄᔑ ᓂᑑᒋᐢᒑᓯᐦᑎᕼ᙮

ᐊᓂᔮ ᒦᓐ ᑳ ᐄᔑ ᓂᑑᒋᐢᒑᓯᐦᑎᕼ ᓈᓐ, ᐋᔦᐧᐃᑦ ᐊᓂᔮ ᑳ ᑎᐱᐦᑎᑖᑦ ᐋ ᓂᑐᐦᑯᓯᓂᐦᒑᓂᐧᐃᒡ ᐊᓂᑦ ᓂᐲᐦᒡ ᑮᔮ ᒫᒃ ᐃᔅᑯᑖᐧᐋᐆᐦᒡ᙮ ᒋᑭ ᑯᒋᐦᑖᐤ ᐊᓂᔮᐦ ᒥᓯᐧᐋ 17 ᓂᐦᒌᐅᒋᐦᒋᑭᓐᐦ ᓃᓱᓯᒡ ᐋ ᐄᔑ ᓂᑐᐦᑯᓯᓂᐦᑳᓂᐧᐃᒡ, ᑮᔮ ᒑ ᓂᑑᒋᐢᒑᓯᐦᑎᕼ ᑖᐧᐸ ᐊᓯᐦᒡ ᐋ ᐄᔑ ᓂᑐᐦᑯᓯᓂᐧᐃᒡᐦ ᐊᓐ ᐹᓯᑯᓯᒡ ᓂᐦᒌᐅᐦᐃᒋᑭᓐ ᓃᓱᓯᒡ ᐋ ᐄᔑ ᑏᐧᔮᐳᐦᒑᓂᐧᐃᒡ:

- ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᓯᒡ ᐊᓐ ᒑ ᒌ ᑭᓇᐧᐋᓯᐦᑖᑯᐦᒡ “ᑳ ᒥᐧᔫᒡ” ᐱᒦ ᐊᓂᑖ ᐲᐦᒋᓯᐤ
- ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᓯᒡ ᒑ ᒌ ᐲᐦᑖᐱᓯᒡ ᓲᑳᐤ ᐊᓂᑖ ᐅᓵᐲᐅᑖᓂᐦᒡ
- ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᓯᒡ ᐋᑳ ᒑ ᐃᔅᐱᔑ ᐅᔑᐦᐆᒥᑭᐦᒡ ᓲᑳᐤ ᐊᓂᑦ ᒥᐢᑯᓂᐦᒡ ᑮᔮ ᒫᒃ ᐊᑎᑑ ᒥᐢᑏ ᒑ ᒌ ᑭᓇᐧᐋᓯᐦᑖᑯᐦᒡ ᓲᑳᐤ ᐊᓂᑦ ᒥᐢᑯᓂᐦᒡ᙮

ᑖᓂᔦᒼ ᐢᐴᑉ ᑳ ᐋᐱᑎᔑᔅᑎᕼ ᐊᓂᔮᐦ ᐋ ᑎᐱᒋᔅᐧᑳᑦ ᐊᓂᔮ ᒑ ᒌ ᓂᔅᑐᐦᑖᑭᓂᐧᐃᒡ ᐊᓐ ᒥᓯᐧᐋ ᒑᐧᑳᓐ ᓵᔅ ᑳ ᐄᔑ ᐧᐋᐱᐦᑖᐦᑭᓂᐧᐃᒡ

ᓵᔅ ᒌ ᒫᒨᓂᒻ ᑖᓂᔦᒼ ᐊᓂᔮ ᑳ ᐄᔑ ᒥᐢᑳᐦᒃ ᐊᓂᔮ ᒥᓯᐧᐋ ᑳ ᐄᔑ ᓂᑑᒋᐢᒑᓯᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᒌᐅᒋᐦᒋᑭᓐᐦ ᒑ ᐅᐦᒋ ᒫᔑᐦᑖᑭᓂᐧᐃᒡ ᐋ ᔑᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ, ᑮᔮ ᒥᓯᐧᐋ ᒥᓯᓂᐦᐊᒻ ᐊᓂᑦ ᑳ ᒥᓯᓂᐧᐋᔅᑖᓯᓂᐦᐄᒋᐱᔮᔮᒡ᙮ ᐋᒧᐃ ᑰᓇᔦᐃ ᐧᐄᒋᐦᐄᑰ, ᐋᔦᐧᐃᑦ ᒫᒃ ᐊᒋᔅᑖᓯᓐ ᐋ ᑭᓇᐧᐋᐱᐦᑎᕼ ᒑ ᒌ ᐅᐦᒋ ᒋᔅᒑᓯᐦᑎᕼ ᑖᐧᐸ ᐋ

Nan Shang's study of the ingredients in tamarack

Like Labrador tea, tamarack seems to help fat cells to reproduce and to store fats that actually help with diabetes. So Nan has been trying to find out which ingredients in tamarack produce this effect. She has found a few of the ingredients responsible, one of which is completely new. However, her tests suggest that you get more effect from several of the ingredients acting together than you do from any one ingredient alone. Next, she will try to identify the best combinations, and then write an article about her study.

Another part of Nan's project is to compare what happens when you dissolve the plants in water or in ethanol. She will be trying all 17 plants both ways, and testing if it makes a difference to how well the plants:

- make fat cells store the "good" fats
- help muscle cells to take in sugar
- help the liver to make less sugar or store more of it

ᑲᓇᐧᐋᐱᐦᑌᐦᒃ ᑫ ᒌ ᐅᐦᒋ ᒋᔅᑫᔨᐦᑌᐦᒃ ᑖᐧᐯ ᐁ ᐃᐦᑎᑯᓂᔨᒡ ᑫᐧᑳᔫ ᒫᒨ ᐁ ᐅᐦᒋ ᐋᐸᑎᓰᒪᑲᓂᔨᒡ᙮ ᐁᐅᒄ ᒫᔥᑯᒡ ᑫ ᒌ ᐃᔑᓈᑯᐦᒡ ᑫ ᒌ ᒥᔅᑲᒫᐦᒡ ᑫᐧᑳᓐ ᐁᑳ ᐅᐦᒋ ᐃᑌᔨᐦᑕᒫᐦᒡ ᓀᔥᑦ ᒫᒃ ᒋᔐᐄᓈᒡ ᐅᒋᔅᑫᔨᐦᑕᒧᐧᐃᓂᐧᐋᐤ, ᑖᓐ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓇᐧᐃᐦᒡ ᓂᐦᑖᐅᒥᐦᒋᑲᓐ, ᑲᔦ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᓂᐦᑖᐅᒥᐦᒋᑲᓐ—ᑖᐱᔥᑯᓐ ᐊᓂᑦ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓇᐧᐃᐦᒡ ᑲᔦ ᐊᓂᑦ ᐁ ᐄᔑ ᐅᔥᑖᐸᔨᐦᐄᐧᐁᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓇᐧᐃᐦᒡ᙮ ᒫᔥᑯᒡ ᒋᑳ ᒌ ᐃᔑᓈᑯᓐ ᐁ ᐅᔥᑳᒡ ᑫᐧᑳᓐ ᐁ ᐃᑌᔨᐦᑖᑲᓇᐧᐃᐦᒡ ᑫ ᒌ ᐅᐦᒋᐸᔨᐦᒡ ᑲᔦ ᐊᓐ ᑫᐧᑳᓐ ᐧᐁᐦᒋ ᐃᔑᓈᑯᐦᒡ ᐁᑎᑑ ᐁ ᒥᔪᐸᔨᐦᐧᑳᐤᐦ ᑯᑕᒃᐦ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ᙮ ᐆ ᒫᒃ ᐁ ᐄᔑ ᐧᐋᐧᐋᐱᐦᑌᑲᓇᐧᐃᐦᒡ, ᐁᑯᑦ ᑫ ᐅᐦᒋ ᒋᔅᑫᔨᐦᑌᑲᓇᐧᐃᐦᒡ ᑫᒄ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ ᒫᐅᒡ ᐁ ᒎᐦᒋᓯᒪᑲᒡᐦ ᐁ ᓂᑐᐦᑯᔨᓈᐦᐧᑳᐤᐦ᙮

ᔖᕐᓓᑦ ᐧᑳᐅᑎᔦᐃ-ᓯᒫᕐ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᒃ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᑦ ᐁ ᒨᔥᑖᑲᓇᐧᐃᐦᒡ ᐁ ᔒᐧᐁᔨᓇᐧᐃᐦᒡ

ᐊᓐ ᐱᒦ ᐁ ᐃᐦᑎᑯᐦᒡ ᐲᐦᒋᔫ, ᐁᑯᑦ ᐧᐁᐦᒋ ᐧᐄᐦᑖᒫᐦᑫᒪᑲᐦᒡ ᐊᓐ ᐁ ᒌᔥᐳᔨᐦᑯ ᑲᔦ ᑖᓂᑌ ᑫ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᑳᒦᓇᐧᐋᑲᒥᐦᐄᑫᐸᔨᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ (ᐊᓐ ᐁ ᐅᐦᒋ ᐧᐄᐦᑖᒫᑫᒪᑲᐦᒡ, ᐁᐅᒄ ᐊᓐ ᓀᐸᑎᓐ Leptin ᑲᔦ ᐋᑎᐧᐹᓀᒃᐃᓐ Adiponectin ᐁ ᐃᔑᓂᐦᑲᑌᐦᐧᑳᐤᐦ᙮) ᐊᓂᔫ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑌᐦᒃ ᔖᕐᓓᑦ, ᐁᔫᒄ ᒥᓯᐧᐁ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᒃ ᐊᓂᔫᐦ 17 ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ ᑖᐧᐯ ᑫ ᒌ ᐅᐦᒋ ᐅᔑᐦᐆᒪᑲᐦᒡ ᐊᓐ ᐁ ᐅᐦᒋ ᐧᐄᐦᑖᒫᑫᒪᑲᐦᒡ ᑫᐧᑳᓐ ᐅᐦᒋ ᐊᓂᑦ ᐱᒦ ᐁ ᐅᐦᒋᐸᔨᐦᒡ, ᓀᔥᑦ ᒫᒃ ᐁᑳ ᑫ ᐃᔥᐱᔑ ᒥᐦᑫᑎᓂᐦᐧᑳᐤᐦ᙮ ᒥᒄ ᒫᒃ ᓇᒧᐃ ᐅᐦᒋ ᒥᔪᐸᔫ ᐆ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑌᑲᓇᐧᐃᐦᒡ, ᓇᒧᐃ ᒫᒃ ᑫᐧᑳᓐ ᓂᐅᐦᒋ ᒋᔅᑯᑕᒫᑯᓈᓐ ᑫᐧᑳᓐ ᐅᐦᒋ ᐊᓐ ᐁ ᐅᐦᒋ ᐧᐄᐦᑖᒫᑫᒪᑲᐦᒡ ᑫᐧᑳᓐ ᑫ ᐃᔥᐱᔑ ᒦᒋᓯᓈᓇᐧᐃᐦᒡ᙮ ᒥᒄ ᒫᒃ ᓂᒌ ᒋᔅᑯᑕᒫᑯᓈᓐ ᐊᓐ ᐯᔭᒄ ᑫᐧᑳᓐ ᐁ ᐃᔅᐸᔨᐦᒡ ᐅᐦᒋ ᐊᓐ ᑫ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᑳᒦᓇᐧᐋᑲᒥᐦᐄᑫᐸᔨᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐊᓂᔫᐦ ᒫᒃ 17 ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ, ᐊᓐ ᐄᓈᔥᑦ ᑲᔦ ᒥᓇᐦᐄᒄ ᒌ ᑖᐦᑲᐦᐄᑫᐸᔫᐦ ᐅᐦᒋ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᐧᐄᐦᑖᒫᑫᒪᑲᐦᒡ ᑫ ᐃᔅᐸᔨᐦᒡ ᐊᓐ ᑳᒦᓇᐧᐋᑲᒥᐦᐄᑫᐸᔨᐦᒡ᙮

ᐃᐦᑎᑯᓂᔨᒡ ᒑᐧᑳᔨᐤ ᒫᒨ ᐋ ᐅᐦᒋ ᐋᐱᑎᓰᒥᑭᓂᔨᒡ᙮ ᐋᐅᒄ ᐧᑳᐧᔖᓐ ᒐ ᒌ ᐃᔑᓈᑯᐦᒡ ᒐ ᒌ ᒥᔅᑭᒫᐦᒡ ᒑᐧᑳᓐ ᐋᑳ ᐅᐦᒋ ᐃᑖᔨᐦᑎᒫᐦᒡ ᑭᔮ ᒫᒃ ᒋᔖᔨᔨᐅᒡ ᐅᒋᔅᒑᔨᐦᑎᒧᐧᐃᓂᐧᐋᐤ, ᑖᓐ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᓂᐦᑖᐅᒥᐦᒋᑭᓐ, ᑭᔮ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᓂᐦᑖᐅᒥᐦᒋᑭᓐ—ᑖᐱᔥᑯᓐ ᐊᓂᑦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ ᑭᔮ ᐊᓂᑦ ᐋ ᐄᔑ ᐅᔥᑖᐱᔨᐦᐄᐧᐋᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ᙮ ᐧᑳᐧᔖᓐ ᒋᑭ ᒌ ᐃᔑᓈᑯᓐ ᐋ ᐅᔥᑳᒡ ᒑᐧᑳᓐ ᐋ ᐃᑖᔨᐦᑖᑭᓂᐧᐃᒡ ᒐ ᒌ ᐅᐦᒋᐱᔨᒡ ᑭᔮ ᐊᓐ ᒑᐧᑳᓐ ᐧᐋᐦᒋ ᐃᔑᓈᑯᐦᒡ ᐊᑎᑑ ᐋ ᒥᔪᐱᔨᒡᐦ ᑯᑎᒃᐦ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ᙮ ᐆ ᒫᒃ ᐋ ᐄᔑ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡ, ᐋᑯᑦ ᒐ ᐅᐦᒋ ᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᒐᒄ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ ᒫᐅᒡ ᐋ ᒎᐦᒋᓯᒥᑭᒡᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡᐦ᙮

ᔖᕐᓓᑦ ᐧᑳᐅᑎᔮᐃ-ᓰᒫᕐ ᑳ ᓂᑑᒋᔅᒐᔨᐦᑎᐦᒃ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒐᐱᔨᒡᐦ ᐊᓂᑦ ᐋ ᒨᔥᑖᑭᓂᐧᐃᒡ ᐋ ᔒᐧᐋᔨᓂᐧᐃᒡ

ᐊᓐ ᐱᒦ ᐋ ᐃᐦᑎᑯᐦᒡ ᐲᐦᒋᔨᐤ, ᐋᑯᑦ ᐧᐋᐦᒋ ᐧᐄᐦᑎᒫᐦᒑᒥᑭᐦᒡ ᐊᓐ ᐋ ᒌᔥᐳᔨᐦᑯ ᑭᔮ ᑖᓂᑖ ᒐ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᑳᒦᓇᐧᐋᑭᒥᐦᐄᒐᐱᔨᒡ ᐊᓂᑖ ᐲᐦᒋᔨᐤ᙮ (ᐊᓐ ᐋ ᐅᐦᒋ ᐧᐄᐦᑎᒫᒑᒥᑭᐦᒡ, ᐋᐅᒄ ᐊᓐ ᓀᐸᑎᓐ Leptin ᑭᔮ ᐋᑎᐧᐹᓀᒃᐃᓐ Adiponectin ᐋ ᐃᔑᓂᐦᑲᑖᐦᒡ᙮) ᐊᓂᔮ ᑳ ᐋᐱᑎᔒᔥᑎᐦᒃ ᔖᕐᓓᑦ, ᐋᔫᐧᐃᒄ ᒥᓯᐧᐋ ᑳ ᓂᑑᒋᔅᒐᔨᐦᑎᐦᒃ ᐊᓂᔮᐦ 17 ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ ᑖᐧᐸ ᒐ ᒌ ᐅᐦᒋ ᐅᔑᐦᐆᒥᑭᐦᒡ ᐊᓐ ᐋ ᐅᐦᒋ ᐧᐄᐦᑎᒫᒑᒥᑭᐦᒡ ᒑᐧᑳᓐ ᐅᐦᒋ ᐊᓂᑦ ᐱᒦ ᐋ ᐅᐦᒋᐱᔨᒡ, ᑭᔮ ᒫᒃ ᐋᑳ ᒐ ᐃᔥᐱᔑ ᒥᐦᒑᒡᐦ᙮ ᒥᒄ ᒫᒃ ᓂᒧᔨ ᐅᐦᒋ ᒥᔪᐱᔨᐤ ᐆ ᑳ ᐄᔑ ᓂᑑᒋᔅᒐᔨᐦᒑᑭᓂᐧᐃᒡ, ᓂᒧᔨ ᒫᒃ ᒑᐧᑳᓐ ᓂᐅᐦᒋ ᒋᔅᑯᑎᒫᑯᓈᓐ ᒑᐧᑳᓐ ᐅᐦᒋ ᐊᓐ ᐋ ᐅᐦᒋ ᐧᐄᐦᑎᒫᒑᒥᑭᐦᒡ ᒑᐧᑳᓐ ᒐ ᐃᔥᐱᔑ ᒦᒋᓯᓈᓂᐧᐃᒡ᙮ ᒥᒄ ᒫᒃ ᓂᒌ ᒋᔅᑯᑎᒫᑯᓈᓐ ᐊᓐ ᐹᔨᒄ ᒑᐧᑳᓐ ᐋ ᐃᔅᐱᔨᒡ ᐅᐦᒋ ᐊᓐ ᒐ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᑳᒦᓇᐧᐋᑭᒥᐦᐄᒐᐱᔨᒡ ᐊᓂᑖ ᐲᐦᒋᔨᐤ᙮ ᐊᓂᐦᐄ ᒫᒃ 17 ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ, ᐊᓐ ᐄᔮᔥᑦ ᑭᔮ ᒥᓂᐦᐄᒄ ᒌ ᑖᐦᑭᐦᐄᒐᐱᔨᐤᐦ ᐅᐦᒋ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᐧᐄᐦᑎᒫᒑᒥᑭᐦᒡ ᒐ ᐃᔅᐱᔨᒡ ᐊᓐ ᑳᒦᓇᐧᐋᑭᒥᐦᐄᒐᐱᔨᒡ᙮

Danielle Spoor's project on using math to understand all the results so far

Danielle has collected the results from all the studies the Anti-diabetic Plant Project has done, and put them into a large computer table. With help from Alain Cuerrier, she is using math to look for links between the different pieces. For instance, we might find links we hadn't thought of between the Elders' knowledge, the ingredients in the plants, and the plants' effects—both on diabetes itself and on the complications of diabetes. This may lead to new ideas about how and why certain plants work better than others. We also think this analysis will confirm our impressions about which of the plants have the strongest effects.

Charlotte Gauthier-Simard's study of how the plants affect hunger signals

The fat tissue in our bodies creates chemical messengers that play a role in telling us when we are full and also affect how our bodies handle insulin. (These messengers are called Leptin and Adiponectin.) Charlotte's project was to test all 17 plants to see if they make fat cells in the lab produce

ᒦᔑᐨ ᑫ̇ᐱᓐᔅᑮ ᑳ ᓂᔫᒋᔅᑫᔨᐦᑌᐦᒃ ᐊᓂᔫ ᐁ ᐃᔥᐱᔑ ᔫᐦᒋᔫᒪᑲᓂᔨᒡ ᐁ ᓂᑐᐦᑯᔨᓅᔨᒡ ᑳᒋᑫᐸᑯᔫ ᑲᔦ ᐊᔨᑲᑖᔑᔫ ᐊᓂᑌ ᐍᑖᒡ ᒌᐍᑎᓂᐦᒡ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᐦᒡ

ᐊᓐ ᐅᑖᐦᒡ ᑳ ᐄᔑ ᓂᔫᒋᔅᑫᔨᐦᑖᑲᓇᐧᐃᐦᒡ, ᐁᐅᒄ ᑳ ᓅᑯᐦᒡ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐁᑎᑑ ᒌᐍᑎᓂᐦᒡ ᐁ ᓂᐦᑖᐅᒋᐦᒡ, ᐁᐅᒄ ᐁᑎᑑ ᑳ ᓂᑐᐦᑯᔨᓇᐧᐃᐦᒡ᙮ ᐁᐅᒄ ᒫᔥᑯᒡ ᐍᐦᒋ ᐃᔅᐸᔨᐦᒡ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐁ ᐐᐦ ᐐᒋᐦᐄᓱᒪᑲᐦᒡ ᑫ ᒌ ᒥᔫᓂᐦᑖᐅᒋᐦᒡ ᐊᓐ ᓈᔥᒡ ᒥᔥᑕᐦᐄ ᐁ ᓅᑯᓯᑦ ᐲᓯᒻ, ᐍᔥ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᓂᐦᑖᐅᒋᐦᒡ ᐊᓂᑌ ᒋᓀᐅᔥ ᐁ ᐚᔥᑖᒡ, ᐁᐅᒄ ᒥᔥᑕᐦᐄ ᐍᐦᒋ ᐅᔑᐦᐆᒪᑲᐦᒡ ᐊᓐ ᑫᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓇᐧᐃᐦᒡ᙮ ᒌ ᐐᐦ ᐚᐱᐦᑕᒻ ᒦᔑᐨ ᐊᓂᔫ ᑖᐧᐯ ᑫ ᐃᔑᓅᑯᓂᔨᒡ ᑳᒋᑫᐸᑯᔫ ᑲᔦ ᐊᔨᑲᑖᔑᔫ ᐁᑎᑑ ᑫ ᓂᑐᐦᑯᔨᓅᔨᒡ ᐅᐦᒋ ᐊᓐ ᐁᑎᑑ ᒌᐍᑎᓂᐦᒡ ᐁ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᐁᔫᒄ ᑳ ᒫᐅᐦᑐᓇᐦᒃ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᓂᔫᔨᓐ ᐄᓅ ᐃᐦᑖᐧᐃᓐᐦ᙮ ᓵᔥ ᒫᒃ ᒌ ᐚᐱᐦᑕᒻ ᐊᓂᔫ ᐁ ᐃᔥᐱᔑ ᓂᑐᐦᑯᔨᓅᔨᐦᒡ᙮ ᐁᐅᒄ ᒫᒃ ᑖᐧᐯ ᐁ ᐃᔑᓅᑯᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐋᐦᒌᐤᐦ ᐁ ᐃᔥᐱᔑ ᓂᑐᐦᑯᔨᓇᐧᐃᐦᒡ ᐅᐦᒋ ᐊᓂᑦ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᐦᒡ, ᒥᒄ ᒫᒃ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁᑎᑑ ᒌᐍᑎᓂᐦᒡ ᑳ ᓂᐦᑖᐅᒋᐦᑳᐧᐤᐦ, ᓇᒧᐃ ᒨᔥ ᐃᔑᓈᑯᓐ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᑫ ᐃᐦᑎᑯᐦᒡ ᐊᓐ ᑫᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓇᐧᐃᐦᒡ᙮ ᐁᔫᒄ ᓵᔥ ᐁ ᓂᔫᒋᔅᑫᔨᐦᑌᐦᒃ ᒦᔑᐨ ᐊᓂᔫ ᐋᐦᒌᐤᐦ ᑫ ᒌ ᐄᔑ ᔫᐦᒋᔫᒪᑲᓂᔨᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᒡ ᐅᐦᒋ ᐊᓂᑦ ᐋᐦᒌᐤᐦ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᐦᒡ᙮

ᒦᔑᐨ ᑫ̇ᐱᓐᔅᑮ ᑳ ᓂᔫᒋᔅᑳᔨᐦᑎᐦᒃ ᐊᓂᔮ ᐋ ᐃᔥᐱᔑ ᔫᐦᒋᔫᒥᑭᓂᔨᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᑳᒋᑳᐱᑯᔨᐤ ᑭᔮ ᐊᔨᑭᑖᔑᔨᐤ ᐊᓂᑖ ᓈᓈᒥᒌᒻ ᒌᐙᑎᓂᐦᒡ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᐦᒡ

ᐊᓐ ᐅᑖᐦᒡ ᑳ ᐄᔑ ᓂᔫᒋᔅᑳᔨᐦᑖᑭᓂᐧᐃᒡ, ᐋᐅᒄ ᑳ ᓅᑯᐦᒡ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐊᑎᑑ ᒌᐙᑎᓂᐦᒡ ᐋ ᓂᐦᑖᐅᒋᐦᒡ, ᐋᐅᒄ ᐊᑎᑑ ᑳ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ᙮ ᐋᐅᒄ ᑳᐧᓵᓐ ᐙᐦᒋ ᐃᔅᐱᔨᐦᒡ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐋ ᐐᐦ ᐐᒋᐦᐄᓱᒥᑭᐦᒡ ᒑ ᒌ ᒥᔫᓂᐦᑖᐅᒋᐦᒡ ᐊᓐ ᓈᔥᒡ ᒥᔥᑏ ᐋ ᓅᑯᓯᑦ ᐲᓯᒧ, ᐙᔥ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᓂᐦᑖᐅᒋᐦᒡ ᐊᓂᑖ ᓈᐅᔥ ᐋ ᐚᔥᑖᒡ, ᐋᐅᒄ ᒥᔥᑏ ᐙᐦᒋ ᐅᔑᐦᐆᒥᑭᐦᒡ ᐊᓐ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ᙮ ᒌ ᐐᐦ ᐚᐱᐦᑎᒻ ᒦᔑᐨ ᐊᓂᔮ ᑖᐧᐹ ᒑ ᐃᔑᓈᑯᓂᔨᒡ ᑳᒋᑳᐱᑯᔨᐤ ᑭᔮ ᐊᔨᑭᑖᔑᔨᐤ ᐊᑎᑑ ᒑ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᐅᐦᒋ ᐊᓐ ᐊᑎᑑ ᒌᐙᑎᓂᐦᒡ ᐋ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᐋᔫᐧᐃᒄ ᑳ ᒫᐅᐦᑐᓂᐦᒃ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᓂᔮᔨᓐ ᐄᔨᔨᐤ ᐃᐦᑖᐧᐃᓐᐦ᙮ ᓵᔥ ᒫᒃ ᒌ ᐚᐱᐦᑎᒻ ᐊᓂᔮ ᐋ ᐃᔥᐱᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡᐦ᙮ ᐋᐅᒄ ᒫᒃ ᑖᐧᐹ ᐋ ᐃᔑᓈᑯᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐊᔨᐦᒡ ᐋ ᐃᔥᐱᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐅᐦᒋ ᐊᓂᑦ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᐦᒡ, ᒥᒄ ᒫᒃ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᑎᑑ ᒌᐙᑎᓂᐦᒡ ᑳ ᓂᐦᑖᐅᒋᐦᒡᐦ, ᓂᒧᔨ ᒨᔥ ᐃᔑᓈᑯᓐ ᐊᑎᑑ ᒥᔥᑏ ᒑ ᐃᐦᑎᑯᐦᒡ ᐊᓐ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ᙮ ᐋᔫᐧᐃᒄ ᓵᔥ ᐋ ᓂᔫᒋᔅᑳᔨᐦᑎᐦᒃ ᒦᔑᐨ ᐊᓂᔮ ᐊᔨᐦᒡ ᒑ ᒌ ᐄᔑ ᔫᐦᒋᔫᒥᑭᓂᔨᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔨᐤ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᐅᐦᒋ ᐊᓂᑦ ᐊᔨᐦᒡ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᐦᒡ᙮

more of these messengers, or fewer. Unfortunately, there were some problems with the tests, so we did not learn about the messenger that controls appetite. However, we did learn about the one that affects how our bodies handle insulin. Of the 17 plants, balsam fir and white spruce seem to have the most effect on this messenger.

MICHEL RAPINSKI'S STUDY OF HOW LATITUDE AFFECTS THE INGREDIENTS AND STRENGTH OF LABRADOR TEA AND PITCHER PLANT

Past studies have found that plants that grow further north often have more healing effect. This may be because plants produce ingredients to help them withstand strong light, and plants that grow in the long northern days make a lot of these ingredients. Michel wanted to see if Labrador tea and pitcher plants had more of certain ingredients, and stronger effects, depending on how far north they grew. He collected samples of these plants from around five

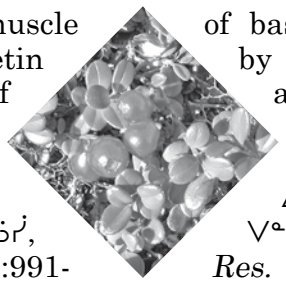
ᐁ ᑎᐸᑐᑌᖏᑲᐤ ᒪᓯᓇᐣᐞᑲᐤ

ᒪᓯᓇᐣᐞᑲᐤ ᑲ ᒪᓯᓇᐣᐞᑲᑯᖏᑲᐤ ᐃᔨᐱᓂ ᐞᖏᕐᕋᐞᐃ ᑲ ᓂᕐᑐᓂᓇᓂᐞᐃᖏᑌ

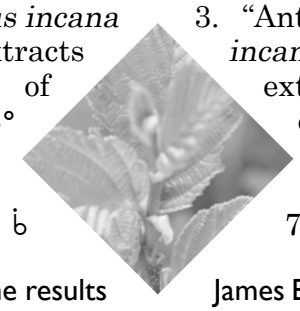
1. “Inhibition of intestinal glucose absorption by antidiabetic medicinal plants derived from the James Bay Cree traditional pharmacopeia” ᑲ ᐃᔑᓂᐣᑲᑌᖏ, ᑲ ᒪᓯᓇᐣᐁᖏᑲᐤ ᓚᑎᑲ ᓂᔨᑦᑦ ᐸᕐᑎᑲ, ᓚᐞᐃ ᐞᖏᐣᓇᑲ, ᐊᑦᓴ ᐯᓂᐣᐊᑐᑲᓯ, ᐊᓂᓇᓯᓂ, ᐅᑭᐟ ᓴᐞᐃ, ᐱᔨᐟ ᖏᐊᑦᑦᓰ (*J. Ethnopharmacol.* 132:473-482; 2010)ₓ ᐊᓂ ᐞᑲ ᐊᐱᐱᔨᓂ ᑲ ᒪᓯᓇᐣᐃᑲᓇᐞᐃᖏᑌ, ᐁᐅᑯ ᐊᓂ “Can the healing plants affect how our guts handle sugar?” ᑲ ᐃᔑᓂᐣᑲᑌᖏᓰ ᐁᐅᑯ ᐊᓂ ᐁ ᒪᓯᓇᐣᑌᑲ ᖃ ᑭ ᐞᐃᑭᐣᐃᐞᐁᐸᔨᐣᑲᐤᐞᐣᐤ ᓂᖏᑕᐅᑭᐣᑭᑲᓇᓂᐞ ᐊᓂ ᐁ ᐃᔨᐸᔨᐣᖏ ᓀᑲᐤ ᒥᑕᐣᑭᐱᖏᓰ

2. “Stimulation of AMPK and enhancement of basal glucose uptake in muscle cells by quercetin and quercetin glycosides, active principles of the antidiabetic medicinal plant *Vaccinium vitis-idaea*” ᑲ ᐃᔑᓂᐣᑲᑌᖏ, ᑲ ᒪᓯᓇᐣᐁᐞᐃᐤ ᐃᑦ, ᒪᔨᐞᐃᓇ, ᐱᓀᒪ, ᒧᐣᐊᒧᑦ, ᕿᓀᔨᐞ, ᐯᓂᐣᐊᑐᑲᓯ, ᐣᐊᑦᑦ (*Mol. Nutr. Food Res.* 54:991-1003; 2010)ₓ ᐊᓂ ᐊᐱᐱᔨᓂ ᑲ ᒪᓯᓇᐣᐃᑲᓇᐞᐃᖏᑌ, ᐁᐅᑯ ᐊᓂ “How lowbush cranberry works to lower blood sugar levels” ᑲ ᐃᔑᓂᐣᑲᑌᖏᓰ ᐁᐅᑯ ᐊᓂ ᐁ ᒪᓯᓇᐣᑌᑲ ᐁ ᐃᔑ ᐞᐃᑭᐣᐃᐞᐁᐸᔨᐣᑲᐤ ᐞᐃᓴᑎᓇᐞ ᐅᓀᑭᐣᑲᐤ ᐁ ᑭ ᐃᔨᐸᔨᐣᑲᐤ ᓀᑲᐤ ᒥᑲᐣᑲᐤ

3. “Anti-adipogenic activities of *Alnus incana* and *Populus balsamifera* bark extracts Part I: Sites and mechanisms of action” ᑲ ᐃᔑᓂᐣᑲᑌᖏ, ᑲ ᒪᓯᓇᐣᐁᐞᐃᐤ ᒪᔨᐞᐃᓇ, ᐁᐅᔨᐱᐃ, ᒧᐣᐊᒧᑦ, ᐣᐊᑦᑦ, ᐣᐊᑐᓴ, ᐣᐊᑦᑦᓰ, ᐣᐊᑦᑦᓰ (*Planta Med.* 76:1439-46;2010)ₓ ᐊᓂ ᒪᓂ ᐊᐱᐱᔨᓂ ᑲ



of the Cree communities. So far, he has the results for ingredients. It seems the plants do indeed make more or less of some ingredients depending on where they grow, but the more northerly plants don’t always have the most. Michel has now moved on to looking at whether the plant’s healing strength changes with where it grew.



UPDATE ON PUBLICATIONS

- ***Articles that have been published since the last meeting***

1. “Inhibition of intestinal glucose absorption by antidiabetic medicinal plants derived from the

ᐊ ᑎᐸᑐᑕᐣᐞᑲᐤ ᒥᔨᓇᐣᐃᑲᓇᐞᐃᖏᑌ

ᒥᔨᓇᐣᐃᑲᓇᐞᐃᖏᑌ ᑲ ᒥᔨᓇᐣᐃᑲᓇᐞᐃᖏᑌᐞᐃᐣᐞᑲᐤ ᐃᔨᐱᓂ ᐃᓕᐣᐞᑕᐣᐃᐞᐃᖏᑌ ᑲ ᓂᕐᑐᓂᓇᓂᐞᐃᐣᐞᑲᐤ

1. “Inhibition of intestinal glucose absorption by antidiabetic medicinal plants derived from the James Bay Cree traditional pharmacopeia” ᑲ ᐃᔑᓂᐣᑲᑕᐣ, ᑲ ᒥᔨᓇᐣᐁᐞᐃᐤ ᓚᑎᑲ ᓂᔨᑦᑦ ᐸᕐᑎᑲ, ᓚᐞᐃ ᐞᖏᐣᓇᑲ, ᐊᑦᓴ ᐯᓂᐣᐊᑐᑲᓯ, ᐊᓂᓇᓯᓂ, ᐅᑭᐟ ᓴᐞᐃ, ᐱᔨᐟ ᖏᐊᑦᑦᓰ (*J. Ethnopharmacol.* 132:473-482; 2010)ₓ ᐊᓂ ᐞᑲ ᐊᐱᐱᔨᓂ ᑲ ᒥᔨᓇᐣᐃᑲᓇᐞᐃᖏᑌ, ᐁᐅᑯ ᐊᓂ “Can the healing plants affect how our guts handle sugar?” ᑲ ᐃᔑᓂᐣᑲᑕᐣᓰ ᐁᐅᑯ ᐊᓂ ᐁ ᒥᔨᓇᐣᐃᑲᓇᐞᐃᐣᑲᐤ, ᐁᐅᑯ ᐊᓂ ᐁ ᐃᔨᐸᔨᐣᑲᐤ ᓀᑲᐤ ᒥᑕᐣᑭᐱᖏᓰ

2. “Stimulation of AMPK and enhancement of basal glucose uptake in muscle cells by quercetin and quercetin glycosides, active principles of the antidiabetic medicinal plant *Vaccinium vitis-idaea*” ᑲ ᐃᔑᓂᐣᑲᑕᐣ, ᑲ ᒥᔨᓇᐣᐁᐞᐃᐤ ᐃᑦ, ᒪᔨᐞᐃᓇ, ᐱᓀᒪ, ᒧᐣᐊᒧᑦ, ᕿᓀᔨᐞ, ᐯᓂᐣᐊᑐᑲᓯ, ᐣᐊᑦᑦ (*Mol. Nutr. Food Res.* 54:991-1003; 2010)ₓ ᐊᓂ ᐊᐱᐱᔨᓂ ᑲ ᒥᔨᓇᐣᐃᑲᓇᐞᐃᐣᑲᐤ, ᐁᐅᑯ ᐊᓂ “How lowbush cranberry works to lower blood sugar levels” ᑲ ᐃᔑᓂᐣᑲᑕᐣᓰ ᐁᐅᑯ ᐊᓂ ᐁ ᒥᔨᓇᐣᐁᐞᐃᐤ ᐁ ᐃᔑ ᐞᐃᑭᐣᐃᐞᐁᐸᔨᐣᑲᐤᐞᐣᐤ ᐞᐃᓴᑎᓇᐞ ᐅᓀᑭᐣᑲᐤ ᐁ ᑭ ᐃᔨᐸᔨᐣᑲᐤ ᓀᑲᐤ ᒥᑲᐣᑲᐤ

3. “Anti-adipogenic activities of *Alnus incana* and *Populus balsamifera* bark extracts Part I: Sites and mechanisms of action” ᑲ ᐃᔑᓂᐣᑲᑕᐣ, ᑲ ᒥᔨᓇᐣᐁᐞᐃᐤ ᒪᔨᐞᐃᓇ, ᐁᐅᔨᐱᐃ, ᒧᐣᐊᒧᑦ, ᐣᐊᑦᑦ, ᐣᐊᑐᓴ, ᐣᐊᑦᑦᓰ, ᐣᐊᑦᑦᓰ (*Planta Med.* 76:1439-46;2010)ₓ ᐊᓂ ᒪᓂ ᐊᐱᐱᔨᓂ ᑲ

James Bay Cree traditional pharmacopeia” by Lidia Nistor Baldea, Louis Martineau, Ali Benhaddou-Andaloussi, John Arnason, Émile Lévy, Pierre Haddad. (*J. Ethnopharmacol.* 132:473-482; 2010). The plain-language summary of this article was called “Can the healing plants affect how our guts handle sugar?”

2. “Stimulation of AMPK and enhancement of basal glucose uptake in muscle cells by quercetin and quercetin glycosides, active principles of the antidiabetic medicinal plant *Vaccinium vitis-idaea*”, by Eid, Martineau, Saleem, Muhamad, Vallerand, Benhaddou-Andaloussi, Haddad (*Mol. Nutr. Food*

ᒪᓯᓀᑌᓪ, ᐁᐅᐣ ᐊᓐ "Fat-fighting potential of speckled alder and balsam poplar" ᑲ ᐃᔑᓂ"ᑲᑌᓪᓵ ᐁᐅᐣ ᐊᓐ ᐁ ᒪᓯᓀᑌᓪ ᐃᓕᔪᓄ ᖁ ᑦ ᐃᔑ"ᖁ<ᔨ"ᖏ ᐅᑐᔦᐲ ᑲᖃ ᑭᑐᔦ ᐅ"ᑭ ᐊᓐ ᐁ ᑦᑭ>ᓀᓄᐃ"ᓵ×

4. "Anti-adipogenic activities of *Alnus incana* and *Populus balsamifera* bark extracts Part II : Bioassay-guided identification of actives salicortin and oregonin," ᑲ ᐃᔑᓂ"ᑲᑌᓪ, ᑲ ᒪᓯᓀ"ᐁ"ᑲᐤ ᐃᓕᖅᓄᓀ, ᒧ"ᐊᒣᑦ, ᐲᓪᒪᓪ, ᐁᕐᐯᐃ, "ᐊᓀᔦ, ᐊᕐᓀᓯᓀ, "ᐊᑦᑦ (*Planta Med.* 76:1519-1524; 2010)× ᐁᐅᐣ ᐅ ᓄᓱ ᒪᓯᓀ"ᐃᑲᓀ ᐅ"ᑭ ᐊᓀ ᐃᕐᐱᒥᖏ ᑲ ᒪᓯᓀᑌᓪ× ᐊᓀ ᒪᐢ ᐊᐱᑎᓵ ᑲ ᒪᓯᓀ"ᐃᑲᓄᐃ"ᓵ, ᐁᔪᑦ ᑕᐱᕐᔪᓀ ᐁ ᒪᓯᓀᑌᓪ ᐊᓂᑦ ᐊᓀ ᐃᕐᐱᒥᖏ ᑲ ᒪᓯᓀᑌᓪ×

4. "Anti-adipogenic activities of *Alnus incana* and *Populus balsamifera* bark extracts Part II : Bioassay-guided identification of actives salicortin and oregonin," ᑲ ᐃᔑᓂ"ᑲᑦᓵ, ᑲ ᒥᓯᓂ"ᐊᖏ ᓕᖅᑎᓄᓵ, ᒧ"ᐊᐃᓕᑦ, ᐲᓪᒪᓪ, ᐁᕐᐯᐃ, "ᐊᓀᔦ, ᐊᕐᓀᓯᓀ, "ᐊᑦᑦ (*Planta Med.* 76:1519-1524; 2010)× ᐁᐅᐣ ᐅ ᓄᓱ ᒥᓯᓂ"ᐃᑭᓀ ᐊᓀ ᐃᕐᐱᒥᖏ ᑲ ᒥᓯᓂ"ᐃᑭᓄᐃ"ᓵ, ᐊᔪᑦ ᑕᐱᕐᔪᓀ ᐊᓂᑦ ᒥᓯᓂ"ᐃᑭᓀᑌᓪ ᑲ ᒥᓯᓂ"ᐃᑭᓄᐃ"ᓵᓪ×

ᒪᓯᓀ"ᐃᑲᓀ ᓱᓐ ᑲ ·ᐊ·ᐊᐱ"ᑌᑲᓵ"·ᑲᐤ ᐊᓂᑌ ᐅᑌᓵᐤ ᖁᔪ ·ᐃᐸᒃ ᒣ ᐃᑕᔑ"ᐃᑲᓵ"·ᑲᐤ ᐊᓂᑌ ᑎᐸᒧᔪᓀ"ᐃᑲᓂ"ᖏ

5. "A combination of Catechin, Epicatechin and Quercetin underlies the *in vitro* adipogenic action of *Rhododendron groenlandicum*, an antidiabetic medicinal plant of the Eastern James Bay Cree pharmacopeia" ᑲ ᐃᔑᓂ"ᑲᑌᓪ, ᑲ ᒥᓯᓀ"ᐁ"·ᑲᐤ ᐅᓄᐅᓀ, ᓂᓱᔨ-ᐊᓵᓀᑯᑲᑉ, ᒪᐦᓯᒃᓪ, ᐲᓪᒪᓪ, ᐊᕐᐯᐃ, ᓀᓕᖅᓵ, "ᐊᑦᑦ× ᐊᓀ ᒪᐢ ᐊᐱᑎᓵ ᑲ ᒥᓯᓀᑌᓪ, ᐁᐅᐣ ᐊᓀ "Ingredients in Labrador tea that affect how our bodies store fat" ᑲ ᐃᔑᓂ"ᑲᑌᓪ× ᐁᐅᐣ ᐊᓀ ᐁ ᐃᔑ"ᖁ<ᔨ"ᖏ ᐁ ᐃ"ᑎᔨ"ᖏ ᓀᑲᐤ ᐁ ᑕ"ᑲ"ᐃᑎ<ᔨ"ᖏ ᐋ"ᑎᓱ ᐅ"ᑭ ᐊᓀ ᐁ ᐃᔑ ᑲᓂᐊᔨᓀ"ᑕᔨᖏ ᐱᒻ×

ᒥᓯᓂ"ᐃᑭᓀ" ᓱᓐ ᑲ ·ᐊ·ᐊᐱ"ᑕᑭᓂᐃᓄ" ᐊᓂᑕ ᐃ"ᑕᐃᓀ" ᑭᓱ ·ᐃᐱᓄ ᓗ ᐃᑎᔑ"ᐃᑭᓂᐃᓄ" ᐊᓂᑕ ᑎᐸᔨᔪᓂ"ᐃᑭᓂ"ᖏ

5. "A combination of Catechin, Epicatechin and Quercetin underlies the *in vitro* adipogenic action of *Rhododendron groenlandicum*, an antidiabetic medicinal plant of the Eastern James Bay Cree pharmacopeia" ᑲ ᐃᔑᓂ"ᑲᑕᓄ, ᑲ ᒥᓯᓂ"ᐊᖏ ᐅᓄᐅᓀ, ᓂᓱᔨ-ᐊᓵᓀᑯᑲᑉ, ᒪᐦᓯᒃᓪ, ᐲᓪᒪᓪ, ᐊᕐᐯᐃ, ᓀᓕᖅᓵ, "ᐊᑦᑦ× ᐊᓀ ᒪᐢ ᐊᐱᑎᓵ ᑲ ᒥᓯᓂ"ᐃᑭᓄᐃ"ᓵ, ᐁᐅᐣ ᐊᓀ "Ingredients in Labrador tea that affect how our bodies store fat" ᑲ ᐃᔑᓂ"ᑲᑕᓄ× ᐊᐅᐣ ᐊᓀ ᐁ ᐃᔑ"ᖁ<ᔨ"ᖏ ᐁ ᐃ"ᑎᔨ"ᖏ ᓀᑲᐤ ᐁ ᑕ"ᑲ"ᐃᑎ<ᔨ"ᖏ ᐋ"ᑎᓱ ᐅ"ᑭ ᐊᓀ ᐁ ᐃᔑ ᑲᓂᐊᔨᓀ"ᑕᔨᖏ ᐱᒻ×

Res. 54:991-1003; 2010). The plain-language summary of this article was called "How lowbush cranberry works to lower blood sugar levels."

3. "Anti-adipogenic activities of *Alnus incana* and *Populus balsamifera* bark extracts Part I: Sites and mechanisms of action." by Martineau, Hervé, Muhammed, Saleem, Harris, Arnason, Haddad. (*Planta Med.* 76:1439-46;2010). The plain-language summary of this article was called "Fat-fighting potential of speckled alder and balsam poplar."

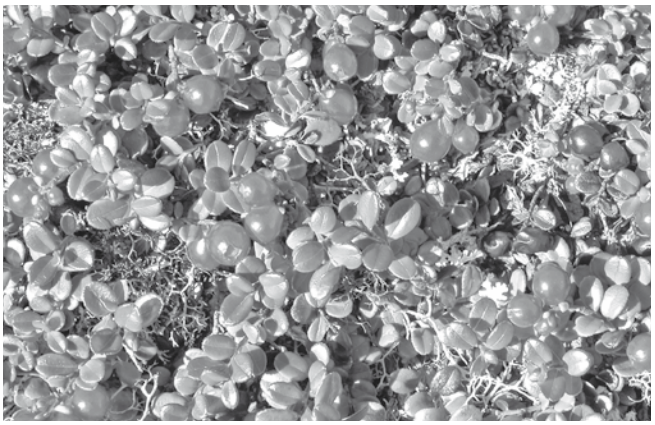
4. "Anti-adipogenic activities of *Alnus incana* and *Populus balsamifera* bark extracts Part II : Bioassay-guided identification of actives salicortin and oregonin," by Martineau, Muhammed, Saleem, Hervé, Harris, Arnason, Haddad. (*Planta Med.* 76:1519-1524; 2010). This is the second part of the article above. The plain-language version summarized both parts together.

6. "*Rhododendron groenlandicum*, an antidiabetic plant of the Eastern James Bay Cree, attenuates insulin resistance in a diet-induced obesity mouse model" ᑲ ᐃᔨᓂᖅᑐᑦ, ᑲ ᒪᓯᓗᐊᖅ᙮ᑲᐧ ᐅᑦᓴᓗ, ᓴᓐᖏᓗ, ᓴᖏᓂᒪ, ᓴᖅᓯᓯᓗ, "ᓴᒋᑦᓵ ᐊᓂ ᐊᐱᔨᓐ ᑲ ᒪᓯᓗᐊᖅᑕᐃᓐᓇᖅ, ᐁᐅᓄ ᐊᓂ "How Labrador tea affects diabetes in mice" ᑲ ᐃᔨᓂᖅᑐᑦᓵ ᐁᐅᓄ ᐊᓂ ᐁ ᒪᓯᓗᐃᖅ ᑦᓂ ᐁ ᐃᔨ ᑦᖅᐳᓄᑦᑦᓂ ᐊᐱᔨᔨᖅ ᐁ ᔨᓯᓴᒥᖅᑫᑦᓂ ᐊᓂᓄᓘ ᑲᑎᒪᔨᖅᑐᑦ

7. "*Vaccinium vitis-idaea*, a medicinal plant of the Eastern James Bay Cree, mobilizes L6 muscle Glut4 transporters and exerts anti-obesity and antidiabetic effects *in vivo*" ᑲ ᐃᔨᓂᖅᑐᑦ, ᑲ ᒪᓯᓗᐊᖅᑐᑦᓵ ᐃᑦ, ᓴᓐᖏᓗ, ᐅᑐᖅᓴᓗ, ᓴᓐᖏᓂᒪ, ᓴᖅᓯᓯᓗ, ᔨᓵᓚ, ᐃᔨᓐᓇᖅ, ᓴᒋᑦᓵ ᐊᓂ ᐊᐱᔨᓐ ᑲ ᒪᓯᓗᐊᖅᑕᐃᓐᓇᖅ, ᐁᐅᓄ ᐊᓂ "Lowbush cranberries as a way to fight weight and diabetes: results from some studies on mice" ᑲ ᐃᔨᓂᖅᑐᑦᓵ ᐁᐅᓄ ᐊᓂ ᐁ ᒪᓯᓗᐃᖅ ᓵᐃᑎᒥᓵᖅ ᐁ ᐊᓂᑎᒥᖅᑕᐃᓐᓇᖅ ᓂ ᐅᖅᑎ ᒪᔨᖅᑕᐃᓐᓇᖅ ᐁ ᑕᖅᑎᐅᓵᓐᓇᖅ ᑲᔪ ᐁ ᔨᓯᓴᒥᖅᑫᑦᓵ: ᑲ ᐃᔨᓂᖅᑐᑦᓵ ᑲ ᓂᕆᑎᓪᓗᐊᓂᖅᑐᑦᓵᓂᖅᑐᑦ ᐊᐱᔨᔨᖅ ᐁ ᔨᓯᓴᒥᖅᑫᑦᓂ ᐊᓂᓄᓘ ᑲᑎᒪᔨᖅᑐᑦ

6. "*Rhododendron groenlandicum*, an antidiabetic plant of the Eastern James Bay Cree, attenuates insulin resistance in a diet-induced obesity mouse model" ᑲ ᐃᔨᓂᖅᑐᑦ, ᑲ ᒥᓯᓗᐊᖅ᙮ᑲᐧ ᐅᑦᓴᓗ, ᓴᓐᖏᓗ, ᓴᖏᓂᒪ, ᓴᖅᓯᓯᓗ, "ᓴᒋᑦᓵ ᐊᓂ ᐊᐱᔨᓐ ᑲ ᒪᓯᓗᐊᖅᑕᐃᓐᓇᖅ, ᐁᐅᓄ ᐊᓂ ᐁ ᒪᓯᓗᐃᖅ ᑦᓂ ᐁ ᐃᔨ ᑦᖅᐳᓄᑦᑦᓂ ᐊᐱᔨᔨᖅ ᐁ ᔨᓯᓴᒥᖅᑫᑦᓵ ᐊᓂᓄᓘ ᑲᑎᒪᔨᖅᑐᑦ

7. "*Vaccinium vitis-idaea*, a medicinal plant of the Eastern James Bay Cree, mobilizes L6 muscle Glut4 transporters and exerts anti-obesity and antidiabetic effects *in vivo*" ᑲ ᐃᔨᓂᖅᑐᑦ, ᑲ ᒥᓯᓗᐊᖅᑐᑦᓵ ᐃᑦ, ᓴᓐᖏᓗ, ᐅᑐᖅᓴᓗ, ᓴᓐᖏᓂᒪ, ᓴᖅᓯᓯᓗ, ᔨᓵᓚ, ᐃᔨᓐᓇᖅ, ᓴᒋᑦᓵ ᐊᓂ ᐊᐱᔨᓐ ᑲ ᒥᓯᓗᐊᖅᑕᐃᓐᓇᖅ, ᐁᐅᓄ ᐊᓂ "Lowbush cranberries as a way to fight weight and diabetes: results from some studies on mice" ᑲ ᐃᔨᓂᖅᑐᑦᓵ ᐁᐅᓄ ᐊᓂ ᐁ ᒥᓯᓗᐃᖅ ᓵᐃᑎᒥᓵᖅ ᐁ ᐊᓂᑎᒥᖅᑕᐃᓐᓇᖅ ᑲ ᐅᖅᑎ ᒪᔨᖅᑕᐃᓐᓇᖅ ᐁ ᑕᖅᑎᐅᓵᓐᓇᖅ ᑭᔾ ᐁ ᔨᓯᓴᒥᖅᑫᑦᓵ: ᑲ ᐃᔨᓂᖅᑐᑦᓵᓂᖅᑐᑦ ᐊᐱᔨᔨᖅ ᐁ ᔨᓯᓴᒥᖅᑫᑦᓂ ᐊᓂᓄᓘ ᑲᑎᒪᔨᖅᑐᑦ



Articles that have been reviewed by the communities and will soon be sent to a journal

5. "A combination of Catechin, Epicatechin and Quercetin underlies the *in vitro* adipogenic action of *Rhododendron groenlandicum*, an antidiabetic medicinal plant of the Eastern James Bay Cree pharmacopeia" by Ouchfoun, Guerrero-Analco, Musallam, Saleem, Arnason, Martineau, Haddad. The plain-language summary of this article was called "Ingredients in Labrador tea that affect how our bodies store fat."

6. "*Rhododendron groenlandicum*, an anti-diabetic plant of the Eastern James Bay Cree, attenuates insulin resistance in a diet-induced obesity mouse model" by Ouchfoun, Brault, Vallerand, Musallam, Arnason, Haddad, The plain-language summary of this article was called "How Labrador tea affects diabetes in mice."

7. "*Vaccinium vitis-idaea*, a medicinal plant of the Eastern James Bay Cree, mobilizes L6 muscle Glut4 transporters and exerts anti-obesity and antidiabetic effects *in vivo*" by Eid, Brault, Ouchfoun, Thong, Vallerand, Musallam, Arnason, Sweeney, Haddad. The plain-language summary of this article was called "Lowbush cranberries as a way to fight weight and diabetes: results from some studies on mice."

ᐁ ᐅᔅᑎᓰᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐊᓂᑌ ᐦᐋᑖᑦ ᓛᐸ

ᒦᔐᓪ ᕌᐱᓐᔅᑮ ᒉ ᐯᒋ ᑎᑯᔑᓐ ᐅᐦᒋ ᐊᓂᑌ ᐋᕐᓈᓯᓐ ᓛᐸ ᒉ ᒌᔑᐦᑫᐦᒃ ᐊᓂᔫ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑌᐦᒃ ᐊᓂᔫ ᐁ ᐃᔥᐱᔑ ᒎᒋᓰᒪᑲᐦᒡ ᐁ ᓂᑐᐦᑯᔨᓄᐃᐧᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐅᐦᒋ ᐊᓂᑌ ᓇᓈᐦᑯ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᐦᒡ᙮

ᐁ ᒫᒌᐧᑖᐤ ᐊᐧᐁᓂᒌ

ᓲᔥ ᒌ ᒌᔑᐦᑲᒻ ᒣᓇᔭᒻ ᐅᒡᕗᓐ ᐊᓂᔫ ᒫᔅᑎᕐᔅ ᖩᓯᔅ ᑳ ᐃᔑᓂᐦᑳᑌᔮᒡ ᐅᒪᓯᓇᐦᐄᑲᓐ᙮

ᓲᔥ ᒌ ᒌᔑᐦᑲᒻ ᐦᐅᑖ ᐄᑦ ᐊᓂᔫ ᐄᐧᐋᒃ ᐅᑖᐸᑎᓰᐧᐃᓐ᙮

ᒋᔅᑯᑕᒧᐧᐋᑲᓂᒡ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑌᐦᐧᑳᐤ ᒉ ᒌᔑᐸᔨᐦᐧᑳᐤᐦ ᒥᔖ ᒫᐦᒋᐸᔨᐦᒉ ᐁ ᐅᐦᒋ ᐧᐄᒋᐦᑖᑲᓄᐧᐃᐦᒡ ᐅᐦᒋ ᔖᓀᔩᐤ

ᓈᓐ ᔖᓐ: ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᓂᑐᐧᐁᔨᐦᑖᑯᓐ ᒉ ᐋᐸᑎᓯᑦ᙮ ᐊᓂᑌ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓄᐧᐃᐦᒡ ᒉᐧᑳᓐ (ᐁᒄ ᒫᒃ ᒉ ᒌ ᒪᓯᓇᐦᐄᑲᓅᐦᐧᑳᐤᐦ ᓃᔓ ᒪᓯᓇᐦᐄᑲᓇᐦ)᙮ ᒑᐃᓈ ᐊᔅᒌᐦᒡ ᐅᐦᒋ ᐧᐄᒋᐦᐋᑲᓅ ᓈᓐ ᒉ ᒋᔅᑯᑕᒫᓯᑦ, ᒥᒄ ᒫᒃ ᔮᐸᒡ ᒋᑲ ᓂᑐᐧᐁᔨᒫᐤ ᔖᓀᔩᐤᐦ ᐅᐦᒋ ᐅᑌ ᐁ ᐅᐦᒋ ᐋᐸᑎᓰᑦ (ᐧᐄᓴᐧᐁ $300/ᐲᓯᒻᐦ)᙮

ᑖᓂᔦᓪ ᐋᑎᔨᐧᐋᓛ-ᔅᐴᕐ: ᓇᒧᐃ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᓂᑐᐧᐁᔨᐦᑖᑯᓐ ᒉ ᐋᐸᑎᓯᑦ᙮ ᓂᐧᐁᔨᐦᑖᑯᓰ ᒉ ᑲᓄᐧᐋᐱᐦᑌᐦᒃ ᐊᓂᔫ ᑳ ᒪᓯᓈᑌᔨᒡ ᑳ ᒪᓯᓈᔥᑌᓯᓇᐦᐄᒉᐸᔨᓂᔨᒡ ᐊᓂᔫ ᒉ ᐧᐄᒋᐦᐄᑯᑦ ᐋᓕᐃ ᑰᓇᔦᐃ᙮ ᒉᒃ ᒫᒃ ᒉ ᒪᓯᓇᐦᐁᐦᒃ ᐊᓂᔫ ᒪᓯᓇᐦᐄᑲᓂᔫ PhD ᖩᓯᔅ ᑳ ᐃᔑᓂᐦᑳᑌᔮᒡ᙮

ᑌᔅᐲᓈ ᐦᐋᕐᐱᓛᔅ: ᓇᒧᐃ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᓂᑐᐧᐁᔨᐦᑖᑯᓐ ᒉ ᐋᐸᑎᓯᑦ; ᒋᑲ ᒪᓯᓇᐦᐊᒻ ᐊᓂᔫ ᐅᒪᓯᓇᐦᐄᑲᓐ PhD ᖩᓯᔅ ᑳ ᐃᔑᓂᐦᑳᑌᔮᒡ᙮

ᐁᐅᒄ ᐆ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᒪᓯᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓐ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᑳ ᒪᓯᓈᑌᒡ ᒪᓯᓇᐦᐄᑲᓐ ᐊᓂᑌ ᐦᐋᑖᑦ ᓛᐸ ᑳ ᐅᐦᒋᐸᔨᐦᒡ᙮

ᐋ ᐅᔅᑎᓰᒡ ᐊᐧᐋᓂᒌ ᐊᓂᑖ ᐦᐋᑖᑦ ᓛᐸ

ᒦᔐᓪ ᕌᐱᓐᔅᑮ ᒑ ᐹᒋ ᑎᑯᔑᓐ ᐅᐦᒋ ᐊᓂᑖ ᐋᕐᓈᓯᓐ ᓛᐸ ᒑ ᒌᔑᐦᑭᐦᒃ ᐊᓂᔮ ᑳ ᐋᐱᑎᔒᔥᑎᐦᒃ ᐊᓂᔮ ᐋ ᐃᔥᐱᔑ ᒎᒋᓯᒥᑭᐦᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐅᐦᒋ ᐊᓂᑖ ᓂᓈᐦᑯ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᐦᒡ᙮

ᐋ ᒫᒌᒡ ᐊᐧᐋᓂᒌ

ᓲᔥ ᒌ ᒌᔑᐦᑭᒼ ᒣᓇᔮᒼ ᐅᒡᕗᓐ ᐊᓂᔮ ᒫᔅᑎᕐᔅ ᖩᓯᔅ ᑳ ᐃᔑᓂᐦᑳᑖᔮᒡ ᐅᒥᓯᓂᐦᐄᑭᓐ᙮

ᓲᔥ ᒌ ᒌᔑᐦᑭᒼ ᐦᐅᑖ ᐄᑦ ᐊᓂᔮ ᐄᐧᐋᒡ ᐅᑖᐱᑎᓰᐧᐃᓐ᙮

ᒋᔅᑯᑎᒧᐧᐋᑭᓂᒡ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᒑ ᒌᔑᐱᔨᒡᐦ ᒥᔖ ᒫᐦᒋᐱᔨᒑ ᐋ ᐅᐦᒋ ᐧᐄᒋᐦᑖᑭᓂᐧᐃᒡ ᐅᐦᒋ ᔖᓀᔩᐤ

ᓈᓐ ᔖᓐ: ᐊᑎᑑ ᒥᔥᑏ ᓂᑐᐧᐋᔨᐦᑖᑯᓐ ᒑ ᐋᐱᑎᓯᑦ᙮ ᐊᓂᑖ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᒑᐧᑳᓐ (ᐋᒄ ᒫᒃ ᒑ ᒌ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡᐦ ᓃᔓ ᒥᓯᓂᐦᐄᑭᓐᐦ)᙮ ᒑᐃᓈ ᐊᔅᒌᐦᒡ ᐅᐦᒋ ᐧᐄᒋᐦᐋᑭᓂᐤ ᓈᓐ ᒑ ᒋᔅᑯᑎᒫᓯᑦ, ᒥᒄ ᒫᒃ ᐋᔮᐱᒡ ᒋᑭ ᓂᑐᐧᐋᔨᒫᐤ ᔖᔫᓐᐦ ᐅᐦᒋ ᐅᑖ ᐋ ᐅᐦᒋ ᐋᐱᑎᓰᑦ (ᐧᐄᓵᐧᐊ $300/ᐲᓯᒼᐦ)᙮

ᑖᓂᔦᓪ ᐋᑎᔨᐃᓛ-ᔅᐴᕐ: ᓂᒧᔨ ᐊᑎᑑ ᒥᔥᑏ ᓂᑐᐧᐋᔨᐦᑖᑯᓐ ᒑ ᐋᐱᑎᓯᑦ᙮ ᓂᐧᐋᔨᐦᑖᑯᓰ ᒑ ᑭᓄᐧᐋᐱᐦᑎᐦᒃ ᐊᓂᔮ ᑳ ᒥᓯᓈᑖᔨᒡ ᑳ ᒥᓯᓈᔥᑖᓯᓂᐦᐄᒑᐱᔨᔨᒡ ᐊᓂᔮ ᒑ ᐧᐄᒋᐦᐄᑯᑦ ᐋᓕᐃ ᑰᓇᔦᐃ᙮ ᒑᒃ ᒫᒃ ᒑ ᒥᓯᓂᐦᐋᐦᒃ ᐊᓂᔮ ᒥᓯᓂᐦᐄᑭᓂᔮᐤ PhD ᖩᓯᔅ ᑳ ᐃᔑᓂᐦᑳᑖᔮᒡ᙮

ᑌᔅᐲᓈ ᐦᐋᕐᐱᓛᔅ: ᓂᒧᔨ ᐊᑎᑑ ᒥᔥᑏ ᓂᑐᐧᐋᔨᐦᑖᑯᓐ ᒑ ᐋᐱᑎᓯᑦ; ᒋᑭ ᒥᓯᓂᐦᐊᒼ ᐊᓂᔮ ᐅᒥᓯᓂᐦᐄᑭᓐ PhD ᖩᓯᔅ ᑳ ᐃᔑᓂᐦᑳᑖᔮᒡ᙮

ᐋᐅᒄ ᐆ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᑖᒡ ᒥᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓐ ᐊᑎᑑ ᒥᔥᑏ ᑳ ᒥᓯᓈᑖᒡ ᒥᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᐦᐋᑖᑦ ᓛᐸ ᑳ ᐅᐦᒋᐱᔨᒡ᙮

New members of the Haddad lab

Michel Rapinski arrived from the Arnason lab to finish his work on how growing location affects a plant's healing strength.

Departures

Meriem Ouchfoun finished her Master's thesis.

Hoda Eid finished the extra work for her project.

Student projects/theses to finish after end of funding

Nan Shang: more laboratory work needed (enough to have material for two articles). Nan has a scholarship from China, but will also need some funds from the team (about $300/month).

Danielle Adiyiwola-Spoor: no more lab work needed. Must finish analysis of the computer table with Alain Cuerrier. Must then write up her PhD thesis.

Despina Harbilas: no more lab work needed; must write up her PhD thesis.

This is a simplified summary of a more technical report from the Haddad lab.

D. ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓂᑌ ᐯᓂᐨ ᓛᑉ

(ᐧᐄᐧᐄᒪᑲᓂᐲᓯᒼ 2011)

ᐅᑌ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᑫᔨᐦᑌᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ, ᐁᐅᑯ ᐁ ᐧᐋᐧᐋᐱᐦᑖᑲᓄᐧᐃᐦᒡ ᑖᓐ ᐁ ᐃᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐊᓐ ᐁ ᐃᔑ ᐧᐊᓈᒋᐸᔨᐦᐄᐧᐁᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓄᐧᐃᐦᒡ᙮ (ᐁᐅᑯ ᐊᓐ ᐃᑖᐢᐱᓀᐧᐃᓐᐦ ᐊᓂᐨ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓄᐧᐃᐦᒡ ᐁ ᐅᐦᒋᐸᔨᐦᐧᑳᐤᐦ, ᓀᐢᐨ ᒫᒃ ᐃᑖᐢᐱᓀᐧᐃᓐ ᐁ ᓈᑎᑯᐨ ᐊᐧᐁᓐ ᐅᐦᒋ ᐊᓂᔩ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐨ᙮) ᐁᐅᑯ ᐊᓐ ᐁ ᑲᓄᐧᐋᐱᐦᑕᒫᐦᒡ ᐃᑖᐢᐱᓀᐧᐃᓐᐦ ᐁ ᐅᐦᒋ ᓈᑎᑯᐨ ᐊᐧᐁᓐ ᐊᓂᔩ ᓈᐢᒡ ᐄᐢᐱᒥᐦᒡ ᐁ ᐃᐢᐸᔨᓂᔨᐠ ᓲᑳᔩ ᐅᒥᐦᑯᐦᒡ ᐊᓂᔩ ᐁ ᐊᑕ ᐧᐊᓈᑎᓂᔨᐠᐦ ᐊᓂᐨ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᐨ—ᐧᒣᐦᒡ ᐊᓂᔩ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᐨ ᐊᓂᐨ ᐅᓯᑎᐦᒡ, ᐅᑎᐦᒌᐦᒡ, ᑲᔦ ᐅᐢᑮᔑᑯᐦᒡ, ᓀᐢᐨ ᒫᒃ ᐁ ᐧᐊᓈᑎᓂᔨᐠ ᐊᓂᔩ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᐨ ᐊᓂᐨ ᐅᑎᐦᐱᐦᒡ᙮

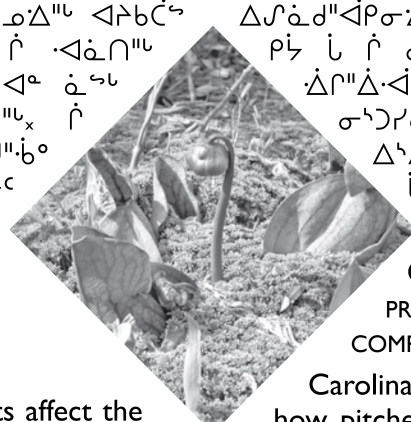
ᐁ ᓂᑑᒋᐢᑫᔨᐦᑌᑲᓄᐧᐃᐦᒡ ᐊᔨᑲᑖᐢ ᒉ ᒌ ᓇᑳᐦᐋᑫᐸᔨᐦᒡ ᐊᓐ ᐅᐢᑲᐠ ᐁ ᐧᐊᓈᒋᐸᔨᐦᐋᐧᐁᐠ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓄᐧᐃᐦᒡ ᓀᐢᐨ ᒫᒃ ᐁ ᐧᐊᓈᒋᐸᔨᐦᐋᐧᐁᐠ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓄᐧᐃᐦᒡ ᐊᓂᐨ ᐋᐱᑯᔒᔑᐠ ᐁ ᐃᐦᑖᐧᑖᐤ

ᑳᕑᓛᐃᓈ ᓯᔭᓂᔮᒃ ᒌ ᐯᒋ ᑎᑯᔑᓐ ᐅᑌ ᒉ ᐯᒋ ᐋᐸᑎᓯᐨ, ᐁᔩᑯ ᐁ ᓂᑑᒋᐢᑫᔨᐦᑌᒃ ᐊᔨᑲᑖᔑᔩ ᐁ ᐃᔑ ᑖᐦᑲᐦᐆᑯᔨᐠᐦ ᐋᐱᑯᔒᐢᐦ ᒉᑳᐨ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᔨᐠᐦ᙮ ᐊᓐ ᓃᐢᑕᒼ ᑳ ᐃᔑ ᐱᒥᐸᔨᐦᒡ ᐆ ᐁ ᐃᔑ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓄᐧᐃᐦᒡ, ᐁᐅᑯ ᐊᓐ ᒉ ᐃᔑᓈᑯᐦᐋᑲᓅᐧᑖᐤ ᐋᐱᑯᔒᔑᐠ ᒉᑳᐨ ᒉ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ, ᐁᐅᑯ ᐊᓐ ᒥᐢᑕᐦᐄᐢ ᐁ ᔑᒫᑲᓅᐧᑖᐤ ᓲᑳᔩ ᒨᐢ᙮ ᑳᕑᓛᐃᓈ ᑲᔦ ᕖᑖ ᐋᐦᒉᐨ ᒌ ᐧᐋᐱᐦᑕᒧᐠ ᐊᓂᔩ ᒉ ᒌ ᐃᔑᓈᑯᐦᐋᑲᓅᐧᑖᐤ ᐋᐱᑯᔒᔑᐠ ᒉᑳᐨ ᒉ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ, ᐁᔩᑯ ᐊᓂᔩ ᑳ ᒥᓂᐦᐋᑲᓅᐧᑖᐤ ᒨᒨᐢᓈᐳᐦ ᑳ ᔒᐧᐋᑲᒥᓯᔨᐠᐦ ᒉᔑᑯᒼ ᒌᔑᑳᐤᐦ ᑎᐦᑐ ᐲᓯᒼᐦ᙮ ᐁᐅᑯ ᐊᓐ ᑳ ᐧᐄᐦ ᐃᔑᓈᑯᐦᐋᑲᓅᐧᑖᐤ ᐋᐱᑯᔒᔑᐠ ᒉᑳᐨ ᒉ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ, ᑲᔦ ᒉ ᒌ ᓂᑑᒋᐢᑫᔨᐦᑌᑲᓄᐧᐃᐦᒡ ᐊᔨᑲᑖᐢ ᑖᐧᐯ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᐁᑳ ᒉ ᒌ ᐧᐊᓈᑎᐦᒡ ᐊᓂᐨ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓄᐧᐃᐦᒡ ᐅᐦᒋ ᐊᓐ ᓈᐢᒡ ᐄᐢᐱᒥᐦᒡ ᐁ ᐃᐢᐸᔨᐦᒡ ᓲᑳᐤ ᒥᐦᑯᐦᒡ᙮ ᒌ ᒥᐢᑳᑌᔨᐦᑖᑯᓐ ᒫᒃ ᑳ ᐃᔑ ᐧᐋᐱᐦᑌᐦᐧᑳᐤ ᐊᓂᔩᐦ ᑳ ᒌᑰᓇᐦᐧᑳᐤ ᐊᔨᑲᑖᔑᔩ ᐊᓂᐨ

D. Report for the Bennett Lab

(January 2011)

In this lab, we look at how the plants affect the complications of diabetes. (This means the illnesses that are caused by diabetes, or that often go along with it.) In particular, we are looking at the illnesses that happen when high blood sugar damages the nerves—either the small nerves in our feet, hands, and eyes, or the nerve cells in our brains.



D. ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓂᑕ ᐯᓂᐨ ᓛᑉ

(ᒋᓵᔮᐢᑯᓂᐲᓯᒻ 2011)

ᐅᑖ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒐᔨᐦᑖᑭᓂᐧᐃᐠᐦ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ, ᐋᐅᑯ ᐋ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐧᐃᐠ ᑖᓐ ᐋ ᐃᔑ ᑖᐦᑭᐦᐄᒐᐱᔨᐠᐦ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐊᓐ ᐋ ᐃᔑ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᐠ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᐠ᙮ (ᐋᐅᑯ ᐊᓐ ᐃᑖᐢᐱᓈᐧᐃᓐᐦ ᐊᓂᐨ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᐠ ᐋ ᐅᐦᒋᐱᔨᐠᐦ, ᑭᔮ ᒫᒃ ᐃᑖᐢᐱᓈᐧᐃᓐ ᐋ ᓈᑎᑯᐨ ᐊᐧᐋᓐ ᐅᐦᒋ ᐊᓂᔮ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᐨ᙮) ᐋᐅᑯ ᐊᓐ ᐋ ᑭᓄᐧᐋᐱᐦᑎᒫᐦᒡ ᐃᑖᐢᐱᓈᐧᐃᓐᐦ ᐋ ᐅᐦᒋ ᓈᑎᑯᐨ ᐊᐧᐋᓐ ᐊᓂᔮ ᓈᐢᒡ ᐄᐢᐱᒥᐦᒡ ᐋ ᐃᐢᐱᔨᔨᐠ ᓲᑳᔨᐤ ᐅᒥᐦᑯᐦᒡ ᐊᓂᔮ ᐋ ᐊᑎ ᐧᐃᓈᑎᓂᔨᐠᐦ ᐊᓂᐨ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᐨ—ᐱᑯᓂᒐ ᐊᓂᔮ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᐨ ᐊᓂᐨ ᐅᓯᑎᐦᒡ, ᐅᑎᐦᒌᐦᒡ, ᑭᔮ ᐅᐢᑮᔑᑯᐦᒡ, ᑭᔮ ᒫᒃ ᐋ ᐧᐃᓈᑎᓂᔨᐠ ᐊᓂᔮ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᐨ ᐊᓂᐨ ᐅᑎᐦᐱᐦᒡ᙮

ᐋ ᓂᑑᒋᐢᒐᔨᐦᑖᑭᓂᐧᐃᐠ ᐊᔨᑭᑖᐢ ᒑ ᒌ ᓂᑳᐦᐄᒐᐱᔨᐠ ᐊᓐ ᐅᐢᑭᐠ ᐋ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᐠ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᐠ ᑭᔮ ᒫᒃ ᐋ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᐠ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᐠ ᐊᓂᐨ ᐋᐱᑯᔒᔑᐠ ᐋ ᐃᐦᑖᐠ

ᑳᕑᓛᐃᓈ ᓯᔭᓂᔮᒃ ᒌ ᐹᒋ ᑎᑯᔑᓐ ᐅᑖ ᒐ ᐹᒋ ᐋᐱᑎᓯᐨ, ᐋᔮᐧᐃᑯ ᐋ ᓂᑑᒋᐢᒐᔨᐦᑎᒃ ᐋᔨᑭᑖᔑᔨᐤ ᐋ ᐃᔑ ᑖᐦᑭᐦᐆᑯᔨᐠᐦ ᐋᐱᑯᔒᐢᐦ ᒐᑳᐨ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᔨᐠᐦ᙮ ᐊᓐ ᓃᐢᑎᒼ ᑳ ᐃᔑ ᐱᒥᐱᔨᐠ ᐆ ᐋ ᐃᔑ ᓂᑑᒋᐢᒐᔨᐦᑖᑭᓂᐧᐃᐠ, ᐋᐅᑯ ᐊᓐ ᒐ ᐃᔑᓈᑯᐦᐋᑭᓂᐧᐃᐠ ᐋᐱᑯᔒᔑᐠ ᒐᑳᐨ ᒐ ᔒᐧᐋᑭᒥᐦᐧᑳᐠ, ᐋᐅᑯ ᐊᓐ ᒥᐢᑏᔨᐢ ᐋ ᔑᒫᑭᓂᐧᐃᐠ ᓲᑳᔨᐤ ᒨᐢ᙮ ᑳᕑᓛᐃᓈ ᑭᔮ ᕖᑖ ᐋᐦᒉᐟ ᒌ ᐧᐋᐱᐦᑎᒧᐠ ᐊᓂᔮ ᒐ ᒌ ᐃᔑᓈᑯᐦᐋᑭᓂᐧᐃᐠ ᐋᐱᑯᔒᔑᐠ ᒐᑳᐨ ᒐ ᔒᐧᐋᑭᒥᐦᐧᑳᐠ, ᐋᔮᐧᐃᑯ ᐊᓂᔮ ᑳ ᒥᓂᐦᐋᑭᓂᐧᐃᐠ ᑑᑑᐢᓈᐳᐃᐦ ᑳ ᔒᐧᐋᑭᒥᓯᔨᐠᐦ ᐋᔑᑯᒼ ᒌᔑᑳᐤᐦ ᑎᐦᑐ ᐲᓯᒻᐦ᙮ ᐋᐅᑯ ᐊᓐ ᑳ ᐧᐄᐦ ᐃᔑᓈᑯᐦᐋᑭᓂᐧᐃᐠ ᐋᐱᑯᔒᔑᐠ ᒐᑳᐨ ᒐ ᔒᐧᐋᑭᒥᐦᐧᑳᐠ, ᑭᔮ ᒐ ᒌ ᓂᑑᒋᐢᒐᔨᐦᑖᑭᓂᐧᐃᐠ ᐊᔨᑭᑖᐢ ᑖᐧᐹ ᒐ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᐠ ᐋᑳ ᒐ ᒌ ᐧᐃᓈᑎᐦᒡ ᐊᓂᐨ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᓈᓂᐧᐃᐠ ᐅᐦᒋ ᐊᓐ ᓈᐢᒡ ᐄᐢᐱᒥᐦᒡ ᐋ ᐃᐢᐱᔨᔨᐠ ᓲᑳᐤ ᒥᐦᑯᐦᒡ᙮ ᒌ ᒥᐢᑳᑖᔨᐦᑖᑯᓐ ᒫᒃ ᑳ ᐃᔑ ᐧᐋᐱᐦᑎᐦᒡ ᐊᓂᔮᐦ ᑳ ᒌᑰᓂᐦᒡ

Checking if pitcher plant might prevent pre-diabetes or diabetic complications in mice

Carolina Cieniak has joined the lab to look at how pitcher plant affects complications in mice that are predisposed to diabetes. The first step in these tests is to make mice pre-diabetic by giving them moderate, constant doses of sugar. Carolina and Fida Ahmed have found that they can produce a pre-diabetic state by giving mice sweetened condensed milk every day for months. Their original idea was to make a group of mice pre-diabetic, and see if pitcher plant helped protect their nerve cells

ᒎᒎᔑᓈᐳᐦᒡ, ᐁᔫᑯ ᑯᓯᔅᑯ ᑳ ᐃᔅᐸᓯᓂᓯᒡ ᓅᑳᔫ ᐅᒥᐦᑯᐧᐋᐦᒡ ᐊᓂᒌ ᐋᐱᑯᔒᔑᒡ—ᐁᑯ ᒫᒃ ᓇᒧᓯ ᐅᐦᒋ ᓂᑐᐧᐁᓯᐦᑖᑯᓐ ᑫ ᐧᐄᒋᐦᐄᑯᐧᑖᐤ ᐁᑳ ᑫ ᒌ ᐧᐋᓈᑎᓂᓯᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᐧᑖᐤ᙮ ᓇᒧᓯ ᐧᐄᔅᑳᑦ ᐅᐦᒋ ᔒᐧᐋᑲᒥᐦᐧᑫᐅᒡ ᐊᓂᒌ ᐋᐱᑯᔒᔑᒡ, ᓅᔥ ᒫᒃ ᓂᔮᓯᓐ ᐲᓯᐧᒫᓲᒡ᙮ ᓇᐧᐃᒡ ᒫᒃ ᒥᔦᓯᐦᑖᑯᓐ ᐆ, ᒥᑯ ᒫᒃ ᒦᓐ ᐃᔑᓈᑯᓐ ᑫ ᐱᒥᐸᓯᐦᑖᔮᐦᒡ ᐆ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᓯᐦᑕᒫᐦᒡ ᐁᑯ ᒫᒃ ᑫ ᑫᔥᑎᓈᐦᐅᔮᐦᒡ ᐊᓐ ᑳ ᐄᔑ ᐧᐋᐱᐦᑕᒫᐦᒡ᙮

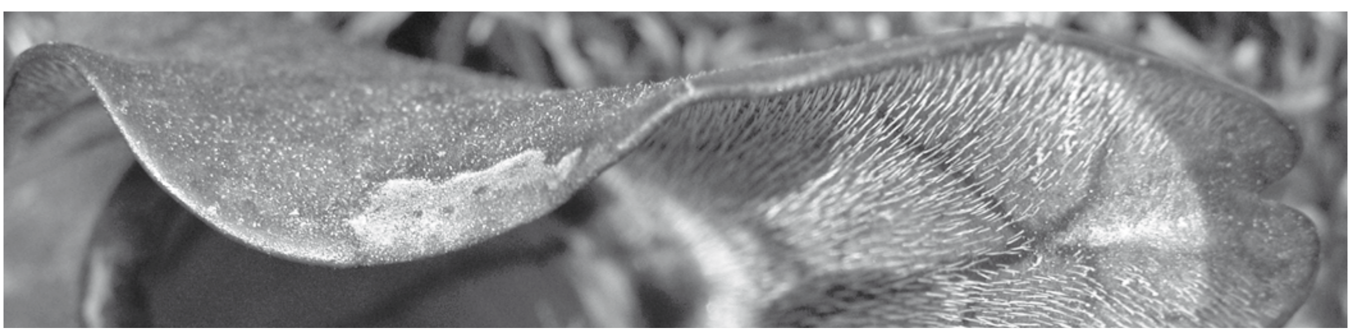
ᐁ ᓂᑑᒋᔅᑫᓯᐦᑌᑲᓇᐧᐃᐦᒡ ᐊᓯᑲᑖᔥ ᑫ ᑖᐦᑲᐦᐄᑫᐸᓯᐦᒡ ᐊᓂᑦ ᑯᑕᒃ ᐃᑖᔅᐱᓀᐧᐃᓐᐦ ᐊᓂᑌ ᐁ ᐅᐦᒋᐸᓯᐦᒡ ᐁ ᐧᐋᓈᑎᐦᒡ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓇᐧᐃᐦᒡ

ᑯᑕᒃᐦ ᐃᑖᔅᐱᓀᐧᐃᓐᐦ ᐁᑳ ᒥᑯ ᐊᓐ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓇᐧᐃᐦᒡ, ᐁᐅᑯ ᐁ ᐊᔑᐸᓯᐦᒡ ᐁ ᐧᐋᓈᒋᐸᓯᐦᐄᐧᐁᒡ ᓅᑳᐤ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓇᐧᐃᐦᒡ᙮ ᐊᓐ ᒫᒃ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓇᐧᐃᐦᒡ, ᐁᐅᑯ ᐁ ᐃᔅᐸᓯᐦᐄᐧᐁᒡ ᐁᑎᑑ ᑫ ᒪᒋᐸᓯᐦᐄᐧᐁᐦᐧᑳᐤᐦ ᑯᑕᒃᐦ ᐋᐦᑯᓯᐧᐃᓐᐦ᙮ ᐁᐅᑯ ᐸᔥᒡ ᐁ ᐃᑌᓯᐦᑌᐦᐧᑳᐤ ᐊᐧᐁᓂᒌ ᐊᓐ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓇᐧᐃᐦᒡ, ᐁᑎᑑ ᒪᒋᐸᓯᐦᐄᐧᐁᐤ ᐊᓐ ᒥᑎᐦᑉ ᐋᐦᑯᓯᐧᐃᓐ ᐋᓪᓵᐃᒥᑫᔅ Alzheimer’s ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮ ᐁᐅᑯ ᒫᒃ ᑳ ᓂᑑᒋᔅᑫᓯᐦᑕᒫᐦᒡ ᐊᓐ ᐊᓯᑲᑖᔥ ᐊᓂᑦ ᐋᐱᑯᔒᔑᒡ ᐁ ᐃᔮᐧᑖᐤ ᐋᐦᑯᓯᐧᐃᓂᔫ ᐧᒣᐦᒡ ᐊᓐ ᐋᓪᓵᐃᒥᑫᔅ ᐁ ᐃᔑᓈᑯᐦᒡ᙮ ᐁᐅᑯ ᑳ ᐧᐄᐦ ᐧᐋᐱᐦᑕᒫᐦᒡ ᑖᐧᐯ ᑫ ᓇᑳᐦᐄᑫᐸᓯᐦᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐅᐦᒋ ᐊᓐ ᓈᔥᒡ ᐄᔥᐱᒥᐦᒡ ᐁ ᐃᔅᐸᓯᐦᒡ ᓅᑳᐤ ᒥᐦᑯᐦᒡ ᐧᒣᐦᒡ ᐊᓂᒌ ᑳ ᐃᔅᐸᓯᐧᑖᐤ ᐋᐱᑯᔒᔑᒡ ᑫᑲᑦ ᑳ ᔒᐧᐋᑲᒪᐦᐧᑫᐧᑖᐤ᙮ ᒥᑯ ᒫᒃ, ᓇᒧᓯ ᐅᐦᒋ ᐃᔅᐸᔫ᙮ ᒣᐧᑳᒡ ᓂᐧᐄᐦ ᒋᔅᑫᓯᐦᑌᓈᓐ ᐊᓐ ᓃᔓᓯᒡ ᐧᐁᐦᒋ ᐃᔅᐸᓯᐦᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐊᓂᑦ ᓃᔓᓯᒡ ᐁ ᐃᔑᓈᑯᐦᐧᑳᐤᐦ ᐃᑖᔅᐱᓀᐧᐃᓐᐦ᙮

ᐊᓯᑭᑖᔑᓯᐤ ᐊᓂᑦ ᑑᑑᔑᓈᐳᐦᒡ, ᐋᔦᐧᐃᑯ ᑯᓯᔅᑯ ᑳ ᐃᔅᐱᓯᓯᒡ ᓅᑳᓯᐤ ᐅᒥᐦᑯᐧᐋᐦᒡ ᐊᓂᒌ ᐋᐱᑯᔒᔑᒡ—ᐋᑯ ᒫᒃ ᓂᒧᓯ ᐅᐦᒋ ᓂᑐᐧᐋᓯᐦᑖᑯᓐ ᒑ ᐧᐄᒋᐦᐄᑯᒡ ᐋᑲ ᒑ ᒌ ᐧᐃᓈᑎᓂᓯᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᒡ᙮ ᓂᒧᓯ ᐧᐄᔅᑳᑦ ᐅᐦᒋ ᔒᐧᐋᑭᒥᐦᐧᑳᐅᒡ ᐊᓂᒌ ᐋᐱᑯᔒᔑᒡ, ᓅᔥ ᒫᒃ ᓂᔮᔦ ᐲᓯᐧᒫᓲᒡ᙮ ᓇᐧᐃᒡ ᒫᒃ ᒥᔮᓯᐦᑖᑯᓐ ᐆ, ᒥᑯ ᒫᒃ ᒦᓐ ᐃᔑᓈᑯᓐ ᒑ ᐱᒥᐱᓯᐦᑖᔮᐦᒡ ᐆ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᓯᐦᑎᒫᐦᒡ ᐋᑯ ᒫᒃ ᒑ ᒑᔥᑎᓈᐦᐅᔮᐦᒡ ᐊᓐ ᑳ ᐄᔑ ᐧᐋᐱᐦᑎᒫᐦᒡ᙮

ᐋ ᓂᑑᒋᔅᒑᓯᐦᑖᑭᓂᐧᐃᒡ ᐊᓯᑭᑖᔥ ᒑ ᑖᐦᑭᐦᐄᒑᐱᓯᒡ ᐊᓂᑦ ᑯᑎᒃ ᐃᑖᔅᐱᓈᐧᐃᓐᐦ ᐊᓂᑖ ᐋ ᐅᐦᒋᐱᓯᒡ ᐋ ᐧᐃᓈᑎᐦᒡ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ

ᑯᑎᒃᐦ ᐃᑖᔅᐱᓈᐧᐃᓐᐦ ᐋᑳ ᒥᑯ ᐊᓐ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ, ᐋᐅᑯ ᐋ ᐊᔑᐱᓯᒡ ᐋ ᐧᐃᓈᒋᐱᓯᐦᐄᐧᐋᒡ ᓅᑳᐤ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ᙮ ᐊᓐ ᒫᒃ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ, ᐋᐅᑯ ᐋ ᐃᔅᐱᓯᐦᐄᐧᐋᒡ ᐊᑎᑑ ᒑ ᒥᒋᐱᓯᐦᐄᐧᐋᒡᐦ ᑯᑎᒃᐦ ᐋᐦᑯᓯᐧᐃᓐᐦ᙮ ᐋᐅᑯ ᐱᔥᒡ ᐋ ᐃᑖᓯᐦᑎᐦᒡ ᐊᐧᐋᓂᒌ ᐊᓐ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ, ᐊᑎᑑ ᒥᒋᐱᓯᐦᐄᐧᐋᐤ ᐊᓐ ᒥᑎᐦᑉ ᐋᐦᑯᓯᐧᐃᓐ ᐋᓪᓵᐃᒥᑫᔅ Alzheimer’s ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮ ᐋᐅᑯ ᒫᒃ ᑳ ᓂᑑᒋᔅᒑᓯᐦᑎᒫᐦᒡ ᐊᓐ ᐊᓯᑭᑖᔥ ᐊᓂᑦ ᐋᐱᑯᔒᔑᒡ ᐋ ᐃᔮᒡ ᐋᐦᑯᓯᐧᐃᓂᓯᐤ ᒍᔮᒻ ᐊᓐ ᐋᓪᓵᐃᒥᑫᔅ ᐋ ᐃᔑᓈᑯᐦᒡ᙮ ᐋᐅᑯ ᑳ ᐧᐄᐦ ᐧᐋᐱᐦᑎᒫᐦᒡ ᑖᐧᐹ ᒑ ᓂᑳᐦᐄᒑᐱᓯᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐅᐦᒋ ᐊᓐ ᓈᔥᒡ ᐄᔥᐱᒥᐦᒡ ᐋ ᐃᔅᐱᓯᒡ ᓅᑳᐤ ᒥᐦᑯᐦᒡ ᐧᒫᐦᒡ ᐊᓂᒌ ᑳ ᐃᔅᐱᓯᒡ ᐋᐱᑯᔒᔑᒡ ᒑᑲᑦ ᑳ ᔒᐧᐋᑭᒥᐦᐧᑳᒡ᙮ ᒥᑯ ᒫᒃ, ᓂᒧᓯ ᐅᐦᒋ ᐃᔅᐱᓯᐤ᙮ ᒫᐧᑳᒡ ᓂᐧᐄᐦ ᒋᔅᒑᓯᐦᑖᓈᓐ ᐊᓐ ᓃᔓᓯᒡ ᐧᐋᐦᒋ ᐃᔅᐱᓯᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐊᓂᑦ ᓃᔓᓯᒡ ᐋ ᐃᔑᓈᑯᐦᒡᐦ ᐃᑖᔅᐱᓈᐧᐃᓐᐦ᙮



against the damage that high blood sugars cause. They were surprised to find that when they added pitcher plant to the milk, the mice’s blood sugars went back to normal—so there was no nerve damage to protect against. These mice have never become diabetic, and they are now five months old. This is exciting, but we still need to repeat the tests to be sure of what we are seeing.

Checking if pitcher plant could affect other diseases caused by nerve damage

Other diseases besides diabetes also involve sugar damage to nerve cells. It seems that diabetes can make some of these other illnesses worse. For instance, some people think diabetes makes Alzheimer’s worse. So we tested pitcher plant on mice that had an illness similar to Alzheimer’s. We wanted to see if the plant would prevent high blood sugars in these mice the same way it did in pre-diabetic mice. Curiously, it did not. We are trying to figure out why the plant has different effects in these two situations.

ᐁ ᓂᑑᒋᐢᑫᔨᐦᑌᑲᓄᐧᐃᐦᒡ ᐋᔨᑲᑖᕽ ᑫ ᒌ ᐧᐄᒋᐦᐋᐧᐁᐸᔨᐦᒡ ᑫ ᒌ ᓅᒋᐸᔨᐦᒡ ᐄᔮᔨᒣᔨᐦᑕᒨᐧᐃᓐ

ᐊᓂᒌ ᐊᐧᐁᓂᒌ ᐁ ᐄᔮᐧᑖᐤ ᐋᐦᑯᓯᐧᐃᓐᐦ ᐁ ᓀᐦᑳᒋᐱᒪᑎᓰᐧᑖᐤ ᐧᒣᐦᒡ ᐊᓐ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓄᐧᐃᐦᒡ ᓀᕽᑦ ᒫᒃ ᐋᓫᓵᐃᒥᖅᐢ ᑳ ᐃᔑᓂᐦᑳᑌᒡ, ᐁᔫᑦ ᐁ ᐃᐦᑎᐧᑖᐤ ᐁ ᐄᔮᔨᒣᔨᐦᑕᐦᐧᑳᐤ᙮ ᓂᒌ ᐧᐄᐦ ᒋᐢᑫᔨᐦᑌᓈᓐ ᑖᐧᐯ ᑫ ᒌ ᐧᐄᒋᐦᐋᐧᐁᐸᔨᐦᒡ ᐋᔨᑲᑖᕽ ᑫ ᒌ ᐅᐦᒋ ᓅᑫᔨᐦᑕᐦᐧᑳᐤ ᐊᐧᐁᓂᒌ ᐊᓂᔫ ᐁ ᐃᐢᐸᔨᐦᐋᑯᐧᑖᐤ ᑫᐧᑳᔫ ᐁ ᐄᔮᔨᒣᔨᐦᑕᐦᐧᑳᐤ᙮ ᐁᐅᑦ ᒫᒃ ᑳ ᐃᐢᐸᔨᐦᐋᒋᐦᐧᑖᐤ ᐋᐱᑯᔒᔑᓐ ᑫ ᐄᔮᔨᒣᔨᐦᑕᐦᐧᑳᐤ, ᑲᔦ ᑳ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᒡ ᑖᐧᐯ ᑫ ᒌ ᐧᐄᒋᐦᐋᑯᐧᑖᐤ ᐊᓂᔫ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ᙮ ᓀᐅᔨᓐ ᐁ ᐃᓯᓈᑯᓯᐧᑖᐤ ᐋᐱᑯᔒᔑᓐ ᓂᒌ ᓂᑑᒋᐢᑫᔨᐦᒫᓈᓂᓐ:

- ᐁ ᒥᔪᐱᒫᑎᓰᐧᑖᐤ ᐋᐱᑯᔒᔑᓐ
- ᐋᐱᑯᔒᔑᓐ ᑫᑳᑦ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ
- ᐋᐱᑯᔒᔑᓐ ᐁ ᐄᔮᐧᑖᐤ ᐃᑖᐢᐱᓀᐧᐃᓂᔫ ᐧᒣᐦᒡ ᐋᓫᓵᐃᒥᖅᐢ ᑳ ᐃᔑᓂᐦᑳᑌᔨᒡ
- ᐋᐱᑯᔒᔑᓐ ᑖᐱᐣᑯᓐ ᐁ ᐃᓯᓈᑯᓯᐧᑖᐤ ᑫᑳᑦ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ ᑲᔦ ᐊᓂᔫ ᐁ ᐄᔮᐧᑖᐤ ᐧᒣᐦᒡ ᐋᓫᓵᐃᒥᐢ ᑳ ᐃᔑᓂᐦᑳᑌᔨᒡ᙮

ᐊᓐ ᒫᒃ ᑳ ᐋᔑ ᐧᐋᐱᐦᑕᒫᐦᒡ, ᐁᐅᑦ ᐁ ᔫᑯᐦᒡ ᐁ ᐧᐄᒋᐦᐋᑯᐧᑖᐤ ᐋᐱᑯᔒᔑᓐ ᐊᓂᔫ ᐋᐱᐦᑑ ᐁ ᐃᑌᔨᐦᑖᑯᓂᔨᒡ ᑫᐧᑳᔫ ᐁ ᐄᔮᔨᒣᔨᐦᑕᒥᐦᐋᐧᐁᔨᒡ (ᐧᒣᐦᒡ ᐊᓐ ᐁ ᐧᐋᐧᐋᐱᐦᑌᐦᐧᑳᐤ ᐁ ᐅᕽᑳᔨᒡ ᐋᐢᒌᔫ ᓀᕽᑦ ᒫᒃ ᐁ ᐃᐦᑖᐧᑖᐤ ᐊᓂᑌ ᐁ ᒌᐦᑳᔮᕽᑌᔨᒡ)᙮ ᒥᑦ ᒫᒃ ᓇᒧᔨ ᐧᐄᒋᐦᐋᑰᒡ ᐊᓂᑦ ᓈᕽᒡ ᐁ ᐄᔮᔨᒣᔨᐦᑕᒥᐦᐋᐧᐁᔨᒡ ᑫᐧᑳᔫ, ᐧᒣᐦᒡ ᐊᓂᔫ ᐁ ᐧᐋᐱᒫᐧᑖᐤ ᑯᑕᒃᐦ ᐋᐱᑯᔒᕽᐦ ᐁᑳ ᐧᐋᐦᑯᒫᐧᑖᐤ᙮ ᐁᕽᑦ ᐁᑎᑑ ᒥᕽᑕᐦᐄ ᓂᑳ ᓂᑑᒋᐢᑫᔨᐦᑌᓈᓐ ᐆ᙮

ᐋ ᓂᑑᒋᐢᑳᔨᐦᑖᑭᓂᐧᐃᓪ ᐋᔨᑭᑖᕽ ᒫ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᓪ ᒫ ᒌ ᓅᒋᐱᔨᓪ ᐄᔮᔨᒫᔨᐦᑎᒧᐧᐃᓐ

ᐊᓂᒌ ᐊᐧᐋᓂᒌ ᐋ ᐄᔮᓪ ᐋᐦᑯᓯᐧᐃᓐᐦ ᐋ ᓈᐦᑳᒋᐱᒥᑎᓰᓪ ᐧᒫᐦᒡ ᐊᓐ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᓪ ᑭᔮ ᒫᒃ ᐋᓫᓵᐃᒥᖅᐢ ᑳ ᐃᔑᓂᐦᑳᑖᓪ, ᐋᔦᐧᐃᑦ ᐋ ᐃᐦᑎᓪ ᐋ ᐄᔮᔨᒫᔨᐦᑎᐦᐧᑳᐤ᙮ ᓂᒌ ᐧᐄᐦ ᒋᐢᒐᔨᐦᑖᓈᓐ ᑖᐧᐸ ᒫ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᓪ ᐋᔨᑭᑖᕽ ᒫ ᒌ ᐅᐦᒋ ᓅᒐᔨᐦᑎᐦᐧᑳᐤ ᐊᐧᐋᓂᒌ ᐊᓂᔮ ᐋ ᐃᐢᐱᔨᐦᐋᑯᓪ ᒫᐧᑳᔨᐤ ᐋ ᐄᔮᔨᒫᔨᐦᑎᐦᐧᑳᐤ᙮ ᐋᐅᑦ ᒫᒃ ᑳ ᐃᐢᐱᔨᐦᐋᒋᐦᒡ ᐋᐱᑯᔒᔑᓐ ᒫ ᐄᔮᔨᒫᔨᐦᑎᐦᒡ, ᑭᔮ ᑳ ᓂᑑᒋᐢᒐᔨᐦᑎᒫᐦᒡ ᑖᐧᐸ ᒫ ᒌ ᐧᐄᒋᐦᐋᑯᓪ ᐊᓂᔮ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔨᐤ᙮ ᓈᐅᔨᓐ ᐋ ᐃᓯᓈᑯᓯᓪ ᐋᐱᑯᔒᔑᓐ ᓂᒌ ᓂᑑᒋᐢᒐᔨᐦᒫᓈᓂᓐ:

- ᐋ ᒥᔪᐱᒫᑎᓰᓪ ᐋᐱᑯᔒᔑᓐ
- ᐋᐱᑯᔒᔑᓐ ᒫᑳᑦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓪ
- ᐋᐱᑯᔒᔑᓐ ᐋ ᐄᔮᓪ ᐃᑖᐢᐱᓈᐧᐃᓂᔨᐤ ᒨᔮᓫ ᐋᓫᓵᐃᒥᖅᐢ ᑳ ᐃᔑᓂᐦᑳᑖᔨᓪ
- ᐋᐱᑯᔒᔑᓐ ᑖᐱᐣᑯᓐ ᐋ ᐃᓯᓈᑯᓯᓪ ᒫᑳᑦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓪ ᑭᔮ ᐊᓂᔮ ᐋ ᐄᔮᓪ ᒨᔮᓫ ᐋᓫᓵᐃᒥᐢ ᑳ ᐃᔑᓂᐦᑳᑖᔨᓪ᙮

ᐊᓐ ᒫᒃ ᑳ ᐋᔑ ᐧᐋᐱᐦᑎᒫᐦᒡ, ᐋᐅᑦ ᐋ ᔫᑯᐦᒡ ᐋ ᐧᐄᒋᐦᐋᑰᓪ ᐋᐱᑯᔒᔑᓐ ᐊᓂᔮ ᐋᐱᐦᑑ ᐋ ᐃᑖᔨᐦᑖᑯᓂᔨᓪ ᒫᐧᑳᔨᐤ ᐋ ᐄᔮᔨᒫᔨᐦᑎᒥᐦᐄᐧᐋᔨᓪ (ᒨᔮᓫ ᐊᓐ ᐋ ᐧᐋᐧᐋᐱᐦᑎᐦᒡ ᐋ ᐅᕽᑳᔨᓪ ᐋᐢᒌᔨᐤ ᑭᔮ ᒫᒃ ᐋ ᐃᐦᑖᓪ ᐊᓂᑖ ᐋ ᒌᐦᑳᔮᕽᑖᔨᓪ)᙮ ᒥᑦ ᒫᒃ ᓂᒧᔨ ᐧᐄᒋᐦᐋᑰᓪ ᐊᓂᑦ ᓈᕽᓪ ᐋ ᐄᔮᔨᒫᔨᐦᑎᒥᐦᐄᐧᐋᔨᓪ ᒫᐧᑳᔨᐤ, ᒨᔮᓫ ᐊᓂᔮ ᐋ ᐧᐋᐱᒫᓪ ᑯᑎᒃᐦ ᐋᐱᑯᔒᕽᐦ ᐋᑳ ᐧᐋᐦᑯᒫᓪ᙮ ᐋᕽᑦ ᐊᑎᑑ ᒥᕽᑎᐦᐄ ᓂᑭ ᓂᑑᒋᐢᒐᔨᐦᑖᓈᓐ ᐆ᙮

Checking if pitcher plant could lower anxiety

People who have chronic diseases like diabetes or Alzheimer's often feel very anxious. We wanted to know if pitcher plant might have calming effects in these situations. So we put mice in situations that would make them anxious, and checked if the plant helped. We did this with four different groups of mice:

- healthy mice
- pre-diabetic mice
- mice with an Alzheimer-like illness
- mice with both pre-diabetes and the Alzheimer-like illness.

So far, our results suggest that the plant helps mice to cope with moderate-stress situations (like exploring new ground or spending time in brightly lit areas). It doesn't seem to help in high-stress situations like being around an unrelated mouse. We are doing more studies on this.

ᐁ ᑲᓇᐧᐋᐱᐦᑖᑲᓇᐧᐃᐦᐠ ᐁ ᐄᓯ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᓐᐦ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᐋᓅᐸᔨᐦᐠ ᑫ ᐄᓯ ᐱᒥᐸᔨᐦᐠ ᑫᐧᑳᓐ ᐊᓂᑦ ᐲᐦᐠ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ

ᐊᓐ ᑳ ᐄᓯ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓇᐧᐃᐦᐠ, ᐁᐅᒄ ᑳ ᐧᐄᐦ ᐧᐋᐱᐦᑕᒫᐦᐠ ᑖᓐ ᐁ ᐃᐢᐸᔨᐦᐠ ᐊᓂᑦ ᐲᐦᐠ ᐊᓐ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ ᐊᓐ ᐧᐁᐦᒋ ᒋᐦᒋᐸᔨᐦᐠ ᑫ ᐊᑕ ᐧᐋᓈᑎᐦᐠ ᐊᓐ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ᙮ ᐊᓂᑦ ᐲᐦᐠ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ, ᓇᓈᐦᑰ ᐃᓯᓈᑯᓐ ᐊᓐ ᑫᐧᑳᓐ ᐁ ᐅᐦᒋ ᐧᐄᐦᑕᒫᑫᒪᑲᐦᐠ ᑫᐧᑳᓐ ᑫ ᐄᓯ ᐱᒥᐸᔨᐦᐠ ᐊᓂᔫ “messengers” ᑳ ᐃᓯᓂᐦᑳᑌᐦᐧᑳᐤᐦ᙮ ᐊᓐ ᒫᒃ ᐁ ᓰᐧᐋᑲᒥᐦᐧᑳᓇᐧᐃᐦᐠ, ᐁᐅᒄ ᐁ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᐠ ᐅᐦᒋ ᐊᓐ ᐁ ᐄᓯ ᐋᐸᑎᔩᒪᑲᐦᐠ ᐊᓐ ᐁ ᐅᐦᒋ ᐧᐄᐦᑕᒫᑫᒪᑲᐦᐠ ᑫᐧᑳᓐ ᐊᓂᑦ ᐲᐦᐠ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ᙮ ᐁᐅᒄ ᐋᐦᒌᐤᐦ ᐁ ᐊᑕ ᐃᐢᐸᔨᐦᐠ ᐊᓐ ᐁ ᐄᓯ ᐋᐸᑎᔩᒪᑲᐦᐠ ᐊᓐ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ, ᐊᓐ ᒫᒃ ᐋᐦᒌᐤᐦ ᐁ ᐊᑕ ᐃᐢᐸᔨᐦᐠ, ᐁᐅᒄ ᐁ ᐃᑌᔨᐦᑕᒫᐦᐠ ᐊᓂᑦ ᐧᐁᐦᒋᐸᔨᐦᐠ ᑫ ᐊᑕ ᐧᐋᓈᑎᐦᐠ ᐊᓐ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ᙮ ᐁᐅᒄ ᑳ ᑲᓇᐧᐋᐱᐦᑕᒫᐦᐠ ᓃᓱᔨᐠ ᐊᓂᑦ ᐲᐦᐠ ᐊᓐ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ ᑫ ᒌ ᐧᐋᓈᑎᐦᐠ: ᐊᓂᑦ ᐁ ᒋᐦᒋᐸᔨᐦᐠ ᐅᑎᐦᑕᐧᑳᑲᓂᔮᐲ, ᑲᔦ ᐊᓂᑦ ᒥᑎᐦᐱᐦᐠ᙮

ᐊᓐ ᓃᔅᑕᒻ ᑳ ᐄᓯ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᐠ, ᐁᐅᒄ ᑳ ᑲᓇᐧᐋᐱᐦᑕᒫᐦᐠ ᐊᓐ ᐯᔭᑯᔨᐠ ᐁ ᐃᓯᓈᑯᐦᐠ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ—ᐁᐅᒄ ᐊᓐ ᑳ ᒋᑲᒍᐠ ᐊᓂᑦ ᐅᑎᐦᑕᐧᑳᑲᓂᔮᐲᐦᐠ᙮ ᐆ ᐁ ᐧᐋᓈᑎᐦᐠ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ, ᐁᔫᒄ ᑫ ᒌ ᒌᐢᒋᒥᔨᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐅᑎᐦᒌᐧᐋᐦᐠ ᑲᔦ ᐅᔨᑎᐧᐋᐦᐠ ᐅᐦᒋ ᐊᓂᔫ ᐁ ᐃᐦᑑᑖᑯᐧᑖᐤ ᐁ ᓰᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ᙮ ᐆ ᑳ ᐄᓯ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᐠ, ᐁᐅᒄ ᑳ ᐋᐸᒋᐦᐄᒋᐦᐧᑖᐤ ᐋᐱᑯᓰᓯᐠ ᐅᐦᒋ ᐊᓂᑌ ᐦᐋᑖᑦ ᓛᑉ ᑳ ᐋᐸᒋᐦᑖᑲᓈᐧᑖᐤ ᐁ ᓂᑑᒋᐢᑫᔨᐦᑌᑲᓇᐧᐃᐦᐠ ᑫᐧᑳᓐ᙮ ᐁ ᑑᒫᔨᐠ ᒦᒋᒥᔫ ᒌ ᓯᒫᑲᓈᐧᐃᐠ ᐊᓂᒌ ᐋᐱᑯᓰᓯᐠ ᑲᔦ ᒦᑐᐢᐦ ᑲᔦ ᐧᐋᒋᓈᑲᓐᐦ᙮ ᓂᒌ ᐧᐄᐦ ᒋᐢᑫᔨᐦᑌᓈᓐ ᑖᓂᑌ ᑳ ᐃᐢᐸᔨᐦᐠ ᐊᓐ ᐋᐦᒌᐤᐦ ᑫ ᒌ ᐃᓯᓈᑯᐦᐠ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᐧᐄᐦᑕᒫᑫᒪᑲᐦᐠ ᑫᐧᑳᓐ ᑫ ᐄᓯ ᐱᒥᐸᔨᐦᐠ ᐲᐦᐠ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᔨᑐᔨᓈᓇᐧᐃᐦᐠ ᐊᓐ “messengers” ᑳ ᐃᓯᓂᐦᑳᑌᐠ᙮ ᐁᐅᒄ ᑳ ᑲᓇᐧᐋᐱᐦᑕᒫᐦᐠ ᓃᓱᔨᐠ ᐊᓐ ᐁ ᐃᓯᓈᑯᐦᐠ ᐁ ᐅᐦᒋ ᐧᐄᐦᑕᒫᑫᒪᑲᐦᐠ ᑫ ᐄᓯ

ᐋ ᑭᓇᐧᐋᐱᐦᑖᑭᓂᐧᐃᐠ ᐋ ᐄᓯ ᑖᐦᑭᐦᐄᒉᐱᔨᐠᐦ ᓂᐦᑖᐅᒋᐦᒋᓐᐦ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᐋᓅᐱᔨᐠ ᒉ ᐄᓯ ᐱᒥᐱᔨᐠ ᒉᐧᑳᓐ ᐊᓂᑦ ᐲᐦᐠ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ

ᐊᓐ ᑳ ᐄᓯ ᓂᑑᒋᐢᒉᔨᐦᑖᑭᓂᐧᐃᐠ, ᐋᐅᒄ ᑳ ᐧᐄᐦ ᐧᐋᐱᐦᑎᒫᐦᐠ ᑖᓐ ᐋ ᐃᐢᐱᔨᐠ ᐊᓂᑦ ᐲᐦᐠ ᐊᓐ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ ᐊᓐ ᐧᐋᐦᒋ ᒋᐦᒋᐱᔨᐠ ᒉ ᐊᑎ ᐧᐄᓈᑎᐦᐠ ᐊᓐ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ᙮ ᐊᓂᑦ ᐲᐦᐠ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ, ᓂᓈᐦᑰ ᐃᓯᓈᑯᓐ ᐊᓐ ᒉᐧᑳᓐ ᐋ ᐅᐦᒋ ᐧᐄᐦᑎᒫᒉᒥᑭᐦᐠ ᒉᐧᑳᓐ ᒉ ᐄᓯ ᐱᒥᐱᔨᐠ ᐊᓂᔮ “messengers” ᑳ ᐃᓯᓂᐦᑳᑖᐠᐦ᙮ ᐊᓐ ᒫᒃ ᐋ ᓰᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᐠ, ᐋᐅᒄ ᐋ ᑖᐦᑭᐦᐄᒉᐱᔨᐠ ᐅᐦᒋ ᐊᓐ ᐋ ᐄᓯ ᐋᐱᑎᔩᒥᑭᐦᐠ ᐊᓐ ᐋ ᐅᐦᒋ ᐧᐄᐦᑎᒫᒉᒥᑭᐦᐠ ᒉᐧᑳᓐ ᐊᓂᑦ ᐲᐦᐠ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ᙮ ᐋᐅᒄ ᐊᔨᐦᐠ ᐋ ᐊᑎ ᐃᐢᐱᔨᐠ ᐊᓐ ᐋ ᐄᓯ ᐋᐱᑎᔩᒥᑭᐦᐠ ᐊᓐ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ, ᐊᓐ ᒫᒃ ᐊᔨᐦᐠ ᐋ ᐊᑎ ᐃᐢᐱᔨᐠ, ᐋᐅᒄ ᐋ ᐃᑖᔨᐦᑎᒫᐦᐠ ᐊᓂᑦ ᐧᐋᐦᒋᐱᔨᐠ ᒉ ᐊᑎ ᐧᐄᓈᑎᐦᐠ ᐊᓐ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ᙮ ᐋᐅᒄ ᑳ ᑭᓇᐧᐋᐱᐦᑎᒫᐦᐠ ᓃᓱᔨᐠ ᐊᓂᑦ ᐲᐦᐠ ᐊᓐ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ ᒉ ᒌ ᐧᐄᓈᑎᐦᐠ: ᐊᓂᑦ ᐋ ᒋᐦᒋᐱᔨᐠ ᐅᑎᐦᐹᐅᑭᓈᔮᐲ, ᑭᔮ ᐊᓂᑦ ᒥᑎᐦᐱᐦᐠ᙮

ᐊᓐ ᓃᔅᑎᒻ ᑳ ᐄᓯ ᓂᑑᒋᐢᒉᔨᐦᑎᒫᐦᐠ, ᐋᐅᒄ ᑳ ᑭᓇᐧᐋᐱᐦᑎᒫᐦᐠ ᐊᓐ ᐹᔨᑯᔨᐠ ᐋ ᐃᓯᓈᑯᐦᐠ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ—ᐋᐅᒄ ᐊᓐ ᑳ ᒋᑭᒍᐠ ᐊᓂᑦ ᐅᑎᐦᐹᐅᑭᓈᔮᐲᐦᐠ᙮ ᐆ ᐋ ᐧᐄᓈᑎᐦᐠ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ, ᐋᔦᐧᐃᒄ ᒉ ᒌ ᒌᐢᒋᒥᔨᐠ ᐊᐧᐋᓂᒌ ᐅᑎᐦᒌᐧᐋᐦᐠ ᑭᔮ ᐅᔨᑎᐧᐋᐦᐠ ᐅᐦᒋ ᐊᓂᔮ ᐋ ᐃᐦᑑᑖᑯᐠ ᐋ ᓰᐧᐋᑭᒥᐦᐧᑳᐠ᙮ ᐆ ᑳ ᐄᓯ ᓂᑑᒋᐢᒉᔨᐦᑎᒫᐦᐠ, ᐋᐅᒄ ᑳ ᐋᐱᒋᐦᐄᒋᐦᐠ ᐋᐱᑯᓰᓯᐠ ᐅᐦᒋ ᐊᓂᑖ ᐦᐋᑖᑦ ᓛᑉ ᑳ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᐠ ᐋ ᓂᑑᒋᐢᒉᔨᐦᑖᑭᓂᐧᐃᐠ ᒉᐧᑳᓐ᙮ ᐋ ᑑᒫᔨᐠ ᒦᒋᒥᔨᐤ ᒌ ᓯᒫᑭᓈᐧᐃᐠ ᐊᓂᒌ ᐋᐱᑯᓰᓯᐠ ᑭᔮ ᒦᑐᐢᐦ ᑭᔮ ᐧᐋᒋᓈᑭᓐᐦ᙮ ᓂᒌ ᐧᐄᐦ ᒋᐢᒉᔨᐦᑖᓈᓐ ᑖᓂᑖ ᑳ ᐃᐢᐱᔨᐠ ᐊᓐ ᐊᔨᐦᐠ ᒉ ᒌ ᐃᓯᓈᑯᐦᐠ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᐧᐄᐦᑎᒫᒉᒥᑭᐦᐠ ᒉᐧᑳᓐ ᒉ ᐄᓯ ᐱᒥᐱᔨᐠ ᐲᐦᐠ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᐢᑐᔨᓈᓂᐧᐃᐠ ᐊᓐ “messengers” ᑳ ᐃᓯᓂᐦᑳᑖᐠ᙮ ᐋᐅᒄ ᑳ ᑭᓇᐧᐋᐱᐦᑎᒫᐦᐠ ᓃᓱᔨᐠ ᐊᓐ ᐋ ᐃᓯᓈᑯᐦᐠ ᐋ ᐅᐦᒋ ᐧᐄᐦᑎᒫᒉᒥᑭᐦᐠ ᒉ ᐄᓯ ᐱᒥᐱᔨᐠ

Looking at how the plants affect the “messengers” in nerve cells

In these tests, we are focusing on what happens inside a nerve cell to set off the changes that end up damaging the nerve. Nerve cells contain several kinds of “messengers” that tell the cell to act in certain ways. We know that diabetes interferes with these messengers. This causes changes in how the nerve cell works, and we think those changes lead to nerve damage. We looked for damage to the nerve cells located in two different spots: the base of the spine, and the brain.

In our first set of tests, we looked at a special kind of nerve cell—nerves that connect to the spine. Damage to these specific nerves causes the tingling that some diabetics feel in their hands and feet. In these tests, we used mice taken from the Haddad lab’s studies. These were mice that had been fed a high-fat diet along with balsam poplar or tamarack. We wanted to see how the “messengers” in these mice’s nerve cells changed. We focused on two particular families of messengers. Camille Juzwik, an Honours student, has looked at some messengers that change when a mouse becomes diabetic. When you give the mice tamarack, these messengers go

ᐱᒥᐸᔩᐦᒡ ᒉᒁᓐ ᐲᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᔑᑐᔑᓈᓇᐏᐦᒡ᙮ ᑳᒦᓪ ᒍᔓᐏᒃ, Honours ᒋᔅᑯᑕᒧᐚᑲᓐ, ᒌ ᑳᓇᐚᐱᐦᑕᒻ ᐊᓂᔫᐦ ᐸᔥᒡ ᐋᐦᒌᐤᐦ ᐁ ᐃᔅᐸᔨᓂᔨᒡ ᐊᓂᔫᐦ ᐁ ᐅᐦᒋ ᐐᐦᑕᒫᑫᒪᑲᐦᒡ ᒉ ᐅᐦᒋ ᐱᒥᐸᔨᐦᒡ ᒉᒁᓐ ᐲᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᔑᑐᔑᓈᓇᐏᐦᒡ ᐅᐦᒋ ᐊᓐ ᐁ ᔒᐚᑲᒥᐦᒁᓇᐏᐦᒡ᙮ ᐚᒋᓈᑲᓐᐦ ᐁ ᒥᔮᑲᓈᑤᐤ ᐊᓂᒌ ᐋᐱᑯᔒᔑᒡ, ᐁᐅᒄ ᒦᓐ ᑯᔨᔅᒄ ᐁ ᐃᔅᐸᔨᐦᒡ ᐊᓐ ᐁ ᐅᐦᒋ ᐐᐦᑕᒫᑫᒪᑲᐦᒡ ᒉᒁᓐ ᒉ ᐄᔑ ᐱᒥᐸᔨᐦᒡ ᐊᓂᑦ ᐲᐦᒡ ᐁ ᐅᐦᒋ ᐃᔑᑐᔑᓈᓇᐏᐦᒡ᙮ ᒥᒄ ᒫᒃ ᓇᒧᔨ ᐅᐦᒋ ᐃᔅᐸᔫ ᐊᓐ ᒦᑐᔅ᙮

ᒉᑳᑦ ᑖᐱᔥᑯᓐ ᐃᔑᓈᑯᓂᔨᐤ ᔦᑖ ᐋᐦᒉᑦ ᐁ ᐄᔑ ᓂᔫᒋᔅᒉᔨᐦᑌᐦᒃ, ᒥᒄ ᒫᒃ ᑳᒋᒉᐸᑯᔫ ᐑ ᓂᔫᒋᔅᒉᔨᐦᑕᒻ ᐊᓂᔫ ᐁ ᐄᔑ ᒌᐦᑲᐦᐄᒉᐸᔨᓂᔨᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᔑᑐᔑᓈᓇᐏᐦᒡ ᐊᓂᑦ ᒥᑎᐦᐱᐦᒡ᙮ ᒌ ᓂᔫᒋᔅᒉᔨᐦᑖᑲᓈ ᒉᒁᓐ ᐊᓂᑌ "ᐋᑖᑦ ᓈᑊ ᐅᐦᒋ ᐊᓐ ᐋᐱᑯᔒᔑᒡ ᑳ ᒥᔮᑲᓈᑤᐤ ᑳᒋᒉᐸᑯᔫ ᐊᓂᔫ ᓂᔥᑐᔨᒡ ᐁ ᐃᔥᐱᔑ ᒥᔮᑲᓈᑤᐤ᙮ ᒉᒁᒡ ᒫᒃ ᓂᔫᒋᔅᒉᔨᐦᑕᒻ ᔦᑖ ᐊᓂᔫᐦ ᐋᐱᑯᔒᔥᐦ ᐅᑎᐦᐱᔫᐦ ᐊᓂᔫ ᒉ ᒌ ᐚᐱᐦᑌᐦᒃ ᑖᓐ ᑳ ᐃᔅᐸᔨᓂᔨᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᐐᐦᑕᒫᑫᒪᑲᐦᒡ ᒉ ᐃᔅᐸᔨᐦᒡ ᒉᒁᓐ ᐲᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᔑᑐᔑᓈᓇᐏᐦᒡ ᐊᓂᑦ ᒥᑎᐦᐱᐦᒡ᙮

ᐁᐅᒄ ᐆ ᐊᐱᔒᔥ ᐁ ᒪᔑᓈᑌᒡ ᒪᔑᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓐ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᑳ ᒪᔑᓇᐦᐄᑲᓇᐏᐦᒡ ᑎᐹᒋᒨᔑᓇᐦᐄᑲᓐ ᐊᓂᑌ ᐯᓂᑦ ᓈᑊ ᑳ ᐅᐦᒋᐸᔨᐦᒡ᙮

ᒑᒁᓐ ᐲᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᔑᓈᓂᐏᒡ᙮ ᑳᒦᓪ ᒍᔓᐏᒃ, Honours ᒋᔅᑯᑎᒧᐚᑭᓐ, ᒌ ᑭᓇᐚᐱᐦᑎᒻ ᐊᓂᔮᐦ ᐱᔥᒡ ᐊᔨᐦᒡ ᐋ ᐃᔅᐱᔨᔨᒡ ᐊᓂᔮᐦ ᐋ ᐅᐦᒋ ᐐᐦᑎᒫᒑᒥᑭᐦᒡ ᒐ ᐅᐦᒋ ᐱᒥᐱᔨᒡ ᒑᒁᓐ ᐲᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᔑᓈᓂᐏᒡ ᐅᐦᒋ ᐊᓐ ᐋ ᔒᐚᑭᒥᐦᒁᓂᐏᒡ᙮ ᐚᒋᓈᑭᓐᐦ ᐋ ᒥᔮᑭᓂᐏᒡ ᐊᓂᒌ ᐋᐱᑯᔒᔑᒡ, ᐋᐅᒄ ᒦᓐ ᑯᔨᔅᒄ ᐋ ᐃᔅᐱᔨᒡ ᐊᓐ ᐋ ᐅᐦᒋ ᐐᐦᑎᒫᒑᒥᑭᐦᒡ ᒑᒁᓐ ᒐ ᐄᔑ ᐱᒥᐱᔨᒡ ᐊᓂᑦ ᐲᐦᒡ ᐋ ᐅᐦᒋ ᐃᔑᑐᔑᓈᓂᐏᒡ᙮ ᒥᒄ ᒫᒃ ᓂᒧᔨ ᐅᐦᒋ ᐃᔅᐱᔨᐤ ᐊᓐ ᒦᑐᔅ᙮

ᒑᑳᑦ ᑖᐱᔥᑯᓐ ᐃᔑᓈᑯᓂᔨᐤ ᔦᑖ ᐋᐦᒐᑦ ᐋ ᐄᔑ ᓂᔫᒋᔅᒐᔨᐦᑎᐦᒃ, ᒥᒄ ᒫᒃ ᑳᒋᒐᐱᑯᔨᐤ ᐑ ᓂᔫᒋᔅᒐᔨᐦᑎᒻ ᐊᓂᔮ ᐋ ᐄᔑ ᒌᐦᑭᐦᐄᒐᐱᔨᔨᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᔑᓈᓂᐏᒡ ᐊᓂᑦ ᒥᑎᐦᐱᐦᒡ᙮ ᒌ ᓂᔫᒋᔅᒐᔨᐦᑖᑭᓂᐤ ᒑᒁᓐ ᐊᓂᑖ "ᐋᑖᑦ ᓈᑊ ᐅᐦᒋ ᐊᓐ ᐋᐱᑯᔒᔑᒡ ᑳ ᒥᔮᑭᓂᐏᒡ ᑳᒋᒐᐱᑯᔨᐤ ᐊᓂᔮ ᓂᔥᑐᔨᒡ ᐋ ᐃᔥᐱᔑ ᒥᔮᑭᓂᐏᒡ᙮ ᒫᒁᒡ ᒫᒃ ᓂᔫᒋᔅᒐᔨᐦᑎᒻ ᔦᑖ ᐊᓂᔮᐦ ᐋᐱᑯᔒᔥᐦ ᐅᑎᐦᐱᔨᐤᐦ ᐊᓂᔮ ᒐ ᒌ ᐚᐱᐦᑎᐦᒃ ᑖᓐ ᑳ ᐃᔅᐱᔨᔨᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᐐᐦᑎᒫᒑᒥᑭᐦᒡ ᒐ ᐃᔅᐱᔨᒡ ᒑᒁᓐ ᐲᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᔑᓈᓂᐏᒡ ᐊᓂᑦ ᒥᑎᐦᐱᐦᒡ᙮

ᐋᐅᒄ ᐆ ᐊᐱᔒᔥ ᐋ ᒥᔑᓈᑖᒡ ᒥᔑᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓐ ᐊᑎᑐ ᒥᔥᑏ ᑳ ᒥᔑᓂᐦᐄᑭᓂᐏᒡ ᑎᐹᒋᒧᔑᓂᐦᐄᑭᓐ ᐊᓂᑖ ᐯᓂᑦ ᓈᑊ ᑳ ᐅᐦᒋᐱᔨᒡ᙮

back to normal. But balsam poplar does not have this effect.

Fida Ahmed is doing the same kind of studies, but looking at how Labrador tea affects nerve cells in the brain. The Haddad lab did a study in which they fed mice Labrador tea at three different doses. Fida is now looking at the brains from these mice to see what happened to some of the "messengers" in their brain cells

This is a simplified summary of a more technical report from the Bennett lab.

E. ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓂᑌ ᐧᒑᓐᔅ ᓛᑉ

(ᐑᐑᒪᑲᓂᐲᓯᒼ 2011)

ᐁᐅᑯ ᒉ ᒋᔅᒋᓯᔦᑯ ᐊᓂᔫᐦ ᕕᕇ ᕌᑎᑲᓪᔅ "free radicals" ᑳ ᐃᔑᓂᐦᑳᑌᐦᐧᑳᐤᐦ, ᐁᐅᑯ ᐊᓂᔫᐦ ᒉᐧᑳᔫᐦ ᐁ ᐃᐦᑎᑯᐦᒡ ᒋᒥᐦᑯᓈᐦᒡ ᐁ ᐧᐊᓈᒋᐸᔨᐦᐄᐧᐁᐦᐧᑳᐤᐦ ᐊᓂᐨ ᒋᒥᐦᑰᔮᐲᓈᐦᒡ, ᐁᒃ ᒫᒃ ᐊᓂᔩ ᐊᐧᐁᓂᔩ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ, ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᐅᔑᐦᐆᒪᑲᓂᔫ ᐅᔫ ᐃᔥᐱᔑ ᐧᐄ ᑯᑕᒃᐦ ᐊᐧᐁᔫᐦ ᐁᑳ ᔒᐧᐋᑲᒥᐦᐧᑫᔨᓪᐦ× ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᒦᒋᒻ, ᑲᔦ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᒫᔑᐦᑖᒉᐸᔨᐦᐧᑳᐤᐦ ᐅᐦᒋ ᐊᓐ ᑳ ᐧᐊᓈᒋᐸᔨᐦᐄᐧᐁᓪ ᒥᐦᑰᔮᐲᐦᒡ, ᐁᐅᑯ ᐋᓐᑎᐧᔫᒃᓯᑕᓐᑦᔅ "antioxidants" ᐁ ᐃᔑᓂᐦᑳᑌᐦᐧᑳᐤᐦ, ᐁᐅᑯ ᐊᓐ ᑳ ᐸᔶᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᐊᓂᑌ ᒥᐦᑯᐦᒡ× ᐅᑌ ᒫᒃ ᐧᒑᓐᔅ ᓛᑉ, ᐁᐅᑯ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑌᑲᓄᐧᐃᐦᒡ ᑖᓂᑌ ᐁ ᐃᔅᐸᔨᐦᒡ ᐊᓐ ᐁ ᒫᔑᐦᑖᒉᐸᔨᐦᒡ ᐊᓂᔩ ᐁᑳ ᒉ ᒌ ᐧᐊᓈᒋᐸᔨᐦᐄᐧᐁᓪ ᒥᐦᑰᔮᐲᐦᒡ× ᓂᔥᑐ ᒉᐧᑳᓐ ᒌ ᑲᓄᐧᐋᐱᐦᑌᑲᓅ:

1. ᐁ ᐧᐄᐦ ᒋᔅᒉᔨᐦᑌᑲᓄᐧᐃᐦᒡ ᒉᐧᑳᓐ ᐁ ᐃᐦᑎᑯᐦᒡ ᐁ ᓂᑐᐦᑯᔨᓄᐧᐃᐦᒡ ᐊᓂᐨ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐊᓐ ᐧᒫᐅᒡ ᐁ ᔫᐦᒋᔫᒪᑲᐦᒡ ᐁ ᒫᔑᐦᑖᐸᔨᐦᒡ ᐊᓐ ᐁ ᐧᐄᐦ ᐧᐊᓈᒋᐸᔨᐦᐄᐧᐁᓪ ᒥᐦᑰᔮᐲᐦᒡ
2. ᐁ ᐧᐄᐦ ᒋᔅᒉᔨᐦᑌᑲᓄᐧᐃᐦᒡ ᒉᐧᑳᓐ ᐊᓐ ᐁ ᒋᔥᑕᒫᐅᐦᒡ ᐁ ᓂᑐᐦᑯᔨᓄᐧᐃᐦᒡ ᐊᓂᐨ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ ᐁ ᓵᐳᐸᔨᐦᒡ ᐊᓂᐨ ᒥᑕᐦᒋᔒᐦᒡ ᐊᓂᑌ ᐁ ᐃᔅᐸᔨᐦᒡ ᒥᐦᑯᐦᒡ, ᑲᔦ ᑖᓂᑌ ᐁ ᐊᑕ ᐄᔑ ᐱᒥᐸᔨᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ
3. ᐁ ᐧᐄᐦ ᒋᔅᒉᔨᐦᑌᑲᓄᐧᐃᐦᒡ ᑖᐧᐯ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐊᓐ ᐁᑳ ᒉ ᒌ ᓈᑎᑯᐨ ᐊᐧᐁᓐ ᐁ ᑑᒫᔨᓪ ᐅᔅᑯᓐ ᐃᑖᔅᐱᓄᐧᐃᓐ, ᑲᔦ ᐊᓐ ᐁ ᐊᔑᒋᐸᔨᐦᒡ ᐊᓐ ᐁ ᐧᐊᓈᒋᐸᔨᐦᐄᐧᐁᓪ ᒥᐦᑰᔮᐲᐦᒡ×

ᐁ ᐧᐄᐦ ᒋᔅᒉᔨᐦᑌᑲᓅᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᑳ ᐸᔶᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᒥᐦᑯᐦᒡ ᐁ ᐃᐦᑎᑯᐦᐧᑳᐤᐦ ᐊᓂᑌ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ

ᐊᓐ ᐯᔦᑯ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ, ᒫᔥᑯᓪ ᒋᑳ ᒌ ᐃᔑᓈᑯᓐ ᒪᐦᒉᑐ ᒥᑖᐦᑐᒪᑕᓅ ᓄᔥᐨ ᒫᒃ ᒪᐦᒉᑐ ᒋᔖᒥᑖᐦᑐᒪᑕᓅ ᒉ ᒌ ᐃᐦᑎᑯᐦᐧᑳᐤᐦ ᒉᐧᑳᔫᐦ ᐁ ᓂᑐᐦᑯᔨᓅᐦᐧᑳᐤᐦ× ᐧᑳᓂ ᑲᔦ ᐊᓐ ᒋᔅᑯᑕᒧᐧᐋᑲᓐ ᒌᓈ ᐧᒫᓐᒃ ᒉᐧᑳᓪ ᐋᐸᑎᔩᐦᑲᐦᑕᒧᓪ ᒉ

E. ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓂᑖ ᐧᒑᓐᔅ ᓛᑉ

(ᒋᓭᔮᔅᑯᓂᐲᓯᒻ 2011)

ᐋᐅᑯ ᒐ ᒋᔅᒋᓯᔫᑯ ᐊᓂᐦᐄ ᕕᕇ ᕌᑎᑭᓪᔅ "free radicals" ᑳ ᐃᔑᓂᐦᑳᑖᓪᐦ, ᐋᐅᑯ ᐊᓂᐦᐄ ᒐᐧᑲᓂᐦᐄ ᐋ ᐃᐦᑎᑯᐦᒡ ᒋᒥᐦᑯᓈᐦᒡ ᐋ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᓪᐦ ᐊᓂᐨ ᒋᒥᐦᐧᑳᔫᐱᓈᐦᒡ, ᐋᒃ ᒫᒃ ᐊᓂᔩ ᐊᐧᐋᓂᔩ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓪ, ᐊᑎᑑ ᒥᔥᑏ ᐅᔑᐦᐆᒥᑭᓂᔫ ᐅᔫ ᐃᔥᐱᔑ ᐧᐄ ᑯᑎᒃᐦ ᐊᐧᐋᔫᐦ ᐋᑳ ᔒᐧᐋᑭᒥᐦᐧᑳᔨᓪᐦ× ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᒦᒋᒻ, ᑭᔫ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᒫᔑᐦᑖᒐᐱᔨᓪᐦ ᐅᐦᒋ ᐊᓐ ᑳ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᓪ ᒥᐦᐧᑳᔫᐲᐦᒡ, ᐋᐅᑯ ᐋᓐᑎᐧᔫᒃᓯᑎᓐᑦᔅ "antioxidants" ᐋ ᐃᔑᓂᐦᑳᑖᓪᐦ, ᐋᐅᑯ ᐊᓐ ᑳ ᐱᔶᒋᐦᐄᐧᐋᐱᔨᓪ ᐊᓂᑖ ᒥᐦᑯᐦᒡ× ᐅᑖ ᒫᒃ ᐧᒑᓐᔅ ᓛᑉ, ᐋᐅᑯ ᑳ ᓂᑑᒋᔅᒐᔨᐦᑖᑭᓂᐧᐃᓪ ᑖᓂᑖ ᐋ ᐃᔅᐱᔨᓪ ᐊᓐ ᐋ ᒫᔑᐦᑖᒐᐱᔨᓪ ᐊᓂᔫ ᐋᑳ ᒐ ᒌ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᓪ ᒥᐦᐧᑳᔫᐲᐦᒡ× ᓂᔥᑐ ᒐᐧᑳᓐ ᒌ ᑭᓄᐧᐋᐱᐦᒑᑭᓅ:

1. ᐋ ᐧᐄᐦ ᒋᔅᒐᔨᐦᑖᑭᓂᐧᐃᓪ ᒐᐧᑳᓐ ᐋ ᐃᐦᑎᑯᐦᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᓪ ᐊᓂᐨ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐊᓐ ᒫᐅᒡ ᐋ ᔫᐦᒋᔫᒥᑭᐦᒡ ᐋ ᒫᔑᐦᑖᐱᔨᓪ ᐊᓐ ᐋ ᐧᐄᐦ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᓪ ᒥᐦᐧᑳᔫᐲᐦᒡ
2. ᐋ ᐧᐄᐦ ᒋᔅᒐᔨᐦᑖᑭᓂᐧᐃᓪ ᒐᐧᑳᓐ ᐊᓐ ᐋ ᒋᔥᑎᒫᐅᐦᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᓪ ᐊᓂᐨ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ ᐋ ᓵᐳᐱᔨᓪ ᐊᓂᐨ ᒥᑎᐦᒋᔒᐦᒡ ᐊᓂᑖ ᐋ ᐃᔅᐱᔨᓪ ᒥᐦᑯᐦᒡ, ᑭᔫ ᑖᓂᑖ ᐋ ᐊᑎ ᐄᔑ ᐱᒥᐱᔨᓪ ᐊᓂᑖ ᐲᐦᒋᔨᐤ
3. ᐋ ᐧᐄᐦ ᒋᔅᒐᔨᐦᑖᑭᓂᐧᐃᓪ ᑖᐧᐸ ᒐ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᓪᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐊᓐ ᐋᑳ ᒐ ᒌ ᓈᑎᑯᐨ ᐊᐧᐋᓐ ᐋ ᑑᒫᔨᓪ ᐅᔅᑯᓐ ᐃᑖᔅᐱᓈᐧᐃᓐ, ᑭᔫ ᐊᓐ ᐋ ᐊᔥᒋᐱᔨᓪ ᐊᓐ ᐋ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᓪ ᒥᐦᐧᑳᔫᐲᐦᒡ×

ᐋ ᐧᐄᐦ ᒋᔅᒐᔨᐦᑖᑭᓂᐧᐃᓪᐦ ᐊᓂᐦᐄ ᑳ ᐱᔶᒋᐦᐄᐧᐋᐱᔨᓪ ᒥᐦᑯᐦᒡ ᐋ ᐃᐦᑎᑯᐦᒡᐦ ᐊᓂᑖ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ

ᐊᓐ ᐹᔨᑯ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ, ᐧᑳᐧᓵᓐ ᒋᑭ ᒌ ᐃᔑᓈᑯᓐ ᒥᐦᒐᑐ ᒥᑖᐦᑐᒥᑎᓂᐤ ᑭᔫ ᒫᒃ ᒥᐦᒐᑐ ᒋᓵᒥᑖᐦᑐᒥᑎᓂᐤ ᒐ ᒌ ᐃᐦᑎᑯᐦᒡᐦ ᒐᐧᑳᐦᓃ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᓪᐦ× ᐧᑳᓂ ᑭᔫ ᐊᓐ ᒋᔅᑯᑎᒧᐧᐋᑭᓐ ᒌᓈ ᐧᒫᓐᒃ ᒐᐧᑳᓪ ᐋᐱᑎᔑᔥᑎᒧᓪ

E. Report for the Johns lab

(January 2011)

Recall that "free radicals" are particles that damage our veins, and that people with diabetes make more of them than usual. Plants, foods, and medicines that fight free radicals are called "antioxidants." The Johns lab has been looking at antioxidant effects of the Cree plants. The work focuses on three areas:

1. Identifying which ingredients in the plants are the strongest antioxidants
2. Finding out if key ingredients from the plants actually make it from the gut into our bloodstream, and from there to other parts of our bodies
3. Finding out if the plants protect against fatty liver disease, and the free radical damage that goes with it

Identifying antioxidants in the plants

A plant may have hundreds or thousands of ingredients. Cory and graduate student Gina Monk are trying to find out which ingredients are the best at fighting free radicals. They plan to look at as many

ᒌ ᒋᔅᑫᔨᐦᑌᐦᐧᑳᐤᐦ ᑖᓂᔫ ᐊᓂᔫ ᐧᒫᐅᒡ ᐁ ᒥᔪᐸᔨᓂᔨᒡ ᑫᐧᑳᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᒡ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ ᐊᓇ ᐁ ᐱᓭᐦᒋᑲᒥᐦᐧᑫᐸᔨᐦᒡ, ᐁᐅᒄ ᐊᓇ ᐁᑳ ᑫ ᒌ ᐃᐦᑎᑯᐦᒡ ᐊᓇ ᑳ ᐧᐋᓈᒋᐸᔨᐦᐄᐧᐁᒡ ᐊᓂᑦ ᒥᐦᑰᔽᐲᐦᒡ. ᐁᔫᒄ ᓃᐦᑉ ᑫ ᑯᒋᐦᑖᐧᑖᐤ ᐧᒫᐅᒡ ᐁ ᐃᔅᐱᔒᐦᑲᐦᐧᑖᐤ ᑫ ᐧᐄᐦ ᐧᐋᐱᐦᑌᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐧᐹᒧᔥ ᒌᔑᐸᔨᐦᑫ ᐆ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑌᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ. ᓵᔥ ᒫᒃ ᓅᔕ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒌ ᐧᐋᐧᐋᐱᐦᑕᒧᒡ ᐅᐦᒋ ᐊᓂᔫ ᐧᒫᐅᒡ ᐁ ᒥᔪᐸᔨᓂᔨᒡ ᐁ ᐱᓭᐦᒋᐸᔨᐦᐄᐧᐁᒡ ᐊᓂᑦ ᒥᐦᑯᐦᒡ: ᐁᐅᒄ ᐊᓇ ᐄᓈᐦᑎᒄ, ᑲᓭ ᐧᐋᒋᓈᑲᓐ.

ᐊᓂᑦ ᐄᓈᐦᑎᑯᐦᒡ, ᐁᔫᒄ ᑳ ᒥᔅᑫᐦᐧᑳᐤ ᐊᓂᔫ ᑫᐧᑳᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᒡ ᐊᓂᑦ ᐧᐄᔫᒌᐦᒡ ᐊᓇ ᐁ ᐱᓭᐦᒋᐸᔨᐦᐄᐧᐁᒡ ᒥᐦᑯᐦᒡ ᐁᑳ ᑫ ᒌ ᐃᐦᑎᑯᐦᒡ ᐊᓇ ᑳ ᐧᐋᓈᒋᐸᔨᐦᐄᐧᐁᒡ ᒥᐦᑰᔽᐲᐦᒡ. ᐁᔫᒄ ᒉᐧᑲᒡ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑌᐦᐧᑳᐤ ᐊᓂᔫ ᑫᐧᑳᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᒡ ᐊᓂᑦ ᐅᔥᐧᑳᒎᔑᐦᒡ. ᐊᓂᑦ ᐧᐋᒋᓈᑲᓂᐦᒡ, ᐁᔫᒄ ᑳ ᒥᔅᑫᐦᐧᑳᐤ ᐸᔥᒡ ᑫᐧᑳᔫᐦ ᓈᔥᒡ ᐁ ᓃᐦᒋᔩᒪᑲᓂᔨᒡ ᐁ ᓂᑐᐦᑯᔨᓅᔨᒡ ᐊᓇ ᐁ ᐱᓭᐦᒋᐦᐄᐧᐁᒡ ᒥᐦᑯᐦᒡ. ᒥᒄ ᒫᒃ ᔮᐸᒡ ᓇᒧᐃ ᐧᐃᒋᐦᐄᐧᐁᐸᔫᐦ ᐅᔫᐦ ᑫᐧᑳᔫᐦ ᐁ ᓂᑐᐦᑯᔨᓅᐦᐧᑳᐤᐦ ᐅᐦᒋ ᐊᓇ ᐁ ᒫᔑᐦᑖᑲᓄᐧᐃᐦᒡ ᐁ ᑖᐦᒋᐳᓈᓄᐧᐃᐦᒡ.

ᐁ ᐧᐄᐦ ᒋᔅᑫᔨᐦᑌᑲᓄᐧᐃᐦᒡ ᐊᓇ ᑫᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓄᐧᐃᐦᒡ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ ᑖᐧᐯ ᐁ ᐲᐦᑌᐸᔨᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ

ᐊᓇ ᐁ ᒦᒋᔨᔨᐦᒄ ᓅᔥᑦ ᐁ ᒥᓂᐦᐧᑫᔨᐦᒄ ᒦᒋᒻ ᓅᔥᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ, ᐁᑯᑌ ᐁ ᓵᐳᐦᑐᐧᐁᐸᔨᐦᒡ ᐊᓂᑌ ᒋᑕᐃᓈᐦᒡ ᐊᓂᑌ ᐁ ᐃᔅᐸᔨᐦᒡ ᒋᑕᐦᒋᔒᓈᐦᒡ. ᐁᑯᑌ ᒫᒃ ᐁ ᓵᐳᐦᑐᐧᐁᐸᔨᐦᒡ ᐊᓇ ᑫᐧᑳᓐ ᐁ ᒦᒋᒥᔥᑲᑫᒡ ᐊᓂᑌ ᒋᒥᐦᑯᓈᐦᒡ ᐁ ᐃᔅᐸᔨᐦᒡ ᐁᒄ ᒫᒃ ᒥᔨᐧᐁ ᐲᐦᒋᔫ ᐁ ᐃᔅᐸᔨᐦᒡ. ᒥᒄ ᒫᒃ ᐸᔥᒡ ᐊᓇ ᑫᐧᑳᓐ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑦ ᒋᑕᐦᒋᔒᓈᐦᒡ, ᓇᒧᐃ ᓵᐳᐦᑐᐧᐁᐸᔫ ᐊᓂᑌ ᑫ ᒌ ᐃᔅᐸᔨᐦᒡ ᒥᐦᑯᐦᒡ. ᒋᔥᑕᒫᐧᐃᓐ ᑫ ᒌ ᒋᔅᑫᔨᐦᑌᑲᓅᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᑫᐧᑳᔫᐦ ᐁ ᐃᔅᐸᔨᐦᒡ ᒥᐦᑯᐦᒡ ᑲᓭ ᐁᑳ ᐁ ᐃᔅᐸᔨᐦᒡ ᐊᓂᑌ ᒥᐦᑯᐦᒡ, ᐧᐁᔥ ᐊᓇ ᐁᑳ ᐃᔅᐸᔨᐦᒡ ᑫᐧᑳᓐ ᒥᐦᑯᐦᒡ, ᓇᒧᐃ ᒋᑳ ᐋᐸᑎᓯᒪᑲᓐ ᐊᓂᑌ ᐲᐦᒋᔫ. ᐅᑌ ᒫᒃ ᐧᒑᓐᔅ ᓛᐸ, ᐁᐅᒄ ᐁ ᐧᐄᒑᐸᑎᓯᒪᑲᓅᐧᑖᐤ ᐊᓂᒌ ᐊᓂᑌ ᑳ ᐋᐸᑎᓯᐧᑖᐤ ᐋᕐᓈᓯᓐ ᓛᐸ ᑲᓭ ᐧᐹᔅᑎᕐ ᓛᐸ ᐅᐦᒋ ᐊᓇ ᑫ ᒌ ᒋᔅᑫᔨᐦᑌᑲᓄᐧᐃᐦᒡ ᑖᓐ ᐁ ᐃᔅᐱᔑ

plants as they can before the end of the project. So far, they have looked at two of the best antioxidant plants: black spruce, and tamarack.

In black spruce, they identified the key ingredients in the bark that fight free radicals. Now they are looking at the ingredients in the cones. In tamarack, they found some ingredients that are very strong antioxidants. Interestingly, these are not the same ingredients as the ones that seem to help fight fat.

ᒑ ᒌ ᒋᔅᒑᔨᐦᑎᐦᒡ ᑖᓂᔮ ᐊᓂᔮ ᒫᐅᒡ ᐋ ᒥᔪᐱᔨᔨᒡ ᒑᐧᑳᔨᐤ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ ᐊᓇ ᐋ ᐱᔮᐦᒋᑭᒥᐦᐧᑳᐱᔨᒡ, ᐋᐅᒄ ᐊᓇ ᐋᑳ ᒑ ᒌ ᐃᐦᑎᑯᐦᒡ ᐊᓇ ᑳ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᒡ ᐊᓂᑦ ᒥᐦᐧᑳᔮᐲᐦᒡ. ᐋᔮᐧᐃᒄ ᓃᐦᑉ ᒑ ᑯᒋᐦᑖᒡ ᒫᐅᒡ ᐋ ᐃᔅᐱᔑᐦᑭᐦᒡ ᒑ ᐧᐄᐦ ᐧᐋᐱᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋᐦᐧᒫᔮ ᒌᔑᐱᔨᐦᒑ ᐆ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ. ᓵᔥ ᒫᒃ ᓅᔕ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒌ ᐧᐋᐧᐋᐱᐦᑎᒧᒡ ᐅᐦᒋ ᐊᓂᔮ ᒫᐅᒡ ᐊ ᒥᔪᐱᔨᔨᒡ ᐋ ᐱᔮᐦᒋᐱᔨᐦᐄᐧᐋᒡ ᐊᓂᑦ ᒥᐦᑯᐦᒡ: ᐋᐅᒄ ᐊᓇ ᐄᔮᐦᑎᒄ, ᑭᔮ ᐧᐋᒋᓈᑭᓐ.

ᐊᓂᑦ ᐄᔮᐦᑎᑯᐦᒡ, ᐋᔮᐧᐃᒄ ᑳ ᒥᔅᑭᐦᒡ ᐊᓂᔮ ᒑᐧᑳᔨᐤ ᐊ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᐊᓂᑦ ᐧᐄᔮᒌᐦᒡ ᐊᓇ ᐋ ᐱᔮᐦᒋᐱᔨᐦᐄᐧᐋᒡ ᒥᐦᑯᐦᒡ ᐋᑳ ᒑ ᒌ ᐃᐦᑎᑯᐦᒡ ᐊᓇ ᑳ ᐧᐃᓈᒋᐱᔨᐦᐄᐧᐋᒡ ᒥᐦᐧᑳᔮᐲᐦᒡ. ᐋᔮᐧᐃᒄ ᒫᐧᑲᒡ ᐊ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᐊᓂᔮ ᒑᐧᑳᔨᐤ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᐊᓂᑦ ᐅᔥᐧᑳᒎᔑᐦᒡ. ᐊᓂᑦ ᐧᐋᒋᓈᑭᓂᐦᒡ, ᐋᔮᐧᐃᒄ ᑳ ᒥᔅᑭᐦᒡ ᐱᔥᒡ ᒑᐧᑳᔨᐤ ᓈᔥᒡ ᐋ ᓃᐦᒋᔩᒥᑭᓂᔨᒡ ᐊ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᐊᓇ ᐊ ᐱᔮᐦᒋᐦᐄᐧᐋᒡ ᒥᐦᑯᐦᒡ. ᒥᒄ ᒫᒃ ᐊᔮᐱᒡ ᓂᒧᔨ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᐤᐦ ᐅᐦᐄ ᒑᐧᑲᓂᐦᐄ ᐊ ᓂᑐᐦᑯᔨᓂᐧᐃᒡᐦ ᐅᐦᒋ ᐊᓇ ᐊ ᒫᔑᐦᑖᑭᓂᐧᐃᒡ ᐊ ᑖᐦᒋᐳᓈᓂᐧᐃᒡ.

ᐋ ᐧᐄᐦ ᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᐊᓇ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ ᑖᐧᐹ ᐋ ᐲᐦᑖᐱᔨᒡ ᐊᓂᑖ ᐲᐦᒋᔨᐤ

ᐊᓇ ᐋ ᒦᒋᔨᔨᐦᒄ ᑭᔮ ᒫᒃ ᐋ ᒥᓂᐦᐧᑳᔨᐦᒄ ᒦᒋᒻ ᑭᔮ ᒫᒃ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ, ᐋᑯᑖ ᐋ ᓵᐳᐦᑐᐧᐋᐱᔨᒡ ᐊᓂᑖ ᒋᑏᓈᐦᒡ ᐊᓂᑖ ᐋ ᐃᔅᐱᔨᒡ ᒋᑎᐦᒋᔒᓈᐦᒡ. ᐋᑯᑖ ᒫᒃ ᐋ ᓵᐳᐦᑐᐧᐋᐱᔨᒡ ᐊᓇ ᒑᐧᑳᓐ ᐋ ᒦᒋᒥᔥᑳᒑᒡ ᐊᓂᑖ ᒋᒥᐦᑯᓈᐦᒡ ᐋ ᐃᔅᐱᔨᒡ ᐋᒄ ᒫᒃ ᒥᔨᐧᐋ ᐲᐦᒋᔨᐤ ᐋ ᐃᔅᐱᔨᒡ. ᒥᒄ ᒫᒃ ᐱᔥᒡ ᐊᓇ ᒑᐧᑳᓐ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑦ ᒋᑎᐦᒋᔒᓈᐦᒡ, ᓂᒧᔨ ᓵᐳᐦᑐᐧᐋᐱᔨᐤ ᐊᓂᑖ ᒑ ᒌ ᐃᔅᐱᔨᒡ ᒥᐦᑯᐦᒡ. ᒋᔥᑎᒫᐧᐃᓐ ᒑ ᒌ ᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᐊᓂᐦᐄ ᒑᐧᑳᓂᐦᐄ ᐋ ᐃᔅᐱᔨᒡ ᒥᐦᑯᐦᒡ ᑭᔮ ᐋᑳ ᐋ ᐃᔅᐱᔨᒡ ᐊᓂᑖ ᒥᐦᑯᐦᒡ, ᐧᐋᔥ ᐊᓇ ᐋᑳ ᐃᔅᐱᔨᒡ ᒑᐧᑳᓐ ᒥᐦᑯᐦᒡ, ᓂᒧᔨ ᒋᑳ ᐋᐱᑎᓯᒥᑭᓐ ᐊᓂᑖ ᐲᐦᒋᔨᐤ. ᐅᑖ ᒫᒃ ᐧᒑᓐᔅ ᓛᐸ, ᐋᐅᒄ ᐊ ᐧᐄᒑᐱᑎᓯᒥᑭᓂᐧᐃᒡ ᐊᓂᒌ ᐊᓂᑖ ᑳ ᐋᐱᑎᓯᒡ ᐋᕐᓈᓯᓐ ᓛᐸ ᑭᔮ ᐧᐹᔅᑎᕐ ᓛᐸ ᐅᐦᒋ ᐊᓇ ᒑ ᒌ ᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᑖᓐ ᐋ ᐃᔅᐱᔑ

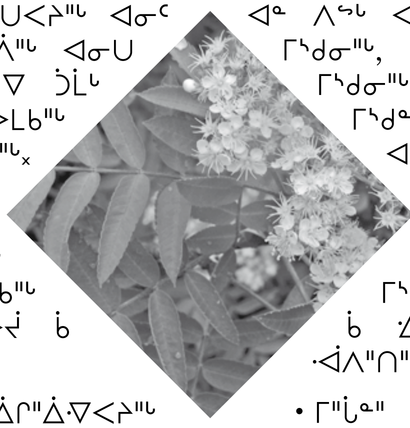
Finding out if the ingredients in the plants get absorbed into the body

When we eat or drink any food or plant, it passes through the stomach and into the gut. From there, nutrients and other ingredients are absorbed into our blood, and spread to other parts of the body. But some ingredients do not get passed into the blood. It is important to know if an ingredient goes into the blood or not, because if it does not, it will probably not have an effect in the body. The Johns lab is working with the Arnason and Foster labs to try to measure whether specific plant ingredients get passed from the gut into the bloodstream.

ᓵᐳᐦᑐᐌᐸᔨᐦᒡ ᐊᓐ ᑫᒁᓐ ᐁ ᒦᒋᓈᓄᐑᐦᒡ ᐊᓂᑌ ᐁ ᐄᔑ ᐲᐦᑌᐸᔨᐦᒡ ᒥᐦᑯᐦᒡ᙮

ᐁ ᓂᑑᒋᐢᑫᔨᐦᑌᑲᓅᐦᒁᐤᐦ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ ᑖᐻ ᑫ ᒌ ᐑᒋᐦᐄᐌᐸᔨᐦᒁᐤᐦ ᐅᐦᒋ ᐊᓐ ᐁ ᒫᔑᐦᑖᑲᓅᐑᐦᒡ ᐁ ᐚᓈᒋᐸᔨᐦᒡ ᒥᐢᑯᓐ ᐃᑖᐢᐱᓀᐎᓐ

ᐊᓐ ᐸᔅᒡ ᐁ ᐃᔑᓈᑯᐦᒡ ᐱᒦ ᐁ ᐲᐦᑌᐸᔨᐦᒡ ᐊᓂᑦ ᒥᐢᑯᓂᐦᒡ, ᐁᑯᑦ ᑫᒃ ᓈᔅᒡ ᑫ ᑑᒫᒡ ᐲᐦᒡ ᐊᓂᑌ ᒥᐢᑯᓂᐦᒡ᙮ ᒥᓲ ᒫᒃ ᓈᔅᒡ ᒥᔅᑖᐦᐄ ᐁ ᑑᒫᒡ ᒥᐢᑯᓐ, ᐁᑯᑦ ᐁᑎᑑ ᒥᔅᑖᐦᐄ ᐁ ᐅᔑᐦᐆᒪᑲᐦᒡ ᐊᓐ ᑳ ᐚᓈᒋᐸᔨᐦᐄᐌᒡ ᒥᐦᑰᔮᐲᐦᒡ᙮ ᐁᔫᒄ ᒫᒃ ᑳ ᐚᐚᐱᐦᑌᐦᒃ ᐹᑦᓇᒃ ᑖᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᓂᔨᐤᐦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ ᐊᓂᑦ ᐱᒦ ᐁ ᐃᐦᑎᑯᐦᒡ ᒥᐢᑯᓂᐦᒡ ᑲᔦ ᐊᓐ ᐁ ᐅᐦᒋ ᐅᔑᐦᐆᒪᑲᐦᒡ ᑳ ᐚᓈᒋᐸᔨᐦᐄᐌᒡ ᒥᐦᑰᔮᐲᐦᒡ᙮ ᒹᐅᔫ ᑳ ᐚᐱᐦᑌᐦᒃ:

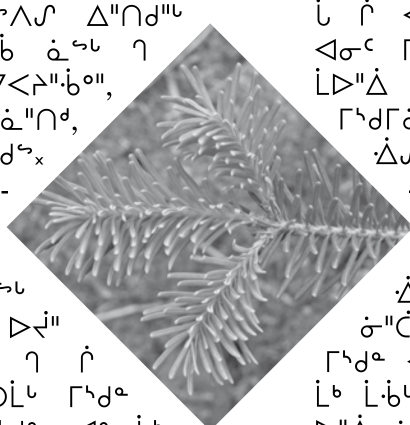


- ᒪᐦᑫᑎᓐᐦ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ ᐁ ᐑᒋᐦᐄᐌᐸᔨᐦᒡ ᐊᓐ ᑫ ᒌ ᐊᒎᐸᔨᐦᒡ ᐁ ᐃᔅᐱᔑ ᐃᐦᑎᑯᐦᒡ ᐱᒦ ᐊᓂᑦ ᒥᐢᑯᓂᐦᒡ ᐊᓐ ᐁᑳ ᓈᔅᒡ ᑫ ᒌ ᑑᒫᒡ᙮ ᒹᐅᔫᐦ ᐁ ᐑᒋᐦᐄᐌᐸᔨᐦᒁᐤᐦ, ᐄᓈᔅᑦ, ᐚᒋᓈᑲᓐ, ᒪᔅᑯᒥᓈᓈᐦᑎᒄ, ᐊᔨᑲᑖᔅ, ᐅᐢᒋᐢᒃ, ᑲᔦ ᐑᔑᒋᐸᑯᔅ᙮ ᐊᓂᔫᐦ ᓃᔓ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ - ᐹᐢᒋᓈᐦᒁᓐ ᑲᔦ ᒦᑐᐢ, ᐋᐦᒌᐤᐦ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔫᐦ ᐅᐦᒋ ᐊᓐ ᐁ ᒥᔽᔑᒡ ᒥᐢᑯᓐ ᓀᐢᑦ ᒫᒃ ᓈᔅᒡ ᐁ ᑑᒫᒡ ᒥᐢᑯᓐ᙮ ᐑᒋᐦᐄᐌᐸᔫᐦ ᐅᔫᐦ ᓃᔓ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ ᓃᐦᑖᐦᒡ ᑫ ᒌ ᐃᔅᐸᔨᐦᒡ ᐊᓐ ᐁ ᐃᔅᐱᔑ ᑑᒫᒡ ᒥᐢᑯᓐ ᐊᓐ ᑫᒁᒡ ᐁ ᒥᔪᐸᔨᐦᒡ ᐊᓐ ᒥᐢᑯᓐ᙮ ᐊᓐ ᒫᒃ ᑫᒁᒡ ᐁ ᑑᒫᒡ ᒥᐢᑯᓐ, ᐁᑎᑑ ᒪᒋᐸᔨᐦᐄᐌᐤᐦ ᐅᔫᐦ ᓃᔓ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ᙮
- ᒥᓯᐌ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ ᐑᒋᐦᐄᐌᐸᔫᐦ ᑫ ᓇᑳᐦᐄᑫᐸᔨᐦᒁᐤᐦ ᐊᓐ ᐁ ᑑᒫᒡ ᒥᐢᑯᓐ ᐁᑎᑑ ᒥᔅᑖᐦᐄ ᑫ ᒌ ᐅᐦᒋ ᐅᔑᐦᐆᒪᑲᐦᒡ ᐊᓐ ᑳ ᐚᓈᒋᐸᔨᐦᐄᐌᒡ ᒥᐦᑰᔮᐲᐦᒡ᙮

ᓵᐳᐦᑐᐙᐱᔨᒡ ᐊᓐ ᒑᒁᓐ ᐋ ᒦᒋᓈᓂᐎᒡ ᐊᓂᑖ ᐋ ᐄᔑ ᐲᐦᑖᐱᔨᒡ ᒥᐦᑯᐦᒡ᙮

ᐋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐎᒡᐦ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ ᑖᐺ ᒑ ᒌ ᐑᒋᐦᐄᐚᐱᔨᒡᐦ ᐅᐦᒋ ᐊᓐ ᐋ ᒫᔑᐦᑖᑭᓂᐎᒡ ᐋ ᐑᓈᒋᐱᔨᒡ ᒥᐢᑯᓐ ᐃᑖᐢᐱᓈᐎᓐ

ᐊᓐ ᐱᔅᒡ ᐋ ᐃᔑᓈᑯᐦᒡ ᐱᒦ ᐋ ᐲᐦᑖᐱᔨᒡ ᐊᓂᑦ ᒥᐢᑯᓂᐦᒡ, ᐋᑯᑦ ᒑᒃ ᓈᔅᒡ ᒑ ᑑᒫᒡ ᐲᐦᒡ ᐊᓂᑖ ᒥᐢᑯᓂᐦᒡ᙮ ᒥᓲ ᒫᒃ ᓈᔅᒡ ᒥᔅᑏ ᐋ ᑑᒫᒡ ᒥᐢᑯᓐ, ᐋᑯᑦ ᐊᑎᑑ ᒥᔅᑏ ᐋ ᐅᔑᐦᐆᒥᑭᐦᒡ ᐊᓐ ᑳ ᐑᓈᒋᐱᔨᐦᐄᐚᒡ ᒥᐦᒁᔮᐲᐦᒡ᙮ ᐋᔫᐎᒄ ᒫᒃ ᑳ ᐚᐚᐱᐦᑎᐦᒃ ᐹᑦᓇᒃ ᑖᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᔨᐤᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ ᐊᓂᑦ ᐱᒦ ᐋ ᐃᐦᑎᑯᐦᒡ ᒥᐢᑯᓂᐦᒡ ᑭᔮ ᐊᓐ ᐋ ᐅᐦᒋ ᐅᔑᐦᐆᒥᑭᐦᒡ ᑳ ᐑᓈᒋᐱᔨᐦᐄᐚᒡ ᒥᐦᒁᔮᐲᐦᒡ᙮ ᒫᐅᔮ ᑳ ᐚᐱᐦᑎᐦᒃ:



- ᒥᐦᒑᓐᐦ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ ᐋ ᐑᒋᐦᐄᐚᐱᔨᒡ ᐊᓐ ᒑ ᒌ ᐊᒋᐎᐱᔨᒡ ᐋ ᐃᔅᐱᔑ ᐃᐦᑎᑯᐦᒡ ᐱᒦ ᐊᓂᑦ ᒥᐢᑯᓂᐦᒡ ᐊᓐ ᐋᑳ ᓈᔅᒡ ᒑ ᒌ ᑑᒫᒡ᙮ ᒫᐅᐦᐄ ᐋ ᐑᒋᐦᐄᐚᐱᔨᒡᐦ, ᐄᔮᔅᑦ, ᐚᒋᓈᑭᓐ, ᒥᐢᑯᒥᓈᓈᐦᑎᒄ, ᐊᔨᑭᑖᔅ, ᐅᐢᒋᐢᒃ, ᑭᔮ ᐑᔑᒋᐱᑯᔅ᙮ ᐊᓂᐦᐄ ᓃᔓ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ - ᐹᓯᓈᐦᒁᑭᓂᒡ ᑭᔮ ᒦᑐᐢ, ᐊᔨᐦᒡ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᐤᐦ ᐅᐦᒋ ᐊᓐ ᐋ ᒥᔽᔑᒡ ᒥᐢᑯᓐ ᑭᔮ ᒫᒃ ᓈᔅᒡ ᐋ ᑑᒫᒡ ᒥᐢᑯᓐ᙮ ᐑᒋᐦᐄᐚᐱᔨᐤᐦ ᐅᐦᐄ ᓃᔓ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ ᓃᐦᑖᐦᒡ ᒑ ᒌ ᐃᔅᐱᔨᒡ ᐊᓐ ᐋ ᐃᔅᐱᔑ ᑑᒫᒡ ᒥᐢᑯᓐ ᐊᓐ ᒑᒁᒡ ᐋ ᒥᔪᐱᔨᒡ ᐊᓐ ᒥᐢᑯᓐ᙮ ᐊᓐ ᒫᒃ ᒑᒁᒡ ᐋ ᑑᒫᒡ ᒥᐢᑯᓐ, ᐊᑎᑑ ᒥᒋᐱᔨᐦᐄᐚᐤᐦ ᐅᐦᐄ ᓃᔓ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ᙮
- ᒥᓯᐚ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ ᐑᒋᐦᐄᐚᐱᔨᐤᐦ ᒑ ᓂᑳᐦᐄᒑᐱᔨᒡᐦ ᐊᓐ ᐋ ᑑᒫᒡ ᒥᐢᑯᓐ ᐊᑎᑑ ᒥᔅᑏ ᒑ ᒌ ᐅᐦᒋ ᐅᔑᐦᐆᒥᑭᐦᒡ ᐊᓐ ᑳ ᐑᓈᒋᐱᔨᐦᐄᐚᒡ ᒥᐦᒁᔮᐲᐦᒡ᙮

Finding out if the plants protect against liver damage

When liver cells are exposed to some kinds of fat, they quickly develop large fat droplets inside them. Once the cells have a lot of fat inside them, they start to make more free radicals than usual. Patrick has been looking at how the plants act on fat and free radicals in the liver. He has found that:

- Many of the plants help to reduce the amount of fat in liver cells that have become too fatty. Balsam fir, tamarack, showy mountain ash, pitcher plant, jack pine, and northern Labrador tea all do this. Oddly, two plants—stag's horn club moss and balsam poplar—have different effects depending on whether the liver cells are healthy or too fatty. These two plants lower fat in healthy liver cells. But in fatty liver cells, they actually make things worse.
- All of the plants help to prevent fatty liver cells from making more free radicals than usual.

How do the plants act to reduce free radicals? There are two possibilities. The plants might fight free radicals directly. Or they might encourage the cells to make more of other products that fight

free radicals. One such product that a cell makes is called glutathione. Patrick and Nicola Grant (a new lab assistant) have been looking at what happens to glutathione levels when you add plant extracts. They have been doing this using both normal liver cells and fatty ones. Nicola is also trying to find a way to measure levels of the enzyme that is responsible for making glutathione.

Arvind has been looking at whether the plants affect how fatty liver cells respond to insulin. He and Patrick checked to see if the plants that are best at fighting free radicals are the same ones that help with insulin, but they aren't. They presented their findings at the 11th International Congress of Ethnopharmacology in Spain last September and won 2nd place for their poster.

This is a simplified summary of a more technical report from the Johns lab.

ᒪᓕᓐᐃᑎᐅᓕᖅ | ᓯᓚᓐᐃᓚᐅᓕᖅ Notes

F. ᑎᐹᒋᒨᔨᓇᐦᐋᑲᓐ ᐅᐦᒋ ᐊᓂᑌ ᐚᔅᑎᕐ ᓛᑊ
(ᑳᑕᐦᑯᔨᑕᐱᔨᒼ 2011)

ᐅᑌ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᑫᔨᐦᑌᑲᓅᐦᒁᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᐅᒃ ᐁ ᐐᐦ ᒋᔅᑫᔨᐦᑌᑲᓅᐦᒁᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑖᐺ ᐁ ᒥᔂᐤᐦ ᑫ ᒌ ᐋᐸᒋᐦᑖᑲᓅᐦᒁᐤᐦ ᐊᓐ ᐁᑳ ᑫ ᐸᐦᒋᐳᓈᓄᐑᐦᒡ ᐁ ᐋᐸᒋᐦᑖᑲᓅᐦᒁᐤᐦx ᒣᒁᒃ ᓂᓂᑑᒋᔅᑫᔨᐦᑌᓈᓐ ᐸᔥᒡ ᐊᓂᔫᐦ ᐁ ᐃᐦᑎᑯᐦᒁᐤᐦ ᒣᒁᔫᐦ ᐁ ᓂᑐᐦᑯᔮᓅᐦᒁᐤᐦ ᐅᐦᒋ ᐊᓂᐨ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ ᐁ ᐅᐦᒋᐸᔮᐦᒁᐤᐦx ᐁᐅᒃ ᐁ ᑲᓄᐚᐱᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐃᔑᓈᑯᐦᒁᐤᐦ, ᐁᑯᐨ ᒫᒃ ᒣ ᐅᐦᒋ ᓂᔨᑐᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐄᔑ ᓂᑐᐦᑯᔮᓅᐦᒁᐤᐦx

ᐁᐅᒃ ᓅᔥᑕᒼ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ ᐊᓐ ᐯᔫᒃ ᒣᒁᓐ ᐁ ᓂᑐᐦᑯᔮᓄᐑᐦᒡ ᐊᓂᐨ ᐄᓈᐦᑎᑯᐦᒡ, ᐁᐅᒃ ᐊᓐ ᐸᓐᒋᓂᓐ pungenin ᐁ ᐃᔑᓂᐦᑳᑌᒡx ᐊᓐ ᒫᒃ ᐁ ᒦᒋᓈᓄᐑᐦᒡ ᐸᓐᒋᓂᓐ, ᐁᑯᐨ ᐁ ᑎᑲᔨᒉᐸᔮᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ ᑲᔦ ᐋᐦᒌᐤᐦ ᐊᑕ ᐃᔑᓈᑯᓐ, ᐁᒄ ᐧᒣᐦᒡ ᐁ ᐅᔥᑳᒡ ᒣᒁᓐ ᐌᐦᒋ ᐅᔑᐦᐆᒪᑲᐦᒡ ᐊᓐ ᐁ ᐄᔑ ᓂᑐᐦᑯᔮᓄᐑᐦᒡx ᐁᐅᒃ ᐁ ᐐᐦ ᒋᔅᒣᔨᐦᑕᒫᐦᒡ ᒣᒁᓐ ᐊᓐ ᐁ ᐅᔥᑳᒡ ᐁ ᐅᔑᐦᐆᒪᑲᐦᒡ ᑲᔦ ᑖᐺ ᐁ ᐐᒋᐦᐄᐌᐸᔮᐦᒡ ᐁᑎᑑ ᒣ ᒌ ᒥᔦᐸᔮᐦᒡ ᓂᑐᐦᑯᔮᓐ ᑲᔦ ᐁᑳ ᒣ ᐸᐦᒋᐳᐦᐄᐌᒡ, ᓄᔥᒡ ᒫᒃ ᒁᔥᑌ ᒣ ᐃᔅᐸᔮᒁx ᐁᐅᒃ ᒫᒃ ᓵᔥ ᒍᒑᔅᒡ ᐊᓂᔫᐦ ᒣᒁᔫᐦ ᐁ ᐅᔥᑳᒁᐤᐦ ᐁ ᒌ ᐅᔑᐦᐆᒪᑲᐦᒁᐤᐦ ᓵᔥ ᑳ ᐚᐱᐦᑕᒫᐦᒡx

ᐁᐅᒃ ᒦᓐ ᑳ ᒋᐦᒋᐸᔮᐦᑖᔮᐦᒡ ᐁ ᓂᑑᒋᔅᒣᔨᐦᑕᒫᐦᒡ ᐊᓐ ᐕᐹᓐᑎᓯᓐ rhaponticin ᑳ ᐃᔑᓂᐦᑳᑌᒡ, ᐁᐅᒃ ᐊᓐ ᒣᒁᓐ ᐁ ᓂᑐᐦᑯᔮᓄᐑᐦᒡ ᐊᓂᑦ ᐚᒋᓈᑲᓂᐦᒡ ᐐᔫᒌᐦᒡ ᐁ ᐅᐦᒋᐸᔮᐦᒡx ᒍᑕᑲᒡ ᐊᐌᓂᒌ ᒌ ᐋᐸᒋᐦᒑᐅᒡ ᐊᓂᔫ ᐕᐹᓐᑎᓯᓐ ᐅᐦᒋ ᐊᓂᔫ ᒣ ᐐᒋᐦᐋᑯᐧᒑᐤ ᐁᑳ ᒥᔪᔥᑳᑯᐧᒑᐤ ᒍᑕᒋᔫ ᒣᒁᔫ, ᐁᑎᑑ ᒣ ᒥᔦᑲᒥᔮᒡ ᐅᒥᐦᑯᐚᐤ, ᐁ ᒫᔑᐦᑳᑲᓄᐑᐦᒡ ᐁ ᐹᒋᐸᔮᓈᓄᐑᐦᒡ, ᑲᔦ ᐁ ᒪᔑᐦᑳᑲᓄᐑᐦᒡ ᐁ ᔑᐚᑲᒥᐦᒁᑲᓄᐑᐦᒡx ᐧᒣᐦᒡ ᒫᒃ ᐊᓐ ᐸᓐᒋᓂᓐ, ᔫᐸᒡ ᐋᐦᒌᐤᐦ ᐃᔅᐸᔫ ᐊᓐ ᐕᐹᓐᑎᓯᓐ ᒥᔖ ᐁ ᐱᐦᑌᐸᔮᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ ᐅᐦᒋ ᐊᓐ ᐁ ᑕᑲᔨᒉᐸᔮᐦᒡ ᒥᑕᐦᒋᔒᐦᒡx

F. Report for the Foster lab
(January 2011)

This lab tests the plant medicines for safety. We are at a stage where we are testing specific ingredients. We are looking at their structure (shape), which will help us to understand their properties.

We began with an ingredient in black spruce called pungenin. When pungenin is eaten, our bodies break it down and change it in various ways, turning it into new kinds of ingredients. We are trying to see what these new ingredients might be and if they make the medicine more active and safe, or less so. So far, we have found six of these "breakdown" ingredients.

We are also starting to look at rhaponticin, a major ingredient in tamarack bark extract. Other peoples have used rhaponticin to control allergies, thin the blood, fight inflammation, and fight diabetes. Like pungenin, rhaponticin gets broken down and changed inside our bodies.

F. ᑎᐹᒋᒨᔨᓂᐦᐋᑭᓐ ᐅᐦᒋ ᐊᓂᑖ ᐚᔅᑎᕐ ᓛᑊ
(ᒋᔖᐱᔨᒻ 2011)

ᐅᑖ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᑳᔨᐦᑖᑭᓂᐌᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᐅᒃ ᐋ ᐐᐦ ᒋᔅᑳᔨᐦᑖᑭᓂᐌᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑖᐙ ᐋ ᒥᔂᐤᐦ ᑳ ᒌ ᐋᐱᒋᐦᑖᑭᓂᐌᐤᐦ ᐊᓐ ᐋᑳ ᑳ ᐱᐦᒋᐳᓈᓂᐌᐤ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐌᐤᐦx ᒫᒁᒃ ᓂᓂᑑᒋᔅᑳᔨᐦᑖᓈᓐ ᐱᔥᒡ ᐊᓂᐦᐋ ᐋ ᐃᐦᑎᑯᐦᐌᐤᐦ ᒫᒁᓂᐦᐋ ᐋ ᓂᑐᐦᑯᔮᓂᐌᐤᐦ ᐅᐦᒋ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ ᐋ ᐅᐦᒋᐱᔮᐌᐤᐦx ᐋᐅᒃ ᐋ ᑭᓄᐚᐱᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐃᔑᓈᑯᐦᐌᐤᐦ, ᐋᑯᐦ ᒫᒃ ᒫ ᐅᐦᒋ ᓂᔅᑐᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐄᔑ ᓂᑐᐦᑯᔮᓂᐌᐤᐦx

ᐋᐅᒃ ᓅᔥᑎᒼ ᑳ ᓂᑑᒋᔅᒫᔨᐦᑎᒫᐦᒡ ᐊᓐ ᐹᔫᒃ ᒫᒁᓐ ᐊ ᓂᑐᐦᑯᔮᓂᐌᐤ ᐊᓂᑦ ᐄᔫᐦᑎᑯᐦᒡ, ᐋᐅᒃ ᐊᓐ ᐱᓐᒋᓂᓐ pungenin ᐊ ᐃᔑᓂᐦᑳᑖᐤx ᐊᓐ ᒫᒃ ᐊ ᒦᒋᓈᓂᐌᐤ ᐱᓐᒋᓂᓐ, ᐋᑯᑦ ᐊ ᑎᑭᔨᒫᐱᔨᐤ ᐊᓂᑖ ᐲᐦᒋᔫᐤ ᑭᔦ ᐊᔨᐦᒡ ᐊᑎ ᐃᔑᓈᑯᓐ, ᐋᒄ ᐧᒫᐦᒡ ᐊ ᐅᔥᑳᐤ ᒫᒁᓐ ᐧᐋᐦᒋ ᐅᔑᐦᐆᒥᑭᐦᒡ ᐊᓐ ᐊ ᐄᔑ ᓂᑐᐦᑯᔮᓂᐌᐤx ᐋᐅᒃ ᐊ ᐐᐦ ᒋᔅᒫᔨᐦᑎᒫᐦᒡ ᒫᒁᓐ ᐊᓐ ᐊ ᐅᔥᑳᐤ ᐊ ᐅᔑᐦᐆᒥᑭᐦᒡ ᑭᔦ ᑖᐹ ᐊ ᐐᒋᐦᐄᐋᐧᐃᐱᔨᐤ ᐊᑎᑑ ᒫ ᒥᔦᐱᔨᐤ ᓂᑐᐦᑯᔮᓐ ᑭᔦ ᐋᑳ ᒫ ᐱᐦᒋᐳᐦᐄᐙᐤ, ᓈᔥᒡ ᒫᒃ ᒁᔥᑖ ᒫ ᐃᔅᐱᔨᒁx ᐋᐅᒃ ᒫᒃ ᓵᔥ ᒍᒑᔅᒡ ᐊᓂᐦᐋ ᒫᒁᓂᐦᐋ ᐊ ᐅᔥᑳᐤᐦ ᐊ ᒌ ᐅᔑᐦᐆᒥᑭᐦᐤᐦ ᓵᔥ ᑳ ᐚᐱᐦᑎᒫᐦᒡx

ᐋᐅᒃ ᒦᓐ ᑳ ᒋᐦᒋᐱᔮᐦᑖᔮᐦᒡ ᐊ ᓂᑑᒋᔅᒫᔨᐦᑎᒫᐦᒡ ᐊᓐ ᐕᐹᓐᑎᓯᓐ rhaponticin ᑳ ᐃᔑᓂᐦᑳᑖᐤ, ᐋᐅᒃ ᐊᓐ ᒫᒁᓐ ᐊ ᓂᑐᐦᑯᔮᓂᐌᐤ ᐊᓂᑦ ᐚᒋᓈᑭᓂᐦᒡ ᐐᔫᒌᐦᒡ ᐊ ᐅᐦᒋᐱᔨᐤx ᒍᑎᑭᐤ ᐊᐧᐋᓂᒌ ᒌ ᐋᐱᒋᐦᑖᐤ ᐊᓂᔫ ᐕᐹᓐᑎᓯᓐ ᐅᐦᒋ ᐊᓂᔫ ᒫ ᐐᒋᐦᐋᑯᐤ ᐋᑳ ᒥᔪᔥᑳᑯᐤ ᒍᑎᒋᔫ ᒫᒁᔫ, ᐊᑎᑑ ᒫ ᒥᔦᑲᒥᔮᐤ ᐅᒥᐦᑯᐚᐤ, ᐊ ᒫᔑᐦᑳᑭᓂᐌᐤ ᐊ ᐹᒋᐱᔮᓈᓂᐌᐤ, ᑭᔦ ᐊ ᒥᔑᐦᑳᑭᓂᐌᐤ ᐊ ᔑᐚᑭᒥᐦᒁᑭᓂᐌᐤx ᐧᒫᐦᒡ ᒫᒃ ᐊᓐ ᐱᓐᒋᓂᓐ, ᐊᔫᐱᐤ ᐊᔨᐦᒡ ᐃᔅᐱᔫ ᐊᓐ ᐕᐹᓐᑎᓯᓐ ᒥᔖ ᐊ ᐲᐦᑖᐱᔨᐤ ᐊᓂᑖ ᐲᐦᒋᔫ ᐅᐦᒋ ᐊᓐ ᐊ ᑎᑭᔨᒫᐱᔨᐤ ᒥᑎᐦᒋᔒᐦᒡx

ᐁᐅᒄ ᐊᓐ ᓵᔅ ᑳ ᒋᐦᒋᐸᔨᐦᑖᔮᐦᒡ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐃᔅᐸᔨᐦᒡ ᐊᓂᔫᐦ ᐸᓐᒋᓂᓐ, ᕌᐧᐹᓐᑎᓯᓐ, ᓈᔅᑦ ᒫᒃ ᑯᑕᒃᐦ ᑫᒁᔫᐦ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ ᐁ ᐅᐦᒋᐸᔨᐦᒁᐤᐦ ᐊᓐ ᐁ ᒌᑯᓇᑲᓅᐦᒁᐤᐦ ᐌᒥᔅᑎᑯᔒᐤ ᔒᐚᑲᒥᐦᑵᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᒋᑳ ᒌ ᐃᔑᓈᑯᓐ-ᐋ ᐁ ᐅᔅᑳᒡ ᑫᒁᓐ ᑫ ᐅᔑᐦᐆᒪᑲᐦᒡ ᐁ ᓂᑐᐦᑯᔨᓄᐐᐦᒡ ᐅᐦᒋ ᐆ ᐁ ᒌᑯᓇᑲᓅᐦᒁᐤᐦ? ᐆ ᒫᒃ ᑖᐍ ᐃᔅᐸᔨᐦᑫ, ᐁᐅᒄ ᒫᔅᑯᒡ ᑲᔦ ᑫ ᒌ ᐋᐦᒋᐸᔨᐦᒡ ᑖᓐ ᐁ ᐃᔅᐱᔑ ᒥᐧᔦᒡ ᐊᓐ ᓂᑐᐦᑯᔨᓐ ᐅᐦᒋ ᐊᓐ ᑫ ᒌ ᐸᐦᒋᐳᑦ ᐊᐌᓐ᙮ ᒷᐅᔫᐦ ᐁ ᐋᐸᒋᐦᑖᔮᐦᒡ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ ᐌᒥᔅᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ, ᑲᓗᒁᓈᕐᒻ (ᕃᐹᒃᓕᓈᐃᑦ) Gluconorm (repaglinide) ᑲᔦ ᑖᔮᒫᐃᒃᐧᕃᓐ (ᑲᓕᒃᓛᓵᐃᑦ) Diamicron (gliclazide)᙮

ᑮᐹ ᐁ ᒥᔦᐸᔨᐦᒡ ᐆ ᐁ ᐄᔑ ᐋᐸᑎᓰᐦᑲᐦᑌᑲᓄᐐᐦᒡ᙮ ᓵᔅ ᓂᒌ ᐚᐱᐦᑖᓈᓐ ᐊᓂᔫᐦ ᑫᒁᔫᐦ ᐁ ᐅᐦᒋ ᐅᔑᐦᐆᒪᑲᐦᒡ ᐊᓂᑦ ᐌᒥᔅᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓂᐦᒡ ᐁ ᐅᐦᒋᐸᔨᐦᒡ ᒥᓈ ᐊᓐ ᑳ ᒌᑯᓇᑲᓅᐦᒁᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐁᐅᒄ ᓵᔅ ᑳ ᐚᐚᐱᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐃᔅᐸᔨᐦᒁᐤᐦ ᐊᓂᔫᐦ ᒥᓯᐌ 17 ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐊᓐ ᑖᓐ ᐁ ᐃᔅᐸᔨᐦᒡ ᒥᓈ ᐁ ᐋᐸᒋᐦᑖᑲᓄᐐᐦᒡ ᑲᓗᒁᓈᕐᒻ ᐊᓐ ᐋᐦᒌᐤᐦ ᐁ ᐄᔑ ᐅᔑᐦᐆᒪᑲᐦᒡ ᑫᒁᓐ ᐁ ᓂᑐᐦᑯᔨᓄᐐᐦᒡ᙮ (ᐁᐅᒄ ᑲᔦ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ ᑯᑕᒃ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐁᑳ ᐊᓂᑌ ᐄᓅ ᐊᔅᒌᐦᒡ ᐁ ᐋᐸᒋᐦᑖᑲᓄᐐᐦᒡ, ᐁᐅᒄ ᐊᓐ ᐧᕃᐅᔅᐲᑦ ᔅᑘᐅᓐᑲᐧᕃᑉ roseroot stonecrop ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮) ᐁᐅᒄ ᑫᑳᑦ ᔮᐸᒡ ᑳ ᐃᔅᐸᔨᐦᒡ ᐊᓐ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ ᐊᓐ ᐁ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐊᓂᑦ ᐁ ᐃᐦᑎᑯᐦᒡ ᑫᒁᓐ ᒥᑕᐦᒋᔒᐦᒡ᙮ ᐁᐅᒄ ᐁᔅᒄ ᔮᐸᒡ ᐁ ᐃᐦᑌᔨᐦᑕᒫᐦᒡ ᐊᓐ ᑳᒋᑫᐸᒄ ᑲᔦ ᐐᔑᒋᐸᑯᔅ ᐁ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒁᐤᐦ ᐌᒥᔅᑎᑯᔒᐤᐦ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐊᓐ ᐐᓴᒋᒥᓈᓐ, ᐁᐅᒄ ᓇᒧᐃ ᓈᔅᒡ ᐃᔑᓈᑯᓐ ᑫ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐌᒥᔅᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮

ᐊᓐ ᒦᓐ ᑫ ᐃᐦᑎᓈᓄᐐᐦᒡ, ᐁᐅᒄ ᓈᔅᒡ ᔫᐦᒃ ᑫ ᓂᑑᒋᔅᑫᔨᐦᑌᑲᓄᐐᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑲᔦ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒁᐤᐦ ᐊᓂᑦ ᐱᐦᒡ ᒥᔅᑯᓂᐦᒡ᙮

ᐋᐅᒄ ᐊᓐ ᓵᔅ ᑳ ᒋᐦᒋᐱᔨᐦᑖᔮᐦᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐃᔅᐱᔨᒡ ᐊᓂᐦᐄ ᐸᓐᒋᓂᓐ, ᕌᐧᐹᓐᑎᓯᓐ, ᓈᔅᑦ ᒫᒃ ᑯᑎᒃᐦ ᒑᒁᓂᐦᐄ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ ᐋ ᐅᐦᒋᐱᔨᒡᐦ ᐊᓐ ᐋ ᒌᑯᓂᑭᓂᐐᒡᐦ ᐚᒥᔅᑎᑯᔒᐤ ᔒᐚᑭᒥᐦᒁᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᒋᑭ ᒌ ᐃᔑᓈᑯᓐ-ᐋ ᐋ ᐅᔅᑳᒡ ᒑᒁᓐ ᒑ ᐅᔑᐦᐆᒥᑭᐦᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐐᒡ ᐅᐦᒋ ᐆ ᐋ ᒌᑯᓂᑭᓂᐐᒡᐦ? ᐆ ᒫᒃ ᑖᐶ ᐃᔅᐱᔨᐦᒑ, ᐋᐅᒄ ᒁᔃᓐ ᑭᔮ ᒑ ᒌ ᐊᐦᒋᐱᔨᒡ ᑖᓐ ᐋ ᐃᔅᐱᔑ ᒥᐧᔮᒡ ᐊᓐ ᓂᑐᐦᑯᔨᓐ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᐱᐦᒋᐳᑦ ᐊᐚᓐ᙮ ᒷᐅᐦᐄ ᐋ ᐋᐱᒋᐦᑖᔮᐦᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᐚᒥᔅᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ, ᑭᓗᒁᓈᕐᒻ (ᕃᐹᒃᓕᓈᐃᑦ) Gluconorm (repaglinide) ᑭᔮ ᑖᔮᒫᐃᒃᐧᕃᓐ (ᑭᓕᒃᓛᓵᐃᑦ) Diamicron (gliclazide)᙮

ᑮᐶ ᐋ ᒥᔦᐱᔨᒡ ᐆ ᐋ ᐄᔑ ᐋᐱᑎᓰᐦᑭᐦᑖᑭᓂᐐᒡ᙮ ᓵᔅ ᓂᒌ ᐚᐱᐦᑖᓈᓐ ᐊᓂᔮᐦ ᒑᒁᔮᐤᐦ ᐋ ᐅᐦᒋ ᐅᔑᐦᐆᒥᑭᐦᒡ ᐊᓂᑦ ᐚᒥᔅᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓂᐦᒡ ᐋ ᐅᐦᒋᐱᔨᒡ ᒥᓈ ᐊᓐ ᑳ ᒌᑯᓂᑭᓂᐐᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐋᐅᒄ ᓵᔅ ᑳ ᐚᐚᐱᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐃᔅᐱᔨᒡᐦ ᐊᓂᔮᐦ ᒥᓯᐚ 17 ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐊᓐ ᑖᓐ ᐋ ᐃᔅᐱᔨᒡ ᒥᓈ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐐᒡ ᑭᓗᒁᓈᕐᒻ ᐊᓐ ᐊᔨᐦᒡ ᐋ ᐄᔑ ᐅᔑᐦᐆᒥᑭᐦᒡ ᒑᒁᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐐᒡ᙮ (ᐋᐅᒄ ᑭᔮ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᑯᑎᒃ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐋᑳ ᐊᓂᑖ ᐄᔨᔨᐤ ᐊᔅᒌᐦᒡ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐐᒡ, ᐋᐅᒄ ᐊᓐ ᐧᕃᐅᔅᐲᑦ ᔅᑘᐅᓐᑭᐧᕃᑉ roseroot stonecrop ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮) ᐋᐅᒄ ᒑᑳᑦ ᐊᔮᐱᒡ ᑳ ᐃᔅᐱᔨᒡ ᐊᓐ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᐊᓐ ᐋ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐊᓂᑦ ᐋ ᐃᐦᑎᑯᐦᒡ ᒑᒁᓐ ᒥᑎᐦᒋᔒᐦᒡ᙮ ᐋᐅᒄ ᐋᔅᒄ ᐊᔮᐱᒡ ᐋ ᐃᐦᑖᔨᐦᑎᒫᐦᒡ ᐊᓐ ᑳᒋᒑᐱᒄ ᑭᔮ ᐐᔑᒋᐱᑯᔅ ᐋ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡᐦ ᐚᒥᔅᑎᑯᔒᐤᐦ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐊᓐ ᐐᓯᒋᒥᓐ, ᐋᐅᒄ ᓂᒧᔨ ᓈᔅᒡ ᐃᔑᓈᑯᓐ ᒑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐚᒥᔅᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮

ᐊᓐ ᒦᓐ ᒑ ᐃᐦᑎᓈᓂᐐᒡ, ᐋᐅᒄ ᓈᔅᒡ ᔫᐦᒃ ᒑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐐᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑭᔮ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᐊᓂᑦ ᐱᐦᒡ ᒥᔅᑯᓂᐦᒡ᙮

Now we have begun to test what happens when you put pungenin, rhaponticin, or some of the other plant ingredients together with a western diabetes medicine. Will putting these medicines together cause them to break down into different ingredients than before? If so, this would also change the medicines' safety. The western medicines we are using in these tests are Gluconorm (repaglinide) and Diamicron (gliclazide).

This work is progressing nicely. We have found that the "breakdown" ingredients of the western medicines do indeed change when they are put together with some of the plant medicines. So far, we have looked at how all 17 of the Cree plants affect the way our bodies break down Gluconorm. (We are also including a non-Cree plant, roseroot stonecrop, in our tests.) The results are much like the ones we found in our earlier studies of how the plants affect specific enzymes. That is, we still think that Labrador tea and Northern Labrador tea are the plants most likely to affect how western medicines work. And we still find that mountain cranberry is the least likely to affect western medicines.

ᑳ ᐚᐱᐦᑏᐍᓅᐦᑿᐤᐦ ᒪᓯᓇᐦᐄᑲᓐᐦ ᑲᔦ ᑯᑕᐠ ᒉᑿᓐ ᑳ ᒪᓯᓇᐦᐄᑲᓄᐑᐦᒡ

1. ᑭᐃ ᓃᐤ ᐑᐸᐠ ᒋᑳ ᒫᔑᐦᑌᐤ ᐊᓂᔩ ᐅᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᒫᐢᑎᕐᐢ ᕒᐃᓯᐢ ᑳ ᐃᔑᓂᐦᑳᑌᐠ᙮ (ᐊᓐ ᐊᐱᔒᐢ ᐁ ᒪᓯᓈᑌᐠ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐊᓂᔩ ᑭᐃ ᐅᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ, ᐁᔩᐠ ᐊᓂᔩ "ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᑿᐤᐦ, ᒫᐃᓃᔒᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᑲᔦ ᐍᒥᐢᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ: ᐃᔑᓈᑯᓐ-ᐋ ᐁ ᒥᐧᔮᐠ ᒌᑰ ᒉ ᒌ ᐋᐸᒋᐦᑖᑲᓅᐦᑿᐤᐦ?")
2. ᐁᐅᐠ ᑳ ᐃᑎᓯᐦᐊᒫᐦᒡ ᒪᓯᓇᐦᐄᑲᓐ ᒉ ᒪᓯᓇᐦᐄᑲᓄᐑᐦᒡ ᐊᓂᑌ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᐦᒡ᙮ ᐊᓐ ᐊᐱᔒᐢ ᑳ ᒪᓯᓇᐦᐄᑲᓄᐑᐦᒡ, ᐁᐅᐠ ᐊᓐ "ᐁ ᓂᑑᒋᐢᒉᔨᐦᑌᑲᓅᐦᑿᐤᐦ ᑏᐦ ᑲᔦ ᐸᐢᒡ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᒉ ᒌ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᑿᐤᐦ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᑿᐤᐦ ᐍᒥᐢᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮" ᒷᐤ ᑳ ᐃᔑᓂᐦᑳᑌᐠ ᐁ ᐍᒥᐢᑎᑯᔒᐅᓯᓈᑌᐠ, Tam TW, Liu R, Mao J, Arnason JT, Krantis A, Haddad PS, Foster BC᙮ The Effect of Leisure and Medicinal Teas on the Activity of Human Cytochrome P450-Mediated Metabolism᙮
3. ᐊᓐ ᐯᔭᐠ ᒪᓯᓇᐦᐄᑲᓐ ᑳ ᒪᓯᓇᐦᐊᒫᐦᒡ ᐊᓂᑌ ᐄᔑ ᐯᒋ ᐅᑖᐦᒡ, ᐁᐅᐠ ᑳ ᒪᓯᓇᐦᐄᑲᓄᐑᐦᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᐦᒡ᙮ ᐊᓐ ᐊᐱᔒᐢ ᑳ ᒪᓯᓈᑌᐠ, ᐁᐅᐠ ᐊᓐ "ᒋᑳ ᒌ ᒌᑰᓇᑲᓅᐦ-ᐋ ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᑲᔦ ᐍᒥᐢᑎᑯᔒᐤ ᔒᐚᑲᒥᐦᑵᐤ ᓂᑐᐦᑯᔨᓐᐦ?" ᒷᐤ ᐃᔑᓂᐦᑳᑌᐠ ᐁ ᐍᒥᐢᑎᑯᔒᐅᓯᓈᑌᐠ Tam TW, Liu R, Arnason JT, Krantis A, Staines WA, Haddad PS, Foster BC. Cree anti-diabetic plant extracts display mechanism-based inhibition of CYP3A4. *Journal of Pharmacy and Pharmacology*, ᐑᐑᒪᑲᓂᐲᓯᒼ 2011᙮

ᐁᐅᐠ ᐆ ᐊᐱᔒᐢ ᐁ ᒪᓯᓈᑌᐠ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓐ ᐁᑎᑑ ᒥᐢᑕᐦᐄ ᑳ ᒪᓯᓇᐦᐄᑲᓄᐑᐦᒡ ᐊᓂᑌ ᑳ ᐅᐦᒋᐸᔨᐦᒡ ᐚᐢᑎᐠ ᓃᐸ᙮

ᑳ ᐚᐱᐦᑏᐚᓂᐏᐠᐦ ᒥᓯᓂᐦᐄᑭᓐᐦ ᑭᔮ ᑯᑎᐠ ᒑᑿᓐ ᑳ ᒥᓯᓂᐦᐄᑭᓂᐏᐠ

1. ᑭᐃ ᓃᐤ ᐑᐱᐠ ᒋᑭ ᒫᔑᐦᑖᐤ ᐊᓂᔮ ᐅᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ ᒫᐢᑎᕐᐢ ᕒᐃᓯᐢ ᑳ ᐃᔑᓂᐦᑳᑖᐠ᙮ (ᐊᓐ ᐊᐱᔒᐢ ᐋ ᒥᓯᓈᑖᐠ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ ᐊᓂᔮ ᑭᐃ ᐅᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ, ᐋᔦᐏᐠ ᐊᓂᔮ "ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐏᐠᐦ, ᒫᐃᓃᔒᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᑭᔮ ᐚᒥᐢᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ: ᐃᔑᓈᑯᓐ-ᐋ ᐋ ᒥᐧᔮᐠ ᒌᑰ ᒫ ᒌ ᐋᐱᒋᐦᑖᑭᓂᐏᐠᐦ?")
2. ᐋᐅᐠ ᑳ ᐃᑎᓯᐦᐊᒫᐦᒡ ᒥᓯᓂᐦᐄᑭᓐ ᒫ ᒥᓯᓂᐦᐄᑭᓂᐏᐠ ᐊᓂᑖ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓂᐦᒡ᙮ ᐊᓐ ᐊᐱᔒᐢ ᑳ ᒥᓯᓂᐦᐄᑭᓂᐏᐠ, ᐋᐅᐠ ᐊᓐ "ᐋ ᓂᑑᒋᐢᒫᔨᐦᑖᑭᓂᐏᐠᐦ ᑏᐦ ᑭᔮ ᐱᐢᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᒫ ᒌ ᑖᐦᑭᐦᐄᒫᐱᔨᐠᐦ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐠᐦ ᐚᒥᐢᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮" ᒫᐤ ᑳ ᐃᔑᓂᐦᑳᑖᐠ ᐋ ᐚᒥᐢᑎᑯᔒᐅᓯᓈᑖᐠ, Tam TW, Liu R, Mao J, Arnason JT, Krantis A, Haddad PS, Foster BC᙮ The Effect of Leisure and Medicinal Teas on the Activity of Human Cytochrome P450-Mediated Metabolism᙮
3. ᐊᓐ ᐹᔨᐠ ᒥᓯᓂᐦᐄᑭᓐ ᑳ ᒥᓯᓂᐦᐊᒫᐦᒡ ᐊᓂᑖ ᐄᔑ ᐹᒋ ᐅᑖᐦᒡ, ᐋᐅᐠ ᑳ ᒥᓯᓂᐦᐄᑭᓂᐏᐠ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓂᐦᒡ᙮ ᐊᓐ ᐊᐱᔒᐢ ᑳ ᒥᓯᓈᑖᐠ, ᐋᐅᐠ ᐊᓐ "ᒋᑭ ᒌ ᒌᑰᓂᑭᓂᐤᐦ-ᐋ ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᑭᔮ ᐚᒥᐢᑎᑯᔒᐤ ᔒᐚᑭᒥᐦᑿᐤ ᓂᑐᐦᑯᔨᓐᐦ?" ᒫᐤ ᐃᔑᓂᐦᑳᑖᐠ ᐋ ᐚᒥᐢᑎᑯᔒᐅᓯᓈᑖᐠ Tam TW, Liu R, Arnason JT, Krantis A, Staines WA, Haddad PS, Foster BC. Cree anti-diabetic plant extracts display mechanism-based inhibition of CYP3A4. *Journal of Pharmacy and Pharmacology*, ᒌᐢᔮᐢᑯᓂᐲᓯᒼ 2011᙮

ᐋᐅᐠ ᐆ ᐊᐱᔒᐢ ᐋ ᒥᓯᓈᑖᐠ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓐ ᐊᑎᑑ ᒥᐢᑏ ᑳ ᒥᓯᓂᐦᐄᑭᓂᐏᐠ ᐊᓂᑖ ᑳ ᐅᐦᒋᐱᔨᐠ ᐚᐢᑎᐠ ᓃᐸ᙮

The next step will be state-of-the-art studies of how the plants and medicines act on liver cells.

Presentations and other products

1. Rui Liu will soon defend his Master`s thesis. (The plain-language version of Rui's thesis was titled "Cree healing plants, Chinese plants, and western medicines: Are they safe to take together?")
2. We have submitted an article to a journal for publication. The plain-language summary of this article was called "Testing if teas and some traditional medicines could interfere with western drugs." The full title was Tam TW, Liu R, Mao J, Arnason JT, Krantis A, Haddad PS, Foster BC. The Effect of Leisure and Medicinal Teas on the Activity of Human Cytochrome P450-Mediated Metabolism.
3. One of our earlier articles was published. The plain-language summary of this article was called "Can the healing plants be combined with western diabetes drugs?" The full title is Tam TW, Liu R, Arnason JT, Krantis A, Staines WA, Haddad PS, Foster BC. Cree anti-diabetic plant extracts display mechanism-based inhibition of CYP3A4. *Journal of Pharmacy and Pharmacology*, January 2011.

This is a simplified summary of a more technical report from the Foster lab.

ᐁ ᓃᑳᓂᔅᑖᑲᓇᐧᐃᐦᒡ ᐄᓅ ᓂᑐᐦᑯᔨᓐ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓇᐧᐃᐦᒡ: ᐁ ᒫᔨᓈᑌᒡ ᐁ ᐃᔅᐸᔨᐦᒡ

ᐊᓐ ᐄᓅ ᓂᑐᐦᑯᔨᓐ ᐊᔅᒌᐦᒡ ᐁ ᐅᐦᒋᐸᔨᐦᒡ, ᐁᐅᒄ ᒋᐦᒋᐧᐁ ᐄᓅ ᐃᔨᐦᑐᐧᐃᓐ ᑲᔦ ᐁᐅᒄ ᒨᔥ ᐁ ᐃᐦᑎᐧᑖᐤ ᐄᓅᒡ ᐁ ᓂᑐᐦᑯᐦᐄᓱᐧᑖᐤ ᐅᐦᒋ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐊᓂᑌ ᐃᐦᑎᑯᓂᔨᒡᐦ ᐯᔓᒡ ᐁ ᐃᐦᑖᐧᑖᐤ᙮ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑕᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐊᓐ ᑫ ᒌ ᐅᐦᒋ ᒫᔑᐦᑖᑲᓇᐧᐃᐦᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓇᐧᐃᐦᒡ, ᐁᔫᒄ ᑳ ᐄᔑ ᐧᐋᐱᐦᑕᐦᐧᑳᐤ ᑖᐧᐯ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᓂᔨᒡᐦ ᐊᓂᔫᐦ ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐊᓐ ᑫ ᒌ ᐅᐦᒋ ᐧᐄᒋᐦᑖᑲᓇᐧᐃᐦᒡ ᐁ ᐅᔅᑖᐸᔨᐦᐄᐧᐁᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓇᐧᐃᐦᒡ ᑲᔦ ᑖᐧᐯ ᐁ ᐃᔑᓈᑯᐦᒡ ᒌᑰ ᑫ ᒌ ᐋᐸᒋᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᑲᔦ ᐧᐁᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮

ᐃᔅᐱᓐ 2009 ᑳ ᐃᔅᐸᔨᐦᒡ, ᒌ ᐱᒥᐱᔨᐦᑖᑲᓅ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᒥᔅᑎᓯᓃᐦᒡ ᐅᐦᒋ ᐊᓐ ᑫ ᒌ ᓂᓯᑐᐦᑖᑲᓇᐧᐃᐦᒡ ᐁ ᐄᔑ ᐋᐸᒋᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᐧᐄᒋᐦᐄᓱᓈᓇᐧᐃᐦᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓇᐧᐃᐦᒡ᙮ ᐁᐅᒄ ᐁ ᐃᔑᓂᐦᑳᑌᒡ ᐁ ᓃᑳᓂᔅᑖᑲᓇᐧᐃᐦᒡ ᐄᓅ ᓂᑐᐦᑯᔨᓐ, ᐆ ᒫᒃ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᒡ, ᐁᐅᒄ ᐁ ᐧᐄᐦ ᒥᒥᔦᐸᔨᐦᑖᑲᓇᐧᐃᐦᒡ ᑫ ᒌ ᒥᔦᔅᑳᑯᐧᑖᐤ ᐄᓅᒡ ᐊᓂᔫ ᐁ ᐧᐄᒋᐦᐊᑲᓅᐧᑖᐤ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ ᐊᓂᑌ ᐄᓅ ᐊᔅᒌᐦᒡ᙮

ᐊᓂᒌ ᐅᑖᐦᑯᔩᒡ ᐁ ᓇᔅᑯᒧᐧᑖᐤ ᑫ ᐧᐄᒋᐦᐄᐧᐁᐧᑖᐤ ᐅᔫ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᔨᒡ, ᐁᔫᒄ ᐁ ᓇᔅᑯᒧᐧᑖᐤ 6-ᐲᓯᒻᐦ ᑫ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᐅᐦᒋ ᐊᓂᔫ ᐯᔦᒄ ᐄᓅᐦ ᐁ ᐧᐄᒋᐦᐄᑯᐧᑖᐤ ᑲᔦ ᑫᐧᑳᒡ ᐁ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐊᓂᔫ ᐁ ᐄᔑ ᐧᐄᒋᐦᐊᑲᓅᐧᑖᐤ ᓂᑐᐦᑯᔨᓂᑲᒥᑯᐦᒡ᙮ ᐁᔫᒄ ᐁ ᓇᔅᑯᒧᐧᑖᐤ ᑫ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᔨᒡ ᐅᒥᐦᑯᐧᐋᐤ ᑫᔑᑯᒻ ᓂᔥᑐ ᐲᓯᒻᐦ᙮ ᐊᓂᒌ ᐊᐧᐁᓂᒌ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐧᑖᐤ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓇᐧᐃᐦᒡ, ᐁᔫᒄ ᔮᐸᒡ ᐁ ᒥᔮᑲᓅᐧᑖᐤ ᐊᓂᔫ ᐁ ᐃᔅᐸᔨᓂᔨᒡ ᐅᒥᐦᑯᐧᐋᐤ ᑲᔦ ᐊᓂᔫ ᐄᐧᐋᑉ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᔨᒡ ᐅᒥᐦᑯᐧᐋᐤ ᐁᑳ ᑫ ᒌ ᒪᒋᐸᔨᐧᑖᐤ᙮

49 ᒫᒨ ᐊᐧᐁᓂᒌ ᒌ ᒪᓯᓇᐦᐆᔩᒡ ᑫ ᐧᐄᒋᐦᐄᐧᐁᐧᑖᐤ ᐅᔫ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᔨᒡ᙮ 24 ᒫᒃ ᐊᓂᒌ ᐊᐧᐁᓂᒌ ᒌ ᒌᔅᑖᐅᒡ ᐊᓂᔫ 6-ᐲᓯᒻᐦ, ᐁᒄ ᒫᒃ 25 ᐊᐧᐁᓂᒌ

ᐊ ᓃᑳᓂᔅᑖᑭᓂᐧᐃᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐ ᐊ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ: ᐊ ᒥᔨᓈᑖᒡ ᐊ ᐃᔅᐱᔨᒡ

ᐊᓐ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐ ᐊᔅᒌᐦᒡ ᐊ ᐅᐦᒋᐱᔨᒡ, ᐋᐅᒄ ᒋᐦᒋᐧᐋ ᐄᔨᔨᐤ ᐃᔨᐦᑐᐧᐃᓐ ᑭᔮ ᐋᐅᒄ ᒨᔥ ᐊ ᐃᐦᑎᒡ ᐄᔨᔨᐅᒡ ᐊ ᓂᑐᐦᑯᐦᐄᓱᒡ ᐅᐦᒋ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊ ᐋᐱᒋᐦᑖᒡ ᐊᓂᑖ ᐃᐦᑎᑯᓂᔨᒡᐦ ᐹᔓᒡ ᐊ ᐃᐦᑖᒡ᙮ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᐅᐦᒋ ᒫᔑᐦᑖᑭᓂᐧᐃᒡ ᐊ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ, ᐋᔦᐧᐃᒄ ᑳ ᐄᔑ ᐧᐋᐱᐦᑎᐦᒡ ᑖᐧᐹ ᐊ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᔨᒡᐦ ᐊᓂᔮᐦ ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᐅᐦᒋ ᐧᐄᒋᐦᑖᑭᓂᐧᐃᒡ ᐊ ᐅᔅᑖᐱᔨᐦᐄᐧᐋᒡ ᐊ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ ᑭᔮ ᑖᐧᐹ ᐊ ᐃᔑᓈᑯᐦᒡ ᒌᑰ ᒑ ᒌ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡᐦ ᐊᓂᔮᐦ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᑭᔮ ᐧᐋᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮

ᐃᔅᐱᓐ 2009 ᑳ ᐃᔅᐱᔨᒡ, ᒌ ᐱᒥᐱᔨᐦᑖᑭᓂᐤ ᐊ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᒥᔅᑎᓯᓃᐦᒡ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᓂᔅᑐᐦᑖᑭᓂᐧᐃᒡ ᐊ ᐄᔑ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡᐦ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊ ᐧᐄᒋᐦᐄᓱᓈᓂᐧᐃᒡ ᐊ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ᙮ ᐋᐅᒄ ᐊ ᐃᔑᓂᐦᑳᑖᒡ ᐊ ᓃᑳᓂᔅᑖᑭᓂᐧᐃᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐ, ᐆ ᒫᒃ ᐊ ᐄᔑ ᐱᒥᐱᔨᒡ, ᐋᐅᒄ ᐊ ᐧᐄᐦ ᒥᒥᔦᐱᔨᐦᑖᑭᓂᐧᐃᒡ ᒑ ᒌ ᒥᔦᔅᑳᑯᒡ ᐄᔨᔨᐅᒡ ᐊᓂᔮ ᐊ ᐧᐄᒋᐦᐊᑭᓂᐧᐃᒡ ᐊ ᔒᐧᐋᑭᒥᐦᐧᑳᒡ ᐊᓂᑖ ᐄᔨᔨᐤ ᐊᔅᒌᐦᒡ᙮

ᐊᓂᒌ ᐅᑖᐦᑯᔩᒡ ᐊ ᓂᔅᑯᒧᒡ ᒑ ᐧᐄᒋᐦᐄᐧᐋᒡ ᐅᔮ ᐊ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᔨᒡ, ᐋᔦᐧᐃᒄ ᐊ ᓂᔅᑯᒧᒡ 6-ᐲᓯᒻᐦ ᒑ ᐋᐱᒋᐦᑖᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐅᐦᒋ ᐊᓂᔮ ᐹᔨᒄ ᐄᔨᔨᐤᐦ ᐊ ᐧᐄᒋᐦᐄᑯᒡ ᑭᔮ ᒫᐧᑳᒡ ᐊ ᐋᐱᒋᐦᑖᒡ ᐊᓂᔮ ᐊ ᐄᔑ ᐧᐄᒋᐦᐊᑭᓂᐧᐃᒡ ᓂᑐᐦᑯᔨᓂᑭᒥᑯᐦᒡ᙮ ᐋᔦᐧᐃᒄ ᐊ ᓂᔅᑯᒧᒡ ᒑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᔨᒡ ᐅᒥᐦᑯᐧᐋᐤ ᐋᔑᑯᒻ ᓂᔥᑐ ᐲᓯᒻᐦ᙮ ᐊᓂᒌ ᐊᐧᐋᓂᒌ ᐊ ᐧᐄᒋᐦᐄᐧᐋᒡ ᐆ ᐊ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ, ᐋᔦᐧᐃᒄ ᐊᔮᐱᒡ ᐊ ᒥᔮᑭᓂᐧᐃᒡ ᐊᓂᔮ ᐊ ᐃᔅᐱᔨᔨᒡ ᐅᒥᐦᑯᐧᐋᐤ ᑭᔮ ᐊᓂᔮ ᐄᐧᐋᒡ ᐊ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᔨᒡ ᐅᒥᐦᑯᐧᐋᐤ ᐊᑳ ᒑ ᒌ ᒥᒋᐱᔨᒡ᙮

49 ᒫᒨ ᐊᐧᐋᓂᒌ ᒌ ᒥᓯᓂᐦᐆᔩᒡ ᒑ ᐧᐄᒋᐦᐄᐧᐋᒡ ᐅᔮ ᐊ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᔨᒡ᙮ 24 ᒫᒃ ᐊᓂᒌ ᐊᐧᐋᓂᒌ ᒌ ᒌᔅᑖᐅᒡ ᐊᓂᔮ 6-ᐲᓯᒻᐦ, ᐋᒄ ᒫᒃ 25 ᐊᐧᐋᓂᒌ ᓅᐦᑦ ᒌ

Putting Cree Traditional Medicine First Study: progress report

Traditional healing from the land is integral to Cree culture and many people regularly use locally available plants for treatments and healing. The researchers involved in the Anti-diabetic Plant Project found that some traditional medicine plants not only act to treat symptoms of diabetes but are also safe when combined with Western medicine.

Since 2009, a small, locally-controlled study has been on-going in Mistissini to assess using traditional medicines in diabetes care. Known as E Nikanstaakanuuch Iinuu Nitakuyin (Putting Cree Traditional Medicine First), the project is investigating a more culturally-adapted approach to diabetes management in Eeyou Istchee.

Patients joining the study agree to follow a 6-month traditional treatment from one of the Healers while continuing their regular, clinical treatments. They give permission for the study to analyse the results of the blood tests they take every three months. Those enrolled receive their regular blood tests as well as some extra ones to assure safety.

ᓅᐦᑦ ᒌ ᐴᓃᐅᐤ ᐅᐦᒋ ᐊᓂᔫ ᐁ ᒌ ᐃᔅᐸᔨᐦᐄᑯᐧᑖᐤ ᑫᐧᑳᔫ: ᐸᔥᐤ ᐊᐧᐁᓂᒌ ᓇᒧᔨ ᐅᐦᒋ ᒋᐦᒋᐸᔨᐦᑖᐅᐤ, ᑯᑕᑲᐤ ᐊᐧᐁᓂᒌ ᒨᔥ ᒌ ᒋᐦᒋᐸᔫᐤ ᐧᐄᐧᐄᑎᒣ ᐃᐦᑖᐧᐃᓂᐦᐤ, ᐸᔥᐤ ᒫᒃ ᐊᐧᐁᓂᒌ ᓇᒧᔨ ᐅᐦᒋ ᒥᔦᐱᒫᑎᓰᐅᐤ ᐁᒄ ᑳ ᐃᑌᐧᑖᐤ ᐊᓂᒌ ᑳ ᐧᐄᒋᐦᐋᐧᑖᐤ ᐊᐧᐁᔫᐦ ᐁᑳ ᐁᑯᔥ ᑫ ᐧᐄᒋᐦᐄᐧᐁᐧᑖᐤ ᐅᔫ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᔨᐤ, ᑲᔦ ᐸᔥᐤ ᐊᐧᐁᓂᒌ ᓇᒧᔨ ᒨᔥ ᐅᐦᒋ ᐅᑎᓇᒧᐤ ᐊᓂᔫᐦ ᐅᓂᑐᐦᑯᔨᓂᒥᐧᐋᐤᐦ᙮ ᐯᔭᑯᔥᑌᐤ ᐊᐧᐁᓂᒌ ᓃᔥ ᒌ ᒌᔥᑖᐅᐤ ᐊᓂᔫ ᑯᐧᑖᔥᐤ ᐲᓯᒻᐦ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓈᐧᐃᐦᐤ, ᑲᔦ 8 ᐊᓂᒌ ᐊᐧᐁᓂᒌ ᒌ ᐅᔦᔨᐦᑕᒧᐤ ᐁᑳ ᑫ ᐳᓂᐦᑖᐧᑖᐤ ᐅᔫ ᒌᑯ ᐁ ᐄᔑ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐊᓂᔫᐦ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᑲᔦ ᐧᐁᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐅᐦᒋ ᐊᓂᔫ ᐁ ᐄᔑ ᐧᐄᒋᐦᐄᓱᐧᑖᐤ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ᙮

ᐅᑌ ᒫᒃ ᓂᑐᐦᑯᔨᓐ ᐋᐸᑎᓰᐧᐃᓂᐦᐤ, ᑫᐧᑳᐤ ᑲᓇᐧᐋᐱᐦᑖᑲᓅ ᐊᓐ ᑳ ᐄᔑ ᒥᔅᑫᑲᓈᐧᐃᐦᐤ ᐊᓐ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓈᐧᐃᐦᐤ, ᑲᔦ ᒋᑳ ᐧᐋᐱᐦᑏᐧᐋᓅ ᐊᓂᑌ ᐃᐦᑖᐧᐃᓂᐦᐤ ᑳ ᐧᐄᒋᐦᐄᐧᐁᐧᑖᐤ, ᐧᐁᔥ ᐧᐄᐧᐋᐤ ᑎᐲᐧᐁᐅᓰᐅᐤ ᐅᔫ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᔨᐤ᙮ ᐊᓂᔫ ᑳ ᐄᔑ ᐧᐄᐦᑌᐦᐧᑳᐤ ᐊᐧᐁᓂᒌ ᑫᑳᑦ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ, ᓅᔥᑖᐧᐯ ᒌ ᒥᔦᐦᑖᑯᓂᔫ᙮ ᐁᔫᒄ ᐁ ᐄᔑ ᐧᐋᐱᐦᑌᐦᐧᑳᐤ ᓅᔥᐤ ᐁ ᐧᐄᒋᐦᐄᑯᐧᑖᐤ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᔫ ᑯᔨᔅᒄ ᑫ ᒌ ᐃᔅᐸᔨᓂᔨᐤ ᔕᑳᔫ ᐅᒥᐦᑯᐧᐋᐦᐤ᙮ ᐊᓐ ᐁ ᐧᐄᒑᐸᑎᓰᒥᑐᐧᑖᐤ ᐄᓅᐤ ᑳ ᐧᐄᒋᐦᐋᐧᑖᐤ ᐊᐧᐁᔫᐦ, ᓂᑐᐦᑯᔨᓂᑲᒥᒄ, ᑲᔦ ᐅᑖᐦᑯᓯᐤ ᑳ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ, ᓅᔥᑖᐧᐯ ᒥᔦᔨᐦᑖᑯᓐ ᐊᓐ ᑳ ᐄᔑ ᐱᒥᐸᔨᐦᐤ ᐊᓂᑌ ᒥᔅᑎᓯᓃᐦᐤ, ᐁᒄ ᒫᒃ ᐊᓂᒌ ᑳ ᐄᔑ ᓂᒋᔥᑫᐦᐧᑳᐤ ᐄᓅᐤ ᑳ ᐧᐄᒋᐦᐋᐧᑖᐤ ᐊᐧᐁᔫᐦ ᐊᓂᑌ ᒥᔅᑎᓯᓃᐦᐤ, ᐁᔫᒄ ᑫ ᐄᔑ ᐋᔨᒧᑕᒧᐧᐋᐧᑖᐤ ᑯᑕᒃᐦ ᐄᓅᐦ ᐁ ᐧᐄᒋᐦᐋᔨᒡᐦ ᐊᐧᐁᔫᐦ ᐊᓂᑌ ᑯᑕᒃᐦ ᐃᐦᑖᐧᐃᓐᐦ᙮

ᑳᕐᓛᐃᓐ ᐧᑳᐧᑖᐤ
PCTMF ᑳ ᐧᐄᐸᔨᐦᑖᑦ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᔨᐤ
ᒥᔅᑎᓯᓃᐤ ᐄᓅᐤ

ᐴᓃᐅᐤ ᐅᐦᒋ ᐊᓂᔮ ᐋ ᒌ ᐃᔅᐱᔨᐦᐄᑯᐤ ᒫᐧᑳᔨᐤ: ᐱᔥᐤ ᐊᐧᐋᓂᒌ ᓂᒧᔨ ᐅᐦᒋ ᒋᐦᒋᐱᔨᐦᑖᐅᐤ, ᑯᑎᑭᐤ ᐊᐧᐋᓂᒌ ᒨᔥ ᒌ ᒋᐦᒋᐱᔨᐅᐤ ᐧᐄᐧᐄᑎᒫ ᐃᐦᑖᐧᐃᓂᐦᐤ, ᐱᔥᐤ ᒫᒃ ᐊᐧᐋᓂᒌ ᓂᒧᔨ ᐅᐦᒋ ᒥᔦᐱᒫᑎᓰᐅᐤ ᐋᒄ ᑳ ᐃᑖᐤ ᐊᓂᒌ ᑳ ᐧᐄᒋᐦᐋᐤ ᐊᐧᐋᔨᐤᐦ ᐋᑳ ᐋᑯᔥ ᒑ ᐧᐄᒋᐦᐄᐧᐋᐤ ᐅᔮ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᔨᐤ, ᑭᔮ ᐱᔥᐤ ᐊᐧᐋᓂᒌ ᓂᒧᔨ ᒨᔥ ᐅᐦᒋ ᐅᑎᓂᒧᐤ ᐊᓂᔮᐦ ᐅᓂᑐᐦᑯᔨᓂᒥᐧᐋᐤᐦ᙮ ᐹᔨᑯᔥᑖᐤ ᐊᐧᐋᓂᒌ ᓃᔥ ᒌ ᒌᔥᑖᐅᐤ ᐊᓂᔮ ᑯᐧᑖᔥᐤ ᐲᓯᒼᐦ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᐤ, ᑭᔮ 8 ᐊᓂᒌ ᐊᐧᐋᓂᒌ ᒌ ᐅᔮᔨᐦᑎᒧᐤ ᐋᑳ ᒑ ᐳᓂᐦᑖᐤ ᐅᔮ ᒌᑯ ᐋ ᐄᔑ ᐋᐱᒋᐦᑖᐤ ᐊᓂᔮᐦ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᑭᔮ ᐧᐋᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐅᐦᒋ ᐊᓂᔮ ᐋ ᐄᔑ ᐧᐄᒋᐦᐄᓱᐤ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᐤ᙮

ᐅᑖ ᒫᒃ ᓂᑐᐦᑯᔨᓐ ᐋᐱᑎᓰᐧᐃᓂᐦᐤ, ᒑᐧᑳᐤ ᑭᓇᐧᐋᐱᐦᑖᑭᓂᐤ ᐊᓐ ᑳ ᐄᔑ ᒥᔅᑳᑭᓂᐧᐃᐤ ᐊᓐ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᐤ, ᑭᔮ ᒋᑭ ᐧᐋᐱᐦᑏᐧᐊᓂᐤ ᐊᓂᑖ ᐃᐦᑖᐧᐃᓂᐦᐤ ᑳ ᐧᐄᒋᐦᐄᐧᐋᐤ, ᐧᐋᔥ ᐧᐄᐧᐋᐤ ᑎᐲᐧᐋᐅᓰᐅᐤ ᐅᔮ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᔨᐤ᙮ ᐊᓂᔮ ᑳ ᐄᔑ ᐧᐄᐦᑎᐦᐤ ᐊᐧᐋᓂᒌ ᒑᑳᑦ ᔒᐧᐋᑭᒥᐦᐧᑳᐤ, ᓅᔥᑖᐧᐸ ᒌ ᒥᔦᐦᑖᑯᓂᔨᐤ᙮ ᐋᔦᐧᐃᒄ ᐋ ᐄᔑ ᐧᐋᐱᐦᑎᐦᐤ ᓅᔥᐤ ᐋ ᐧᐄᒋᐦᐄᑯᐤ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᔮ ᑯᔨᔅᒄ ᒑ ᒌ ᐃᔅᐱᔨᔨᔨᐤ ᔒᑳᔨᐤ ᐅᒥᐦᑯᐧᐋᐦᐤ᙮ ᐊᓐ ᐋ ᐧᐄᒑᐱᑎᓰᒥᑐᐤ ᐄᔨᔨᐅᐤ ᑳ ᐧᐄᒋᐦᐋᐤ ᐊᐧᐋᔨᐤᐦ, ᓂᑐᐦᑯᔨᓂᑭᒥᒄ, ᑭᔮ ᐅᑖᐦᑯᓯᐤ ᑳ ᔒᐧᐋᑭᒥᐦᐧᑳᐤ, ᓅᔥᑖᐧᐸ ᒥᐧᔮᔨᐦᑖᑯᓐ ᐊᓐ ᑳ ᐄᔑ ᐱᒥᐱᔨᐤ ᐊᓂᑖ ᒥᔅᑎᓯᓃᐦᐤ, ᐋᒄ ᒫᒃ ᐊᓂᒌ ᑳ ᐄᔑ ᓂᒋᔥᑭᐦᐤ ᐄᔨᔨᐅᐤ ᑳ ᐧᐄᒋᐦᐋᐤ ᐊᐧᐋᔨᐤᐦ ᐊᓂᑖ ᒥᔅᑎᓯᓃᐦᐤ, ᐋᔦᐧᐃᒄ ᒑ ᐄᔑ ᐋᔨᒧᑎᒧᐧᐋᐤ ᑯᑎᒃᐦ ᐄᔨᔨᐤᐦ ᐋ ᐧᐄᒋᐦᐋᔨᒡᐦ ᐊᐧᐋᔨᐤᐦ ᐊᓂᑖ ᑯᑎᒃᐦ ᐃᐦᑖᐧᐃᓐᐦ᙮

ᑳᕐᓛᐃᓐ ᐧᑳᐧᑖᐤ
PCTMF ᑳ ᐧᐄᐱᔨᐦᑖᑦ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᔨᐤ
ᒥᔅᑎᓯᓃᐤ ᐄᔨᔨᐅᐤ

In total, 49 participants registered to be part of the study. Of these, 24 are carrying through for the entire 6-month period, while 25 have stopped for various reasons: some never began, others travel frequently outside the community, a few had other health problems that were judged unsafe by the healers, and some did not take their medicines regularly. Nine patients have already finished the six month study, and 8 of them have decided to continue using a combination of traditional medicines and Western medicines for their diabetes care.

The Cree Health Board is now analysing the results from the tests and these will be presented to the community partners who own the study. The testimonials of some participants with pre-diabetes have been very positive. They find that using traditional medicines has helped them to control their blood sugars. Collaboration between traditional healers, the local clinic, and patients with diabetes has been a positive experience in Mistissini and now the healers from Mistissini will be sharing their experiences with healers from other communities.

Karoline Gaudot
PCTMF Research Coordinator
Cree Nation of Mistissini

Species	English Name	Cree Name	Southern Dialect	Northern Dialect
Abies balsamea	Balsam fir	Inaasht	ᐃᓀᓵᑦ înâsht	ᐃᐧᔭᔪᑦ îyâshiht
Alnus incana subsp. rugosa	Gray alder	Atushpi	ᐅᔐᓴᐱ utûspî	ᐅᑐᓴᐱ utuspî
Andromeda polifolia L.	Bog rosemary	Uschischibuk	ᐅᓴᓯᓴᐸᐣ uschischipakw	ᐅᓴᓯᓴᐱᐣ uschischipikw
Betula papyrifera	Paper birch	Ushkui	ᐅᓵᐣᐃ ushkui	·ᐃᓵᐣᐃ wishkui
Cladonia rangiferina	Gray reindeer lichen	Wapskamkw	·ᐊᐱᐧᓴᒥᐣ wâpiskamikw	·ᐊᐱᐧᐸᒥᐣ wâpiskimikw
Empetrum nigrum	Crowberry	Eshjeemenan	ᐊᓵᐢᒥᓀᓐ aschîminânh	ᐊᓵᐢᒥᓐ aschîminh
Gaultheria hispidula	Creeping snowberry	Pieuminaan	ᐱᔦᐅᒥᓀᓐ piyeuminânh	ᐱᐧᐅᒥᓐ piyâuminh
Heracleum maximum	Cow parsnip	Wiipashtk	·ᐃᐦᐸᓵᐣ wîhpâshkw	·ᐃᐦᐸᓵᐣ wîhpâskw
Juniperus communis	Ground juniper	Kakachiiminatuk	ᑲᐦᑲᐢᒥᓀᓯᓐᑎᐣ kâhkâchîminâhtikw	ᑲᐦᑲᐢᒥᓀᓐ kâhkâchîminâhtikw
Kalmia angustifolia	Sheep laurel	Uishichipukw	ᐅᓴᓯᓴᐸᐣ uschischipakw	ᐅᓴᓯᓴᐱᐣ uschischipikw
Larix laricina	Tamarack larch	Watnagan	·ᐊᐢᓀᑲᓵ wâchinâkan	·ᐊᐢᓀᐢᓵ wâchinâkin
*Leymus mollis**	American dune grass	Weenibekushkushuh	·ᐃᓂᐯᔦᓴᔦᓭᐦ wiinipekushkushuuh	·ᐃᓂᐸᔦᓴᔦᔪᐤ wiinipaakushkushiuh
Lycopodium clavatum	Stag's horn club moss or ground pine	Pashtnahoagin	ᐸᐢᓀᓀ·ᑲᑲᓵ pâschinâhkwâkan	ᐸᓯᓀ·ᑲᐢᓵ pâsinâhkwâhkin
Picea glauca	White spruce	Minhikw	ᒥᓀᐃᐣ minahîkw	ᒥᓂᐃᐣ minihîkw
Picea mariana	Black spruce	Inaahtikw	ᐃᓀᐦᑎᐣ înâhtikw	ᐃᐧᐦᑎᐣ îyâhtikw
Picea mariana	Black spruce (bog)	Maschegotuk	ᒪᔭᒣ·ᑲᐦᑎᐣ mashekwâhtikw	ᒥᔭᒐ·ᑲᐦᑎᐣ mischekwâhtikw
Pinus banksiana	Jack pine	Ushchishk	ᐅᔐᔭᐠ uschisk	ᐅᔐᔭᐠ uschisk
Populus balsamifera	Balsam poplar	Miitus	ᒼᑐᔭ mîtus	ᒼᑐᔭ mîtus
Rhododendron groenlandicum	Labrador tea	Kachichepukw	ᑲᔐᒣᐸᐣ kâchichepakw	ᑲᔐᒐᐱᐣ kâchichâpikw
Rhododendron tomentosum	Northern Labrador tea	Weeshichbuksh	·ᐃᓵᔐᐸᔪᐦ wîshashipakush-h	·ᐃᔑᔐᐱᔪᐦ wîshichipikush-h
Salix planifolia	Willow	Pieuatikw	ᐱᔦᐅ·ᐊᐦᑎᐣ piyeuwâhtikw	ᐱᐧᐅ·ᐊᐦᑎᐣ piyâuwâhtikw
Sarracenia purpurea	Pitcher plant	Ayigadash	ᐊᐳᑲᑦᓵ ayikatâsh	ᐊᐳᑭᑦᓵ ayikitâsh
Sorbus decora	Showy mountain ash	Mushkuminanatikw	ᒪᔭᔪᒥᓀᓀᓐᑎᐣ maskuminânâhtikw	ᒥᔭᔪᒥᔑ miskumishî
Sphagnum fuscum	Common brown peat moss	Awashischee	ᐊ·ᐊᔑᔭᐢ awâshischî	ᐊ·ᐊᔑᓵᐢᓵ awâshishchîsh
Stereocaulon paschale	Common coral lichen	Wabuwakunapwkw	·ᐊᐱ·ᐊᐦᔪᓀᐱᐣ wâpiwâhkunâpiskw	·ᐊᐱ·ᐊᐦᔪᓐ wâpiwâhkunh
Thuya occidentalis	Cedar	Maastchiisk	ᒪᔭᐢᔭᐠ mâschîsk	ᒪᔭᐢᔭᐠ mâschîsk
*Typha latifolia**	Cattail	Uchshkoyushkushu	ᐅᐢᓵ·ᑳᔦᓵᔪᐦ uchishkwâyûshkushû	ᐅᐢᓵ·ᑳᔦᓵᔪᔑᐤ uchishkwâyûshkushiu
*Vaccinium angustifolium**	Low-bush blueberry	Minshe	ᐃᓂᒥᓀᓐ îniminânh	ᐃᐧᒥᓐ îyiminh
Vaccinium uliginosum	Alpine bilberry	N'chiminatuk	ᓂᐢᔪᒥᓀᐦᑎᐣ nichikuminâhtikw	ᓂᐢᔪᒥᓀᐦᑎᐣ nichikuminâhtikw
Vaccinium vitis-idaea	Mountain cranberry or lingonberry	Wishichimna	·ᐃᔭᐢᒥᓀᓀᓐ wîsachiminânh	·ᐃᔪᐢᒥᓐ wîsichiminh

* ᓀᒧᐃ ᒧᓵ ᐊᐳᒧᐅᐤᓰ * ᓂᒧᐳ ᒧᓵ ᐊᐳᒧᐢᑦᓰ * *not often mentioned during interviews*