ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᐅᐦᒋ ᐊᓂᔫ ᐁ ᓂᑑᒋᐢᑫᓴᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒥᐦᒋᑲᓐᐦ ᐊᓂᔫᐦ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᓴᐦᐧᑳᐤᐦ ᐁ ᓇᑳᐦᐅᑌᐠ ᐁ ᒎᐧᐋᑲᒥᐦᐧᑳᓅᐦᐠ

ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓂᔮ ᐋ ᓂᑑᒋᐢᒑᓴᐦᑖᑭᓂᐧᐃᐠᐦ ᓂᐦᑖᐅᒥᐦᒋᑭᓐᐦ ᐊᓂᐦᐄ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᓴᐠᐦ ᐋ ᓂᑳᐦᐅᑖᐠᐦ ᐋ ᒎᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᐠ

Reports from the anti-diabetic plant project

ᐅᐦᐸᐦᐆᐲᓯᒼ
ᐅᐦᐱᐦᐆᐲᓯᒻ
August
2009

ᑳᓈᑖ ᐋᐸᑎᓲᐧᐃᓐ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᑫᓴᐦᑖᑲᓄᐦᒡ ᒥᔦᐱᒫᑎᓲᐧᐃᓐ ᐊᓂᒌ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑕᐦᐧᑳᐤ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᐃᔨᐢ ᐁᑳ ᑫ ᒎᐧᐋᑲᒥᐦᐧᑳᓅᐦᐠ

ᑳᓈᑖ ᐋᐱᑎᓰᐧᐃᓐ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᓴᐦᑖᑭᓂᐧᐃᐠ ᒥᔦᐱᒫᑎᓰᐧᐃᓐ ᐊᓂᒌ ᑳ ᐋᐱᑎᓲᐢᑎᐦᐠ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᐠᐦ ᐋᑳ ᒫ ᒎᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᐠ

CIHR Team in Aboriginal Anti-Diabetic Medicines

ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᐅᐦᒋ ᐊᓂᔫ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᔫᐦ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐁ ᓇᑳᐦᐅᑌᒡ ᐁ ᔑᐧᐋᑲᒥᐦᐧᑳᓅᐦᒡ*

*ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓂᔮ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᐦᐄ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ 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

ᒉᔑᑯᒻ ᐱᐳᓐᐦ ᐁ ᓂᔥᑐᐧᐄᐧᑖᐤ ᐊᓂᒌ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑎᐦᐧᑳᐤ
ᑳᓈᑖ ᐋᐸᑎᓰᐧᐃᓐ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᒡ ᒥᔦᐱᒫᑎᓰᐧᐃᓐ ᐊᓂᒌ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑎᐦᐧᑳᐤ ᐄᓅ ᓂᑐᐦᑯᔮᓐᐦ ᐁ ᒫᓯᐦᒉᐸᔮᓃᐦᐧᑳᐤᐦ ᐁ ᔑᐧᐋᑲᒥᐦᐧᑫᓅᐦᒡ
ᒨᓀᔮᐤ, ᐅᐦᐸᐦᐆᐲᓯᒻ 2009

ᐋᔑᑯᒻ ᐱᐳᓐᐦ ᐋ ᓂᔥᑐᔮᒡ ᐊᓂᒌ ᑳ ᐋᐱᑎᔒᔥᑎᐦᒡ
ᑳᓈᑖᐦ ᐋᐱᑎᓰᐧᐃᓐ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᒥᔦᐱᒫᑎᓰᐧᐃᓐ ᐊᓂᒌ ᑳ ᐋᐱᑎᔒᔥᑎᐦᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔮᓐᐦ ᐋ ᒫᓯᐦᒑᐱᔨᔨᒡᐦ ᐋ ᔑᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ
ᐧᒫᓀᔮᐤ, ᐅᐦᐱᐦᐆᐲᓯᒼ 2009

Annual Team Retreat

CIHR Team in Aboriginal Anti-Diabetic Medicines
Montreal, August 2009

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

*ᑯᐃᔅᒄ ᐁ ᑲᓇᐧᐁᔨᐦᑖᑲᓄᐧᐃᐦᒡ ᒉᐧᑳᓐ: ᐁᐅᒄ ᒉ ᒋᔅᒉᔨᐦᑕᒉᒄ ᒥᒄ ᐊᓂᒌ ᐊᐧᐁᓂᒌ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐧᑖᐤ ᐊᓂᔫ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐁ ᔑᐧᐋᑲᒥᐦᐧᑫᓄᐧᐃᐦᒡ ᒋᑲ ᒌ ᐊᔨᒥᐦᑌᐅᒡ ᐅᔫ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᔫ᙮ ᐁᑯᑦ ᐁ ᒪᓯᓈᑌᒡ ᐄᓅ ᒋᔅᒉᔨᐦᑕᒧᐧᐃᓐ ᑲᔦ ᐊᓂᔫ ᑳ ᐄᔑ ᒥᔅᑲᐧᐋᐦᑖᐧᑖᐤ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᒦᓐ ᒋᑲ ᒪᓯᓇᐦᐄᑲᓅ ᑯᑕᒃ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᒥᓯᐧᐁ ᐊᐧᐁᓐ ᒉ ᒌ ᐧᐋᐸᐦᑕᐦᒃ ᒥᓈ ᒌ ᐊᔨᒥᐦᑖᐧᑖᐤ ᓅᔥᑕᒻ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᒋᔐᐄᓅᒡ ᑲᔦ ᐅᑌᓈᐤᐦ᙮

**ᑯᔭᔅᒄ ᐋ ᑭᓂᐧᐋᔨᐦᑖᑭᓂᐧᐃᒡ ᒑᐧᑳᓐ: ᐋᐅᒄ ᒑ ᒋᔅᒑᔨᐦᑎᒫᒄ ᒥᒄ ᐊᓂᒌ ᐋ ᐧᐄᒋᐦᐄᐧᐋᒡ ᐊᓂᔮ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐋ ᔑᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ ᒋᑭ ᒌ ᐊᔨᒥᐦᑖᐅᒡ ᐅᔮ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᔨᐤ᙮ ᐋᑯᑎᐦ ᐋ ᒥᓯᓈᑖᒡ ᐄᔨᔨᐤ ᒋᔅᒑᔨᐦᑎᒧᐧᐃᓐ ᑭᔮ ᐊᓂᔮ ᑳ ᐄᔑ ᒥᔅᑭᐧᐋᐦᑖᒡ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᒦᓐ ᒋᑭ ᒥᓯᓂᐦᐄᑭᓂᐤ ᑯᑎᒃ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᒥᓯᐧᐋ ᐊᐧᐋᓐ ᒑ ᒌ ᐧᐋᐱᐦᑎᐦᒃ ᒥᓈ ᒌ ᐊᔨᒥᐦᑖᐧᑖᐤ ᓅᔥᑎᒻ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᒋᔖᔨᔨᐅᒡ 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**

ᐄᔨᔨᐤ/ᐄᓅ ᐃᐧᑖᔅᑎᒫᒑᓯᐤ: **ᐱᕌᔨᓐ ᐧᐁᑉ**
Cree translations: **Brian Webb**

ᓅᒋᒦᔫ ᐄᓅ ᐊᔨᒧᐧᐃᓐ ᑳ ᐃᔑ ᒪᓯᓇᐦᐁᒃ: **ᒣᕆ ᓃᐧᐹᔥ**
Editing of Southern translation: **Marie M. Neeposh**

ᒥᓯᓈᐱᔅᑭᐦᐄᑭᓐᐦ: **ᐋᓗᐃᓐ ᑰᓇᔦᕐ**
Photos: **Alain Cuerrier**

ᑳ ᒥᔦᓈᑯᐦᑖᑦ ᒥᓯᓂᐦᐄᑭᓂᔨᐤ: **ᑳᑎᔮ ᐯᑦᐧᕈᕝ**
Design and page layout: **Katya Petrov**

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ᐊᓐ ᐁ ᐱᒥᐸᔨᐦᒡ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐧᐄᒋᐦᐄᑯᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐁ ᐅᔥᑖᐸᔨᐦᐄᑯᐧᑖᐤ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ, ᐁᐅᒄ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐧᑖᐤ ᐄᓅᒡ ᐁ ᐧᐄᒋᐦᐋᐧᑖᐤ ᐊᐧᐁᔫᐦ ᐁ ᐅᔥᑖᐸᔨᐦᐄᑯᔨᒡᐦ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᔨᒡᐦ ᑲᔦ ᒋᔖᐄᓅᒡ ᑲᔦ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᔫᒄ ᐁ ᐋᐸᑎᓰᐦᑲᐦᑕᐦᐧᑳᐤ ᒉ ᒌ ᓂᓯᑐᐦᑕᐦᐧᑳᐤ ᑖᓂᑌ ᒉ ᒌ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᓂᔨᐦᐧᑳᐤᐦ ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓐᐦ ᒉ ᒌ ᐅᐦᒋ ᐧᐄᒋᐦᐄᑯᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐁ ᐅᔥᑖᐸᔨᐦᐄᑯᐧᑖᐤ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ ᓀᔥᑦ ᒫᒃ ᒉ ᒌ ᓇᑳᐦᐄᑲᓅᐦᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᐦᒡ× ᐆ ᒫᒃ ᐁ ᐄᔑ ᐋᐸᑎᓰᐦᑲᐦᑕᑲᓅᐦᒡ, ᐁᐅᒄ ᐧᐁᐦᒋ ᐱᒥᐸᔨᐦᒡ ᐁ ᒋᔅᑌᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑖᓐ ᒉ ᒌ ᐄᔑ ᓂᑐᐦᑯᐦᐄᑯᐧᑖᐤ ᐊᐧᐁᓂᒌ× ᐃᔅᐱᓐ 2003 ᑳ ᐃᔅᐸᔨᐦᒡ, ᐊᓂᒌ ᑳ ᒫᒨ ᐋᐸᑎᓰᐧᑖᐤ ᒥᔥᑕᐦᐄ ᒌ ᐋᐸᑎᓰᐦᑲᐦᑕᒧᒡ ᒉᐧᑳᔫ ᑲᔦ ᐁᔫᒄ ᑳ ᒥᔪᐸᔨᐦᑖᐧᑖᐤ ᑯᐃᔅᑯ ᒉ ᒌ ᐧᐄᒑᐸᑎᓰᒪᑐᐧᑖᐤ×

ᐆ ᒫᒃ ᐁ ᐄᔑ ᐋᐸᑎᓰᐦᑲᐦᑕᑲᓅᐦᒡ, ᒥᔥᑕᐦᐄ ᒉᐧᑳᓐ ᒌ ᐃᐦᑎᓈᓅ ᒉ ᒌ ᒥᔪᐸᔨᐦᒡ ᒫᒨ ᐁ ᐋᐸᑎᓰᓈᓅᐦᒡ, ᐁᐅᒄ ᐆ ᐯᔭᒄ ᐁ ᓅᑯᐦᒡ ᐆ ᒪᓯᓇᐦᐄᑲᓐ ᐁ ᒌ ᒪᓯᓇᐦᐄᑲᓅᐦᒡ× ᐊᓐ ᒦᓐ ᑯᑕᒡ ᒉᐧᑳᓐ, ᐁᐅᒄ ᐊᓐ ᐁ ᓂᔥᑐᐧᐄᐧᑖᐤ ᑳ ᒫᒦᓄᔥᑳᒉᐧᑖᐤ, ᐊᓐ ᒦᓐ ᓃᐧᔖᐤ ᒣᔑᑯᒻ ᐱᐳᓐᐦ ᑳ ᓂᔥᑐᐧᐄᓈᓅᐦᒡ ᒉ ᒌ ᒋᔅᒉᔨᐦᑖᑯᐦᑖᑲᓅᐦᒡ ᐊᓐ ᒉᐧᑳᓐ ᐁ ᐃᔅᐸᔨᐦᒡ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᒡ× ᐊᓐ ᒦᓐ ᒥᓯᐧᐁ ᒉᐧᑳᓐ ᐁ ᒪᓯᓇᐦᐄᑲᓅᐦᒡ, ᐁᐅᒄ ᔮᔨᑌ ᐁ ᐃᔑᓈᑯᐦᑖᑲᓅᐦᒡ ᒥᓯᐧᐁ ᐊᐧᐁᓐ ᒉ ᒌ ᓂᓯᑐᐦᑕᐦᒃ ᐊᓂᔫ ᒉᐧᑳᔫ ᐁ ᒪᓯᓇᐦᐄᑲᓅᔨᒡ ᐁ ᐧᐁᒥᔥᑎᑯᔒᐅᔥᑌᔨᒡ ᑲᔦ ᐁ ᐃᐧᑌᔥᑕᒫᑕᑲᓅᐦᒡ ᓃᔓᔨᒡ ᐁ ᐄᔑ ᐊᔨᒥᐧᑖᐤ ᐄᓅᒡ ᐊᓂᑌ ᐧᐄᓂᐯᑯᐦᒡ ᑲᔦ ᓅᐦᒋᒦᐦᒡ, ᐁᒄ ᒫᒃ ᒉ ᒌ ᓇᔅᑯᒨᐧᑖᐤ ᐊᓂᒌ ᑳ ᐧᐄᒋᐦᐋᐧᑖᐤ ᐊᐧᐁᔫᐦ ᐁ ᐅᔥᑖᐸᔨᐦᐄᑯᔨᒡᐦ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᔨᒡᐦ ᑲᔦ ᐊᓂᒌ ᒥᓯᐧᐁ ᑳ ᐧᐄᒋᐦᐄᐧᐁᐧᑖᐤ ᐅᔫ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᑖᑲᓅᔨᒡ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᔨᒡ× ᐊᓅᐦᒌᑳᓐ ᒫᒃ ᔖᔥ ᒌ ᒌᔑ ᒪᓯᓇᐦᐄᑲᓅ ᐊᓐ

ᐊᓐ ᐋ ᐱᒥᐱᔨᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐧᐄᒋᐦᐄᑯᒡ ᐊᐧᐋᓂᒌ ᐋ ᐅᔥᑖᐱᔨᐦᐄᑯᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᒡ, ᐋᐅᒄ ᐋ ᐧᐄᒋᐦᐄᐧᐋᒡ ᐄᔨᔨᐅᒡ ᐋ ᐧᐄᒋᐦᐋᒡ ᐊᐧᐋᔨᐤᐦ ᐋ ᐅᔥᑖᐱᔨᐦᐄᑯᔨᒡᐦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᔨᒡᐦ ᑭᔮ ᒋᔖᔨᔨᐅᒡ ᑭᔮ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᔪᐧᐃᒄ ᐋ ᐋᐱᑎᐅᔒᔥᑎᐦᒡ ᒑ ᒌ ᓂᔥᑐᐦᑎᐦᒡ ᑖᓂᑖ ᒑ ᒌ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᔨᔨᒡᐦ ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓐᐦ ᒑ ᒌ ᐅᐦᒋ ᐧᐄᒋᐦᐄᑯᒡ ᐊᐧᐋᓂᒌ ᐋ ᐅᔥᑖᐱᔨᐦᐄᑯᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᒡ ᑭᔭ ᒫᒃ ᒑ ᒌ ᓂᑳᐦᐄᑭᓂᐧᐃᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ× ᐆ ᒫᒃ ᐋ ᐄᔑ ᐋᐱᑎᔒᔥᑖᑭᓂᐧᐃᒡ, ᐋᐅᒄ ᐧᐋᐦᒋ ᐱᒥᐱᔨᒡ ᐋ ᒋᔅᑖᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑖᓐ ᒑ ᒌ ᐄᔑ ᓂᑐᐦᑯᐦᐄᑯᒡ ᐊᐧᐋᓂᒌ× ᐃᔅᐱᓐ 2003 ᑳ ᐃᔅᐱᔨᒡ, ᐊᓂᒌ ᑳ ᒫᒨ ᐋᐱᑎᓰᒡ ᒥᔥᑏ ᒌ ᐋᐱᑎᔒᔥᑎᒧᒡ ᒑᐧᑳᔨᐤ ᑭᔮ ᐋᔪᐧᐃᒄ ᑳ ᒥᔪᐱᔨᐦᑖᒡ ᑯᔨᔅᑯ ᒑ ᒌ ᐧᐄᒑᐱᑎᓰᒥᑐᒡ×

ᐆ ᒫᒃ ᐋ ᐄᔑ ᐋᐱᑎᔒᔥᑎᑭᓂᐧᐃᒡ, ᒥᔥᑏ ᒑᐧᑳᓐ ᒌ ᐃᐦᑎᓈᓂᐤ ᒑ ᒌ ᒥᔪᐱᔨᒡ ᒫᒨ ᐋ ᐋᐱᑎᓰᓈᓂᐧᐃᒡ, ᐋᐅᒄ ᐆ ᐹᔨᒄ ᐋ ᓅᑯᐦᒡ ᐆ ᒥᓯᓂᐦᐄᑭᓐ ᐋ ᒌ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡ× ᐊᓐ ᒦᓐ ᑯᑎᒡ ᒑᐧᑳᓐ, ᐋᐅᒄ ᐊᓐ ᐋ ᓂᔥᑐᔨᒡ ᑳ ᒫᒦᓄᔥᑳᒑᒡ, ᐊᓐ ᒦᓐ ᓃᐧᔖᐤ ᐋᔑᑯᒻ ᐱᐳᓐᐦ ᑳ ᓂᔥᑐᔨᓈᓂᐧᐃᒡ ᒑ ᒌ ᒋᔅᒑᔨᐦᑖᑯᐦᑖᑭᓂᐧᐃᒡ ᐊᓐ ᒑᐧᑳᓐ ᐋ ᐃᔅᐱᔨᒡ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ× ᐊᓐ ᒦᓐ ᒥᓯᐧᐋ ᒑᐧᑳᓐ ᐋ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡ, ᐋᐅᒄ ᔮᔨᑖ ᐋ ᐃᔑᓈᑯᐦᑖᑭᓂᐧᐃᒡ ᒥᓯᐧᐋ ᐊᐧᐋᓐ ᒑ ᒌ ᓂᔥᑐᐦᑎᐦᒃ ᐊᓂᔮ ᒑᐧᑳᔨᐤ ᐋ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᔨᒡ ᐋ ᐧᐋᒥᔥᑎᑯᔒᐅᔥᑖᔨᒡ ᑭᔮ ᐋ ᐃᐧᑖᔥᑎᒫᑎᑭᓂᐧᐃᒡ ᓃᔓᔨᒡ ᐋ ᐄᔑ ᐊᔨᒥᒡ ᐄᔨᔨᐅᒡ ᐊᓂᑖ ᐧᐄᓂᐹᑯᐦᒡ ᑭᔮ ᓅᐦᒋᒦᐦᒡ, ᐋᒄ ᒫᒃ ᒑ ᒌ ᓂᔅᑯᒨᒡ ᐊᓂᒌ ᑳ ᐧᐄᒋᐦᐋᒡ ᐊᐧᐋᔨᐤᐦ ᐋ ᐅᔥᑖᐱᔨᐦᐄᑯᔨᒡᐦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᔨᒡᐦ ᑭᔮ ᐊᓂᒌ ᒥᓯᐧᐋ ᑳ ᐧᐄᒋᐦᐄᐧᐋᒡ ᐅᔮ ᐋ ᐄᔑ ᐱᒥᐱᔨᐦᑖᑭᓂᐧᐃᔨᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᔨᒡ× ᐊᓅᐦᒌᐦᒑ ᒫᒃ ᔖᔥ ᒌ ᒌᔑ ᒥᓯᓂᐦᐄᑭᓂᐤ ᐊᓐ ᓂᔅᑯᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐆ

The Anti-diabetic medicinal plant project involves Iiyiyiu Healers and Elders with university-based scientists in an effort to understand how Iiyiyiu medicinal plants can be effective for preventing and managing symptoms of diabetes. The project is based on a mutual love of plants and a profound respect for the healing properties they can share with us. Since 2003, the project partners have worked hard to develop open communication and trust among everyone involved.

This has produced some innovative approaches, of which this document is but one example. Other examples are the monthly steering committee meetings, the biannual meetings to report on the progress from the laboratories and the annual retreat. As well, all scientific communications from the project, whether these are presentations at conferences or formal publications, are summarized in plain English and translated into coastal and inland Cree so they can be approved by the Healers and the project partners. Recently, the long-awaited Research Agreement from the project was finalized and it is in the process of being signed.

The project has a number of components. The Iiyiyiu healers and university-based ethnobotanists work on the land to identify the plants of interest. Then

ᓇᔅᑯᒨᓯᓇᐦᐋᑲᓐ ᐅᐦᒋ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᒡ ᑲᔦ ᒉᐧᑳᒡ ᐱᒥᐸᔩ ᐁ ᒪᓯᓇᐦᐆᓱᓈᓅᐦᒡ᙮

ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᓇᓈᐦᑰ ᒉᐧᑳᓐ ᐊᔑᒋᐸᔩ ᐆ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᒡ᙮ ᐊᓂᒌ ᐄᓅᒡ ᑳ ᐧᐄᒋᐦᐋᐧᑖᐤ ᐊᐧᐁᔩᐦ ᐁ ᐅᔥᑖᐸᔨᐦᐄᑯᔨᒡᐦ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᔨᒡᐦ ᑲᔦ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᒫᒨ ᐋᐸᑎᓰᐅᒡ ᐊᓂᑌ ᐊᔅᒌᐦᒡ ᒉ ᒌ ᓂᓯᑑᓂᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐄᓅᒡ ᐁ ᐧᐄᒋᐦᐄᓱᐧᑖᐤ᙮ ᐁᒄ ᒫᒃ ᑯᑕᑲᒡ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ ᒉᐧᑳᔩ ᒋᐦᒋᐧᐁ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ ᐊᓂᔩᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁᒄ ᒫᒃ ᒉ ᒌ ᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ ᑖᐧᐯ ᐁ ᓂᑐᐦᑯᔨᓈᔨᐧᑳᐤᐦ ᐊᓂᔩᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᓂᔨᒡ ᐁ ᐅᔥᑖᐸᔨᐦᐄᐧᐁᔨᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᐦᒡ ᓀᔥᑦ ᒫᒃ ᐁᑳ ᒉ ᒌ ᐸᐦᒋᐳᓈᓅᐦᒡ ᐁ ᐋᐸᒋᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐊᓂᔩᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐁᐅᒄ ᔒᔥ ᐁ ᐱᒥᐸᔨᐦᑖᑲᓅᐦᒡ “ᐁ ᓃᔥᑖᒥᔥᑖᑲᓅᐦᐧᑳᐤᐦ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᐋᐸᑎᓰᐧᐃᓐ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ, ᐁᐅᒄ ᐊᓐ ᐁ ᓈᓈᑲᒋᐦᐋᑲᓅᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ ᑖᐱᔥᑯᓐ ᐁ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᑲᔦ ᐧᐁᒥᔥᑎᑯᔒᐤ ᔒᐧᐋᑲᒥᐦᐧᑫᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐁᐅᒄ ᐆ ᐊᓅᐦᒌᐦᒡ ᑳ ᒋᐦᒋᐸᔨᐦᑖᑲᓅᐦᒡ ᐊᓂᑌ ᒥᔅᑎᓯᓃᐦᒡ, ᐁᐅᒄ ᑲᔦ ᒉ ᐱᒥᐸᔨᐦᑖᑲᓅᐦᒡ ᐊᓂᑌ ᑯᑕᒃᐦ ᐄᓅ ᐃᐦᑖᐧᐃᓐᐦ᙮ ᐊᓐ ᒫᒃ ᐁ ᒌᑰᓇᑲᓅᐦᒡ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᒉᐧᑳᒡ ᐁ ᐋᐸᒋᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐧᐁᒥᔥᑎᑯᔒᐤ ᔒᐧᐋᑲᒥᐦᐧᑫᐤ ᓂᑐᐦᑯᔨᓐᐦ, ᐁᐅᒄ ᐆ ᐁ ᐧᐄᐦ ᒥᔦᐸᔨᐦᑖᑲᓅᐦᒡ ᐊᓂᑌ ᐄᔑ ᓃᔥᑖᒥᐦᒡ ᐊᓂᑌ ᒥᔅᑎᓯᓃᐦᒡ ᑲᔦ ᐁᑯᑦ ᐁ ᐅᐦᒋ ᐧᐄᒋᐦᑖᑲᓅᐦᒡ ᐊᓂᑌ ᓂᑐᐦᑯᔨᓐ ᐋᐸᑎᓰᐧᐃᓂᐦᒡ ᒉ ᒌ ᐄᔑ ᐱᒥᐸᔨᐦᑖᐧᑖᐤ᙮

ᐊᓂᔩ ᒥᓯᐧᐁ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᐅᐦᒋ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ, ᐁᐅᒄ ᔒᔥ ᒥᓯᐧᐁ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑦ ᐁ ᓅᑯᐦᑖᑲᓇᐧᐃᐦᒡ ᒉᐧᑳᓐ

ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᑭᔮ ᒑᐧᑳᒡ ᐱᒥᐱᔨᐤ ᐋ ᒥᓯᓂᐦᐆᓱᓈᓂᐧᐃᒡ᙮

ᐆ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᓂᓈᐦᑰ ᒑᐧᑳᓐ ᐊᔥᒋᐱᔨᐤ ᐆ ᐋ ᐄᔑ ᐱᒥᐱᔨᒡ᙮ ᐊᓂᒌ ᐄᔨᔨᐅᒡ ᑳ ᐧᐄᒋᐦᐋᒡ ᐊᐧᐋᔨᐤᐦ ᐋ ᐅᔥᒑᐱᔨᐦᐄᑯᔨᒡᐦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᔨᒡᐦ ᑭᔮ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᒫᒨ ᐋᐱᑎᓰᐅᒡ ᐊᓂᑖ ᐊᔅᒌᐦᒡ ᒑ ᒌ ᓂᔥᑑᓂᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᐋᐱᒋᐦᑖᒡ ᐄᔨᔨᐅᒡ ᐋ ᐧᐄᒋᐦᐄᓱᒡ᙮ ᐋᒄ ᒫᒃ ᑯᑎᑭᒡ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᒑᐧᑳᔨᐤ ᒋᐦᒋᐧᐋ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋᒄ ᒫᒃ ᒑ ᒌ ᒋᔅᒑᔨᐦᑎᐦᒡ ᑖᐧᐹ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡᐦ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᔨᒡ ᐋ ᐅᔥᒑᐱᔨᐦᐄᐧᐋᔨᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ ᑭᔮ ᒫᒃ ᐋᑳ ᒑ ᒌ ᐱᐦᒋᐳᓈᓂᐧᐃᒡ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐋᐅᒄ ᔒᔥ ᐋ ᐱᒥᐱᔨᐦᑖᑭᓂᐧᐃᒡ “ᐋ ᓃᔥᑖᒥᔥᑖᑭᓂᐧᐃᒡᐦ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐋᐱᑎᓰᐧᐃᓐ” ᑳ ᐃᔑᓂᐦᑳᑖᒡ, ᐋᐅᒄ ᐊᓐ ᐋ ᓈᓈᑭᒋᐦᐋᑭᓂᐧᐃᒡ ᐊᐧᐋᓂᒌ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᒡ ᑖᐱᔥᑯᓐ ᐋ ᐋᐱᒋᐦᑖᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᑭᔮ ᐧᐋᒥᔥᑎᑯᔒᐤ ᔒᐧᐋᑭᒥᐦᐧᑳᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐋᐅᒄ ᐆ ᐊᓅᐦᒌᐦᒡ ᑳ ᒋᐦᒋᐱᔨᐦᑖᑭᓂᐧᐃᒡ ᐊᓂᑖ ᒥᔅᑎᓯᓃᐦᒡ, ᐋᐅᒄ ᑭᔮ ᒑ ᐱᒥᐱᔨᐦᑖᑭᓂᐧᐃᒡ ᐊᓂᑖ ᑯᑎᒃᐦ ᐄᔨᔨᐤ ᐃᐦᑖᐧᐃᓐᐦ᙮ ᐊᓐ ᒫᒃ ᐋ ᒌᑰᓂᑭᓂᐧᐃᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᒑᐧᑳᒡ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡᐦ ᐧᐋᒥᔥᑎᑯᔒᐤ ᔒᐧᐋᑭᒥᐦᐧᑳᐤ ᓂᑐᐦᑯᔨᓐᐦ, ᐋᐅᒄ ᐆ ᐋ ᐧᐄᐦ ᒥᔦᐱᔨᐦᑖᑭᓂᐧᐃᒡ ᐊᓂᑖ ᐄᔑ ᓃᔥᑖᒥᐦᒡ ᐊᓂᑖ ᒥᔅᑎᓯᓃᐦᒡ ᑭᔮ ᐋᑯᑦ ᐋ ᐅᐦᒋ ᐧᐄᒋᐦᑖᑭᓂᐧᐃᒡ ᐊᓂᑖ ᓂᑐᐦᑯᔨᓐ ᐋᐱᑎᓰᐧᐃᓂᐦᒡ ᒑ ᒌ ᐄᔑ ᐱᒥᐱᔨᐦᑖᒡ᙮

ᐊᓂᐦᐄ ᒥᓯᐧᐋ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᐅᐦᒋ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ, ᐋᐅᒄ ᔒᔥ ᒥᓯᐧᐋ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑦ ᐋ ᓅᑯᐦᑖᑭᓂᐧᐃᒡ ᒑᐧᑳᓐ

the other scientists study them in the laboratories to understand if they hold promise as medicines for diabetes and if they are safe to use for this purpose. Now, a final component called the "Putting Cree Medicines First Project" is following Cree patients with diabetes who are using both traditional medicines and clinical medicines for their diabetes care. This project has recently begun in Mistissini and will later be offered to the other community partners. Introducing traditional medicines alongside clinical treatments has been a long-term goal of the Cree Nation of Mistissini and it is also part of the Cree Board of Health's Strategic Regional Plan.

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/. Please recognize that because of the complex approval process within the project, many of the documents are not yet available to everyone. For example, 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.

ᑯᓵᐱᐦᒋᑲᓀᔮᐲᐦᒡ, ᐁᑯᑌ ᐅᑌ ᒉ ᒌ ᐲᐦᑌᐸᔨᓈᓄᐧᐃᐦᒡ http://www.taam-emaad.umontreal.ca/᙮ ᐁᐅᒄ ᒫᒃ ᒉ ᒋᔅᒋᓰᐦᑖᑲᓄᐧᐃᐦᒡ ᓇᓈᐦᑰ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᒡ ᒉᐧᑳᓐ ᒉ ᒌ ᔖᐳᐦᑐᐧᐁᐸᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᐅᐦᒋ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓄᐧᐃᐦᒡ, ᒥᐦᑫᓐᐦ ᐁᔥᒄ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᒣᐧᑳᒡ ᐁ ᑲᓇᐧᐋᐱᐦᑖᑲᓅᐦᐧᑳᐤ ᐁᔅᒄ ᐁᑲ ᒉ ᒌ ᐧᐋᐱᐦᑕᐦᐧᑳᐤ ᒥᓯᐧᐁ ᐊᐧᐁᓂᒌ᙮ ᐁᐅᒄ ᐧᒣᐦᒡ ᐆ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ, ᓇᒧᐃ ᒧᔖ ᒋᑲ ᐧᐋᐱᐦᑏᐧᐋᓅ ᐁ ᒥᓯᓈᑌᒡ ᑲᔦ ᐊᓂᑦ ᑯᓵᐱᐦᒋᑲᓈᔮᐲᐦᒡ, ᐁᐅᒄ ᐁᒄ ᐊᓐ ᐁ ᐧᐄᓯᓈᑌᒡ ᐊᓐ ᐄᓅ ᓂᑐᐦᑯᔨᓐ ᒋᔅᑫᔨᐦᑕᒧᐧᐃᓐ ᑲᔦ ᐊᓐ ᒋᔅᑫᔨᐦᑕᒧᐧᐃᓐ ᐅᐦᒋ ᐊᓐ ᑳ ᐄᔑ ᒥᔅᑲᐧᐋᐦᑖᑲᓄᐧᐃᐦᒡ ᐯᐦᑳᒡ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓄᐧᐃᐦᒡ, ᐹᒋᔅᑳᓐ ᒥᒄ ᐁ ᓂᔅᑯᒧᐧᑖᐤ ᐊᓂᒌ ᑳ ᐧᐄᒋᐦᐋᐧᑖᐤ ᐊᐧᐁᔫᐦ ᐁ ᔔᐧᐋᑲᒥᐦᐧᑫᔨᒡᐦ ᑲᔦ ᐊᓂᒌ ᒋᔐᐄᓅᒡ ᑲᔦ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑕᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᑯᑦ ᒥᒄ ᒧᔖ ᒉ ᐧᐋᐱᐦᑏᐧᐋᓄᐧᐃᐦᒡ ᐆ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ᙮ ᐁᑯᑦ ᒫᒃ ᒉᒃ ᒧᔖ ᒉ ᓅᑯᐦᒡ ᐊᓂᑦ ᑯᓵᐱᐦᒋᑲᓀᔮᐲᐦᒡ᙮

ᐁᑎᑑ ᒫᒃ ᐧᐄᐦ ᓂᑑᒋᔅᑫᔨᐦᑕᒥᓀ ᒉᐧᑳᓐ ᐅᐦᒋ ᐆ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᑖᑲᓄᐧᐃᐦᒡ ᐋᐸᑎᓰᐧᐃᓐ, ᐁᐅᒄ ᒉ ᒌ ᐊᔨᒥᐦᐄᑦ **ᑎᓭᐃᓰ ᐧᐋᐃᓱᑦ** ᐊᓂᑌ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓄᐧᐃᐦᒡ ᒉᐧᑳᓐ ᒪᓯᓇᐦᐄᒉᐅᑲᒥᒄ ᐊᓂᑌ ᓂᑐᐦᑯᔨᓐ ᑲᔦ ᐧᐄᒋᐦᐄᐧᐁᐧᐃᓐ ᐁ ᓈᓈᑲᒋᐦᑖᑲᓄᐧᐃᐦᒡ, ᐧᒫᐅᑌ ᐁ ᐃᑎᓯᓈᓱᑦ **(418) 923-3355** ext. **273** ᓄᔅᑦ ᒫᒃ **twysote@ssss.gouv.qc.ca**᙮ ᐁᐅᒄ ᑲᔦ **ᒋᓪ** ᒉ ᒌ ᐊᔨᒥᐦᐄᑦ, ᐧᒫᐅᑌ ᐁ ᐃᑎᓯᓈᓱᑦ **(514) 953-8283** ᓄᔅᑦ ᒫᒃ **torrie.jill@ssss.gouv.qc.ca**᙮

ᒋᓪ ᐧᑖᕇ
ᑳ ᒪᓯᓇᐦᐄᒉᐸᔨᐦᑖᑦ ᐊᓂᑦ ᑳ ᒫᒨᐱᐧᑖᐤ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᑫᔨᐦᑕᐦᐧᑳᐤ ᒉᐧᑳᔫ
ᓂᑐᐦᑯᔨᓐ ᑲᔦ ᐧᐄᒋᐦᐄᐧᐁᐧᐃᓐ ᐁ ᓈᓈᑲᒋᐦᑖᑲᓄᐧᐃᐦᒡ

ᐱᔦᕐ ᐦᐋᑖᑦ
ᑳ ᐱᒥᐸᔨᐦᑖᑦ
ᒥᔪᐱᒫᑎᓰᐧᐃᓐ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓄᐧᐃᐦᒡ ᑳᓈᑖ ᐅᐦᒋ ᐊᓐ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐁ ᔔᐧᐋᑲᒥᐦᐧᑫᓄᐧᐃᐦᒡ

ᑯᓵᐱᐦᒋᑭᓈᔮᐲᐦᒡ, ᐋᑯᑖ ᐅᑖ ᒑ ᒌ ᐲᐦᑎᑖᐱᔨᓈᓂᐧᐃᒡ http://www.taam-emaad.umontreal.ca/᙮ ᐋᐅᒄ ᒫᒃ ᒑ ᒋᔅᒌᐦᑖᑭᓂᐧᐃᒡ ᓂᓈᐦᑰ ᐋ ᐄᔑ ᐱᒥᐱᔨᒡ ᒑᐧᑳᓐ ᒑ ᒌ ᔖᐳᐦᑐᐧᐋᐱᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᐊᓂᐦᐄ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᐅᐦᒋ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ, ᒥᐦᒑᓐᐦ ᐋᔥᒄ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᒫᐧᑳᒡ ᐋ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡ ᐋᐦᐧᒫᔫ ᒑ ᒌ ᐧᐋᐱᐦᑎᐦᒡ ᒥᓯᐧᐋ ᐊᐧᐋᓂᒌ᙮ ᐋᐅᒄ ᐱᑯᓂᒑ ᐆ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ, ᓂᒧᔨ ᒧᔖ ᒋᑭ ᐧᐋᐱᐦᑏᐧᐋᓂᐤ ᐋ ᒥᓯᓈᑖᒡ ᑭᔮ ᐊᓂᑦ ᑯᓵᐱᐦᒋᑭᓈᔮᐲᐦᒡ, ᐋᐅᒄ ᐋᒄ ᐊᓐ ᐋ ᐧᐄᓯᓈᑖᒡ ᐊᓐ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐ ᒋᔅᒑᔨᐦᑎᒧᐧᐃᓐ ᑭᔮ ᐊᓐ ᒋᔅᒑᔨᐦᑎᒧᐧᐃᓐ ᐅᐦᒋ ᐊᓐ ᑳ ᐄᔑ ᒥᔅᑭᐧᐋᐦᑖᑭᓂᐧᐃᒡ ᒥᒋᓐ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ, ᐹᑎᔅ ᒥᒄ ᐋ ᓂᔅᑯᒧᒡ ᐊᓂᒌ ᑳ ᐧᐄᒋᐦᐋᒡ ᐊᐧᐋᔨᐤᐦ ᐋ ᔔᐧᐋᑭᒥᐦᐧᑳᔨᒡᐦ ᑭᔮ ᐊᓂᒌ ᒋᔖᔨᔨᐅᒡ ᑭᔮ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᑯᑦ ᒥᒄ ᒧᔖ ᒑ ᐧᐋᐱᐦᑏᐧᐋᓂᐧᐃᒡ ᐆ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ᙮ ᐋᑯᑦ ᒫᒃ ᒑᒃ ᒧᔖ ᒑ ᓅᑯᐦᒡ ᐊᓂᑦ ᑯᓵᐱᐦᒋᑭᓈᔮᐲᐦᒡ᙮

ᐊᑎᑑ ᒫᒃ ᐧᐄᐦ ᓂᑑᒋᔅᒑᔨᐦᑎᒥᓈ ᒑᐧᑳᓐ ᐅᐦᒋ ᐆ ᐋ ᐄᔑ ᐱᒥᐱᔨᐦᑖᑭᓂᐧᐃᒡ ᐋᐱᑎᓰᐧᐃᓐ, ᐋᐅᒄ ᒑ ᒌ ᐊᔨᒥᐦᐄᑦ **ᑎᓭᐃᓰ ᐧᐋᐃᓱᑦ** ᐊᓂᑖ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᒑᐧᑳᓐ ᒥᓯᓂᐦᐄᒑᐅᑭᒥᒄ ᐊᓂᑖ ᓂᑐᐦᑯᔨᓐ ᑭᔮ ᐧᐄᒋᐦᐄᐧᐋᐧᐃᓐ ᐋ ᓈᓈᑭᒋᐦᑖᑭᓂᐧᐃᒡ, ᒫᐅᑖ ᐋ ᐃᑎᓯᓈᓱᑦ **(418) 923-3355** ext. **273** ᓈᔅᑦ ᒫᒃ **twysote@ssss.gouv.qc.ca**᙮ ᐋᐅᒄ ᑭᔮ **ᒋᓪ** ᒑ ᒌ ᐊᔨᒥᐦᐄᑦ, ᒫᐅᑖ ᐋ ᐃᑎᓯᓈᓱᑦ **(514) 953-8283** ᓈᔅᑦ ᒫᒃ **torrie.jill@ssss.gouv.qc.ca**᙮

ᒋᓪ ᐧᑖᕇ
ᑳ ᒥᓯᓂᐦᐄᒑᐱᔨᐦᑖᑦ ᐊᓂᑦ ᑳ ᒫᒨᐱᒡ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᒑᐧᑳᔨᐤ
ᓂᑐᐦᑯᔨᓐ ᑭᔮ ᐧᐄᒋᐦᐄᐧᐋᐧᐃᓐ ᐋ ᓈᓈᑭᒋᐦᑖᑭᓂᐧᐃᒡ

ᐱᔦᕐ ᐦᐋᑖᑦ
ᑳ ᐱᒥᐱᔨᐦᑖᑦ
ᒥᔪᐱᒫᑎᓰᐧᐃᓐ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᑳᓈᑖ ᐅᐦᒋ ᐊᓐ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐋ ᔔᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ

If you wish to know more about the project please contact: **Tracy Wysote** at the Research Office of the Cree Health Board at **(418) 923-3355** ext. **273** or at ***twysote@ssss.gouv.qc.ca***. You are also invited to contact **Jill** anytime at **(514) 953-8283** or at ***torrie.jill@ssss.gouv.qc.ca***.

Jill Torrie
Permanent Secretary of the Research Committee
Cree Board of Health and Social Services of James Bay

Pierre Haddad
Director
CIHR Team in Aboriginal Anti-diabetic Medicines

ᑎᐹᒋᒎᓯᓇᐦᐄᑲᓐᐦ ᐅᐦᒋ ᐊᓂᑌ ᐯᐦᑳᒡ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᐅᐦᒋᐸᔨᐦᐧᑳᐤᐦ ᐧᐄᐧᐄᒪᑲᓂᐲᓯᒻ – ᐧᒫᑯᐲᓯᒻ 2009

A. ᐦᐋᑖᑦ
B. ᐋᕐᓈᓴᓐ
C. ᐧᕚᐢᑕᕐ
D. ᐯᓂᑦ
E. ᑰᓀᔦᕐ
F. ᐧᒑᓐᐢ

ᑎᐹᒋᒎᓯᓂᐦᐄᑭᓐᐦ ᐅᐦᒋ ᐊᓂᑖᐦ ᒥᒋᓐ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᐅᐦᒋᐱᔨᒡᐦ ᒋᓵᔮᐢᑯᓂᐲᓯᒼ – ᐋᔑᐧᒫᑯᐲᓯᒻ 2009

A. ᐦᐋᑖᑦ
B. ᐋᕐᓈᓯᓐ
C. ᐧᕚᐢᑎᕐ
D. ᐯᓂᑦ
E. ᑰᓀᔦᕐ
F. ᐧᒑᓐᐢ

Reports from the laboratories for January – May 2009

A. Haddad
B. Arnason
C. Foster
D. Bennett
E. Cuerrier
F. Johns

A. ᑎᐹᒋᒨᔨᓇ"ᐄᑲᓐ ᐅ"ᒋ ᐊᓂᑌ "ᐋᑖᑦ ᐁ ᐅ"ᒋ ᓂᑑᒋᔅᑫᔨ"ᑖᑲᓅ"ᐧᑳᐤ" ᓂ"ᑖᐅᒋ"ᒋᑲᓐ"

(ᐧᐋᐧᐄᒪᑲᓂᐲᔨᒻ – ᐧᒫᑯᐲᔨᒻ 2009)

ᐁ ᒋᔅᑫᔨ"ᑖᑯ"ᑖᑲᓅ"ᒡ ᒦᓐ ᑖᓐ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨ"ᑖᑲᓅ"ᒡ ᐁ ᐃᔅᐸᔨ"ᐄᑯᐧᑖᐤ ᐋᐳᑯᔒᔑᒡ ᒦᑐᔅ" ᑲᔦ ᐧᐋᒋᓈᑲᓐ"

ᐁᔩᒄ ᐅᔩ ᑌᔅᐲᓈ "ᐋᕐᐱᓛᔅ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨ"ᑕ"ᒃ ᐊᓂᔩ ᑫ ᒌ ᐱᑯ"ᑖᑦ PhD ᐅᒪᔨᓇ"ᐄᑲᓐˣ

ᐁᔩᒄ ᑳ ᓂᑑᒋᔅᑫᔨ"ᑕ"ᒃ ᑌᔅᐲᓈ ᑖᓐ ᐁ ᐃᔅᐸᔨ"ᐄᑯᔨᒡ" ᐋᐳᑯᔒᔥ" ᐊᓂᔩ ᐁ ᒥᔮᑦ ᒦᑐᔅ" ᑲᔦ ᐧᐋᒋᓈᑲᓐ", ᐁᔩᒄ ᐊᓂᔩ

- ᐁᑳ ᑫ ᒌ ᑖ"ᒋᐳᔨᒡ", ᓅᔥᑦ ᒫᒃ
- ᑫ ᒌ ᐊᒎᐸᐃᔨᒡ" ᐊᓂᔩ ᔒᔥ ᐁ ᑖ"ᒋᐳᔨᒡ"

ᔒᔥ ᒌ ᒌᔥᑖᐤ ᐅᔩ ᓅᓯ ᑫᐧᑳᔩ" ᑳ ᓂᑑᒋᔅᑫᔨ"ᑕ"ᒃ ᑌᔅᐲᓈ ᑲᔦ ᑫᐧᑳᒡ ᒪᔨᓇ"ᐊᒻ ᑎᐹᒋᒨᔨᓇ"ᐄᑲᓐ" ᐊᓂᔩ ᑳ ᐄᔑ ᒥᔅᑯᐧᐋ"ᑖᑦˣ ᒦᓐ ᒫᒃ ᐹᑎᒫ ᐁᔩᒄ ᐅᔩ ᐊᔮᐸᒡ ᑫ ᐃ"ᑎᑦ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᒫᑦ ᐅᑑᔅᐲ" ᑲᔦ ᐊᓂᔩ ᐯᔭᑯᔨᒡ ᐁ ᐃᔑᓈᑯᓃᔨᒡ ᑫᐧᑳᔩ ᐁ ᓂᑐ"ᑯᔨᓅᔨᒡ ᐊᓂᑦ ᒦᑐᔅ, ᐁᔩᒄ ᐊᓂᔩ ᓵᓚᐧᑳᕐᑎᓐ salicortin ᑳ ᐃᔑᓂ"ᑳᑌᔨᒡ ᑫᐧᑳᔩ ᐁ ᓂᑐ"ᑯᔨᓅᔨᒡˣ

ᐁ ᒋᔅᑫᔨ"ᑖᑯ"ᑖᑲᓅ"ᒡ ᒦᓐ ᑖᓐ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨ"ᑖᑲᓅ"ᒡ ᐁ ᐃᔅᐸᔨ"ᐄᑯᐧᑖᐤ ᐋᐳᑯᔒᔑᒡ ᐧᐄᔅᒋᒥᓈᓐ"

ᐁᔩᒄ ᐅᔩ "ᐅᑖ ᐄᑦ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨ"ᑕ"ᒃ ᐊᓂᔩ ᑫ ᒌ ᐱᑯ"ᑖᑦ PhD ᐅᒪᔨᓇ"ᐄᑲᓐˣ

ᐊᓐ ᐅᑖ"ᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨ"ᑕᒫ"ᒡ, ᐁᔩᒄ ᑳ ᒦᔨᒋ"ᐧᑖᐤ ᐋᐳᑯᔒᔑᒡ ᐊᓂᒌ 2 ᑳ ᐃᑎᔨᓈᑌᔨᒡ ᐁ ᔒᐧᐋᑲᒥ"ᐧᑳᐧᑖᐤ ᐊᓂᔩ ᐧᐄᔅᒋᒥᓈᓐ", (ᐁᑯᑦ

A. ᑎᐹᒋᒨᔨᓂ"ᐄᑭᓐ ᐅ"ᒋ ᐊᓂᑖ "ᐋᑖᑦ ᐋ ᐅ"ᒋ ᓂᑑᒋᔅᒑᔨ"ᑖᑭᓂᐧᐃᒡ" ᓂ"ᑖᐅᒋ"ᒋᑭᓐ"

(ᒋᓵᔅᑯᓂᐲᔨᔾ – ᐋᔑᐧᒫᑯᐲᔨᒻ 2009)

ᐋ ᒋᔅᒐᔨ"ᑖᑯ"ᑖᑭᓂᐧᐃᒡ ᒦᓐ ᑖᓐ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨ"ᑖᑭᓂᐧᐃᒡ ᐋ ᐃᔅᐱᔨ"ᐄᑯᒡ ᐋᐱᑯᔒᔑᒡ ᒦᑐᔅ" ᑭᔮ ᐧᐋᒋᓈᑭᓐ"

ᐋᔨᐧᐃᒄ ᐅᔮ ᑖᔅᐲᓈ "ᐋᕐᐱᓛᔅ ᐋ ᐄᔑ ᓂᑑᒋᔅᒐᔨ"ᑎ"ᒃ ᐊᓂᔮ ᒐ ᒌ ᐱᑯ"ᑖᑦ PhD ᐅᒥᔨᓂ"ᐄᑭᓐˣ

ᐋᔨᐧᐃᒄ ᑳ ᓂᑑᒋᔅᒐᔨ"ᑎ"ᒃ ᑖᔅᐲᓈ ᑖᓐ ᐋ ᐃᔅᐱᔨ"ᐄᑯᔨᒡ" ᐋᐱᑯᔒᔥ" ᐊᓂᔮ ᐋ ᒥᔮᑦ ᒦᑐᔅ" ᑭᔮ ᐧᐋᒋᓈᑭᓐ", ᐋᔨᐧᐃᒄ ᐊᓂᔮ

- ᐋᑳ ᒐ ᒌ ᑖ"ᒋᐳᔨᒡ", ᑭᔮ ᒫᒃ
- ᒐ ᒌ ᐊᒋᐧᐃᐱᔨᔨᒡ" ᐊᓂᔮ ᔒᔥ ᐋ ᑖ"ᒋᐳᔨᒡ"

ᔒᔥ ᒌ ᒌᔥᑖᐤ ᐅᔮ ᓅᓯ ᒐᐧᑳᔨᐤ" ᑳ ᓂᑑᒋᔅᒐᔨ"ᑎ"ᒃ ᑖᔅᐲᓈ ᑭᔮ ᒫᐧᑳᒡ ᒥᔨᓂ"ᐊᔾ ᑎᐹᒋᒨᔨᓂ"ᐄᑭᓐ" ᐊᓂᔮ ᑳ ᐄᔑ ᒥᔅᑯᐧᐋ"ᑖᑦˣ ᒦᓐ ᒫᒃ ᐹᑎᒫ ᐋᔨᐧᐃᒄ ᐅᔮ ᐊᔮᐱᒡ ᒐ ᐃ"ᑎᒃ ᐋ ᐄᔑ ᓂᑑᒋᔅᒐᔨᒫᑦ ᐅᑑᔅᐲ" ᑭᔮ ᐊᓂᔮ ᐹᔨᑯᔨᒡ ᐋ ᐃᔑᓈᑯᔨᒡ ᒐᐧᑳᔨᐤ ᐋ ᓂᑐ"ᑯᔨᓂᐧᐃᔨᒡ ᐊᓂᑦ ᒦᑐᔅ, ᐋᔨᐧᐃᒄ ᐊᓂᔮ ᓵᓚᐧᑳᕐᑎᓐ salicortin ᑳ ᐃᔑᓂ"ᑳᑖᔨᒡ ᒐᐧᑳᔨᐤ ᐋ ᓂᑐ"ᑯᔨᓅᔨᒡˣ

ᐋ ᒋᔅᒐᔨ"ᑖᑯ"ᑖᑭᓂᐧᐃᒡ ᒦᓐ ᑖᓐ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨ"ᑖᑭᓂᐧᐃᒡ ᐋ ᐃᔅᐱᔨ"ᐄᑯᒡ ᐋᐱᑯᔒᔑᒡ ᐧᐄᔨᒋᒥᓐ"

ᐋᔨᐧᐃᒄ ᐅᔮ "ᐅᑖ ᐄᑦ ᐋ ᐄᔑ ᓂᑑᒋᔅᒐᔨ"ᑎ"ᒃ ᐊᓂᔮ ᒐ ᒌ ᐱᑯ"ᑖᑦ PhD ᐅᒥᔨᓂ"ᐄᑭᓐˣ

ᐊᓐ ᐅᑖ"ᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᒐᔨ"ᑎᒫ"ᒡ, ᐋᔨᐧᐃᒄ ᑳ ᒦᔨᒋ"ᒡ ᐋᐱᑯᔒᔑᒡ ᐊᓂᒌ 2 ᑳ ᐃᑎᔨᓈᑖᔨᒡ ᐋ ᔒᐧᐋᑭᒥ"ᐧᑳᒡ ᐊᓂᔮ ᐧᐄᔨᒋᒥᓐ", (ᐋᑯᑦ

A. Report from the Haddad lab

(January – May 2009)

Update on studies of balsam poplar and tamarack in mice

This is Despina Harbilas' PhD project.

Despina has been looking at whether balsam poplar and tamarack help mice to:

- keep from getting fat or
- lose weight when they are already fat

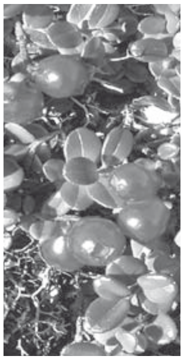
These two studies are now finished, and Despina is writing reports on them. Later this year, we plan to do similar studies with speckled alder and with one of the active ingredients we have found in balsam poplar, called "salicortin."

Update on study of lowbush cranberry in mice

This is Hoda Eid's PhD project.

In our earlier studies, we gave lowbush cranberries to mice with Type 2 diabetes (in their drinking water). This lowered the amount of sugar in their blood. We think this is because the cranberries send a signal to the mouse's brain telling it that it has had enough to eat and feels full. If this is the right explanation, we will be able to detect it in the mice's brains. We plan

ᐊᓂᑦ ᐅᓂᐲᒧᐚᐦᒡ ᑳ ᐃᐦᑎᑯᓂᔨᒡ)᙮ ᐁᔫᒄ ᒫᒃ ᐅᔫ ᑳ ᐐᒋᐦᐄᑯᐧᑖᐤ ᓃᐦᑖᐦᒡ ᐁ ᐃᔅᐸᔨᓂᔨᒡ ᓲᑳᔫ ᐊᓂᑌ ᐅᒥᐦᑯᐚᐦᒡ᙮ ᐁᐅᒄ ᒫᒃ ᐁ ᐃᑌᔨᐦᑕᒫᐦᒡ ᐁ ᐐᐦᑕᒫᒉᒪᑲᓂᔨᒡ ᒉᐧᑳᔫ ᐊᓂᑦ ᐅᑎᐦᐱᐚᐦᒡ ᐁ ᐐᐦᑕᒫᑯᐧᑖᐤ ᔖᔥ ᐁ ᒌᔥᐳᐧᑖᐤ ᑲᔦ ᐁᑳ ᔒᐌᐃᐧᑖᐤ᙮ ᐆ ᒫᒃ ᑖᐧᐯ ᐁ ᐃᔅᐸᔨᐦᒡ, ᐁᔫᒄ ᐅᔫ ᒉ ᒌ ᐚᐸᐦᑕᒧᒋᔅᑦ ᐊᓂᑦ ᐊᓂᔫ ᐋᐳᑯᔒᔑᐦᒡ ᐅᑎᐦᐱᐚᐦᒡ᙮ ᐁᐅᒄ ᒫᒃ ᒉ ᐃᑎᔕᐦᐋᒫᐦᒡ ᐊᓂᔫ ᐋᐳᑯᔒᔑᐦᒡ ᐅᑎᐦᐱᐚᐤᐦ ᐊᓂᑌ ᐯᓂᑦ ᓛᑉ, ᐁᔫᒄ ᐐᐚᐤ ᐅᔫ ᒉ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ᙮



ᐁ ᒋᔅᒉᔨᐦᑖᑯᐦᑖᑲᓅᐦᒡ ᒦᓐ ᑖᓐ ᑳ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᒡ ᑖᐧᐯ ᐁ ᐐᒋᐦᐄᐌᐸᔨᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᓇᑳᐦᐄᒉᐸᔨᐦᐧᑳᐤᐦ ᒉ ᒌ ᐲᐦᑌᐸᔨᐦᒡ ᓲᑳᐤ ᐊᓂᑌ ᒥᑕᐦᒋᔒᐦᒡ

ᐁᔫᒄ ᐅᔫ ᓕᑎᔮ ᓂᔅᐧᑖᕐ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᐊᓂᔫ ᒉ ᒌ ᐱᑯᐦᑖᑦ MSc ᐅᒪᓯᓇᐦᐄᑲᓐ᙮

ᐁᔫᒄ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᓕᑎᔮ ᐊᓂᔫ ᒥᓯᐌ 17 ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑖᐧᐯ ᒉ ᒌ ᐐᒋᐦᐄᐌᐸᔨᐦᐧᑳᐤᐦ ᐁ ᓇᑳᐦᐄᒉᐸᔨᐦᐧᑳᐤᐦ ᒉ ᒌ ᐲᐦᑌᐸᔨᐦᒡ ᓲᑳᐤ ᐊᓂᑌ ᒥᑕᐦᒋᔒᐦᒡ ᓃᔥᑦ ᒫᒃ ᒉ ᒌ ᐐᐐᐸᔨᐦᒡ ᓲᑳᐤ ᐊᓂᑌ ᒥᐦᑯᐦᒡ ᔖᔥ ᐁ ᐃᐦᑎᑯᐦᒡ᙮ ᐅᔫ ᒫᒃ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᓕᑎᔮ, ᐁᔫᒄ ᒥᒄ ᐊᓂᑌ ᐅᔮᑲᓂᔑᐦᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᑲᔦ ᐊᓂᔫᐦ ᐋᐳᑯᔒᔥᐦ ᐁ ᐋᐸᒋᐦᐋᑦ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ᙮ ᐆ ᒫᒃ ᔮᐸᒡ ᐃᔅᐸᔨᐦᒉ ᐊᓂᑌ ᐄᓅᒡ ᐁ ᐃᐦᑖᐧᑖᐤ, ᐁᔫᒄ ᒉ ᒌ ᐐᒋᐦᐄᑯᐧᑖᐤ ᐊᐌᓂᒌ ᓃᐦᑖᐦᒡ ᒉ ᒌ ᐃᐦᑎᑯᓂᔨᒡ ᓲᑳᔫ ᐊᓂᑌ ᐅᒥᐦᑯᐚᐦᒡ᙮ ᒉᐧᑲᒡ ᒫᒃ ᒪᓯᓇᐦᐊᒧᒡ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ ᑎᐹᒋᒨᓯᓂᐦᐄᑲᓂᔫ ᐊᓂᔫ ᑳ ᐄᔑ ᒥᔅᑯᐚᐦᑖᐧᑖᐤ᙮

ᐁ ᒋᔅᒉᔨᐦᑖᑯᐦᑖᑲᓅᐦᒡ ᐁ ᐅᔥᑳᒡ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐧᑫᔅᒋᐸᐃᔨᑖᑲᓅᒡ ᐁᔨᔅᐸᐃᒡ ᐊᓐ ᑳ ᒦᓅᐚᑲᒥᐦᐄᒉᐸᐃᔨᒡ ᒦᓐ ᒉ ᒌ ᐋᐸᑎᓰᒪᑲᐦᒡ

ᐁᔫᒄ ᐅᔫ ᐋᕐᕕᓐᑦ ᐋᕝᔖᕐ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᐊᓂᔫ ᒉ ᒌ ᐱᑯᐦᑖᑦ MSc ᐅᒪᓯᓇᐦᐄᑲᓐᐦ᙮

to send the brains from these mice to the people in the Bennett lab, who will check for this.

UPDATE ON THE STUDY OF WHETHER THE PLANTS KEEP CELLS IN THE INTESTINE FROM ABSORBING SUGAR

This is Lidia Nistor's MSc project.

Lidia has been testing all 17 plants to see if they affect how intestines absorb sugar and move it out to the blood. So far, Lidia has been doing tests in lab dishes and in live rats. If the plants have the same effects on humans, it could help people keep their blood sugars down. The team is now writing a report about the results.

ᐊᓂᑦ ᐅᓂᐲᒧᐚᐦᒡ ᑳ ᐃᐦᑎᑯᓂᔨᒡ)᙮ ᐋᔪᐎᒄ ᒫᒃ ᐅᔮ ᑳ ᐐᒋᐦᐄᑯᒡ ᓃᐦᑖᐦᒡ ᐋ ᐃᔅᐱᔨᔨᒡ ᓲᑳᔨᐤ ᐊᓂᑖ ᐅᒥᐦᑯᐚᐦᒡ᙮ ᐋᐅᒄ ᒫᒃ ᐋ ᐃᑖᔨᐦᑎᒫᐦᒡ ᐋ ᐐᐦᑎᒫᒑᒥᑭᓂᔨᒡ ᒑᐧᑳᔨᐤ ᐊᓂᑦ ᐅᑎᐦᐱᐚᐦᒡ ᐋ ᐐᐦᑎᒫᑯᒡ ᔖᔥ ᐋ ᒌᔥᐳᒡ ᑭᔮ ᐋᑳ ᔒᐅᑖᒡ᙮ ᐆ ᒫᒃ ᑖᐧᐹ ᐋ ᐃᔅᐱᔨᒡ, ᐋᔪᐎᒄ ᐅᔮ ᒑ ᒌ ᐚᐱᐦᑎᒧᒋᐦᑦ ᐊᓂᑦ ᐊᓂᔮ ᐋᐱᑯᔒᔑᐦᒡ ᐅᑎᐦᐱᐚᐦᒡ᙮ ᐋᐅᒄ ᒫᒃ ᒑ ᐃᑎᔑᐦᐋᒫᐦᒡ ᐊᓂᔮ ᐋᐱᑯᔒᔑᐦᒡ ᐅᑎᐦᐱᐚᐤᐦ ᐊᓂᑖ ᐯᓂᑦ ᓛᑉ, ᐋᔪᐎᒄ ᐐᐚᐤ ᐅᔮ ᒑ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ᙮

ᐋ ᒋᔅᒑᔨᐦᑖᑯᐦᑖᑭᓂᐎᒡ ᒦᓐ ᑖᓐ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐎᒡ ᑖᐧᐹ ᐋ ᐐᒋᐦᐄᐚᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᓂᑳᐦᐄᒑᐱᔨᒡᐤᐦ ᒑ ᒌ ᐲᐦᑎᑖᐱᔨᒡ ᓲᑳᐤ ᐊᓂᑖ ᒥᑎᐦᒋᔒᐦᒡ

ᐋᔪᐎᒄ ᐅᔮ ᓕᑎᔮ ᓂᔅᐧᑖᕐ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐊᓂᔮ ᒑ ᒌ ᐱᑯᐦᑖᑦ MSc ᐅᒥᓯᓂᐦᐄᑭᓐ᙮

ᐋᔪᐎᒄ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᓕᑎᔮ ᐊᓂᔮ ᒥᓯᐚ 17 ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑖᐧᐹ ᒑ ᒌ ᐐᒋᐦᐄᐚᐱᔨᒡᐦ ᐋ ᓂᑳᐦᐄᒑᐱᔨᒡᐦ ᒑ ᒌ ᐲᐦᑎᑖᐱᔨᒡ ᓲᑳᐤ ᐊᓂᑖ ᒥᑎᐦᒋᔒᐦᒡ ᑭᔮ ᒫᒃ ᒑ ᒌ ᐐᐐᐱᔨᒡ ᓲᑳᐤ ᐊᓂᑖ ᒥᐦᑯᐦᒡ ᔖᔥ ᐋ ᐃᐦᑎᑯᐦᒡ᙮ ᐅᔮ ᒫᒃ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᓕᑎᔮ, ᐋᔪᐎᒄ ᒥᒄ ᐊᓂᑖ ᐅᔮᑭᓂᔑᐦᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᑭᔮ ᐊᓂᔮᐦ ᐋᐱᑯᔒᔥᐦ ᐋ ᐋᐱᒋᐦᐋᑦ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ᙮ ᐆ ᒫᒃ ᐊᔮᐱᒡ ᐃᔅᐱᔨᒑ ᐊᓂᑖ ᐄᔨᔨᐅᒡ ᐋ ᐃᐦᑖᒡ, ᐋᔪᐎᒄ ᒑ ᒌ ᐐᒋᐦᐄᑯᒡ ᐊᐚᓂᒌ ᓃᐦᑖᐦᒡ ᒑ ᒌ ᐃᐦᑎᑯᓂᔨᒡ ᓲᑳᔨᐤ ᐊᓂᑖ ᐅᒥᐦᑯᐚᐦᒡ᙮ ᒫᐧᑲᒡ ᒫᒃ ᒥᓯᓂᐦᐊᒧᒡ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᔨᐤ ᐊᓂᔮ ᑳ ᐄᔑ ᒥᔅᑯᐚᐦᑖᒡ᙮

ᐋ ᒋᔅᒑᔨᐦᑖᑯᐦᑖᑭᓂᐎᒡ ᐋ ᐅᔥᑳᒡ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐎᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑖᐧᐹ ᒑ ᒌ ᒋᐚᐱᔨᒡ ᐊᓂᔮ ᒑ ᒌ ᐋᐱᑎᓰᒥᑭᓂᔨᒡ ᑳ ᒦᓅᐚᑭᒥᐦᐄᒑᐱᔨᔨᒡ

ᐋᔪᐎᒄ ᐅᔮ ᐋᕐᕕᓐᑦ ᐋᕝᔖᕐ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐊᓂᔮ ᒑ ᒌ ᐱᑯᐦᑖᑦ MSc ᐅᒥᓯᓂᐦᐄᑭᓐᐦ᙮

UPDATE ON A NEW WAY TO TEST WHETHER THE PLANTS CAN UNDO INSULIN RESISTANCE

This is Arvind Afshar's MSc project.

When people have diabetes, their cells resist insulin. We'd like to be able to produce cells that resist insulin in the lab, so we can test whether the plants can undo insulin resistance. Arvind Afshar has now found a way to make liver cells resist insulin by adding a specific kind of fat to them. Now we can start testing the 17 plants to see if they can help prevent this insulin resistance.

ᐊᓂᔫ ᐊᐧᐁᓂᒌ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ, ᐁᑯᑦ ᓇᒧᐃ ᒥᔪᐸᔨᓂᔫ ᐊᓂᔫ ᑳ ᒦᓄᐧᐋᑲᒥᐦᐄᒉᐸᔨᓂᔨᒡ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐁᐅᒄ ᒫᒃ ᐊᓐ ᐁ ᐧᐄᐦ ᐅᔑᐦᑖᔮᐦᒡ ᐧᒣᐦᒡ ᐁ ᐃᔑᓈᑯᐦᒡ ᒉᐧᑳᓐ ᐲᐦᒋᔫ ᐊᓐ ᐁᑳ ᒥᔪᐸᔨᐦᒡ ᒉ ᒌ ᐋᐸᑎᓰᒪᑲᐦᒡ ᑳ ᒦᓄᐧᐋᑲᒪᐦᐄᒉᐸᔨᐦᒡ, ᐁᒄ ᒫᒃ ᒉ ᒌ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᐅᔮᑲᓂᔑᐦᒡ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᐊᓐ ᒦᓐ ᒉ ᒌ ᒥᔪᐸᔨᐦᒡ ᐁ ᐋᐸᑎᓰᒪᑲᐦᒡ ᑳ ᒦᓄᐧᐋᑲᒥᐦᐄᒉᐸᔨᐦᒡ᙮ ᐁᔫᒄ ᔖᔥ ᑳ ᒥᔅᑲᐦᒃ ᐋᕐᕆᓐᑦ ᐋᓫᔖᕐ ᑖᓂᑌ ᒉ ᒌ ᐅᐦᒋ ᐅᔑᐦᑖᑲᓅᔨᒡ ᐧᒣᐦᒡ ᐊᓐ ᐅᔅᑯᓐ ᐊᐧᐁᓐ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᔨᒡ ᐅᔮᑲᓂᔑᐦᒡ ᐅᐦᒋ ᐊᓂᔫ ᐯᔭᑯᔨᒡ ᐁ ᐃᔑᓈᑯᓂᔨᒡ ᐱᒦᔫ ᐁ ᒌᑰᐸᔨᐦᑖᑦ᙮ ᐁᐅᒄ ᒫᒃ ᔖᔥ ᒉ ᒌ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᐊᓂᔫ 17 ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐧᐋᐸᐦᑕᒫᐦᒡ ᒉ ᒌ ᒦᓄᐸᔨᐦᑖᑲᓅᐦᒡ ᐊᓐ ᒦᓐ ᒉ ᒌ ᐋᐸᑎᓰᒪᑲᐦᒡ ᑳ ᒦᓄᐧᐋᑲᒥᐦᐄᒉᐸᔨᐦᒡ᙮

ᐁ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᒡ ᑖᐧᐯ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᒥᔅᑯᓂᐦᒡ ᐁᒄ ᒫᒃ ᒉ ᒌ ᒥᔪᐸᔨᐦᒡ ᒉ ᒌ ᐋᐸᑎᓰᒪᑲᐦᒡ ᔔᑳᐤ ᐊᓂᑌ ᐲᐦᒋᔫ

ᐁᔫᒄ ᐅᔫ ᐋᐱᕐ ᓈᔖᕐ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᐊᓂᔫ ᒉ ᒌ ᐱᑯᐦᑖᑦ MSc ᐅᒪᓯᓇᐦᐄᑲᓐ᙮

ᒉᐧᑳᒡ ᐋᐸᑎᓰᐦᑲᐦᑕᒻ ᐋᐱᕐ ᐊᓂᔫ 17 ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᑖᓐ ᐁ ᐄᔑ ᐊᑖᐦᑲᐦᐄᒉᐸᔨᓂᔨᐦᐧᑳᐤᐦ ᐊᓐᑦ ᒥᔅᑯᓂᐦᒡ ᐅᐦᒋ ᐊᓐᑦ ᐁᐅᒡ ᐅᔑᐦᐆᒪᑲᐦᒡ ᔔᑳᐤ ᒉ ᒌ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐁᔫᒄ ᐊᓂᔫ ᓃᔓ ᒉᐧᑳᔫᐦ ᑳ ᐧᐋᐧᐋᐸᐦᑕᐦᒃ ᐋᐱᕐ ᐊᓂᔫ ᐁ ᐃᔅᐸᔨᓂᔨᒡ ᐊᓂᑌ ᒥᔅᑯᓂᐦᒡ:

1) ᐊᓂᑌ ᐲᐦᒋᔫ, ᐃᐦᑎᑯᓐ ᐊᓐ ᐯᔭᒄ ᒉᐧᑳᓐ ᐁ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐁᓐᔮᐃᒻ ᑳ ᐃᔑᓂᐦᑳᑌᒡ, ᐁᐅᒄ ᐊᓐ ᑲᓘᐧᑳᐅᔅ-6-ᐧᕚᔅᕚᑌᐃᔅ glucose-6-phosphatase ᐁ ᐃᔑᓂᐦᑳᑌᒡ, ᐁᐅᒄ ᐆ ᐁ ᐧᐄᐦᑕᒫᒉᒪᑲᐦᒡ ᒉ ᒌ ᐧᐄᐧᐄᐸᔨᐦᒡ ᔔᑳᐤ ᐊᓂᑌ ᐁ ᐃᐦᑎᑯᐦᒡ ᒥᔅᑯᓂᐦᒡ ᒉ ᒌ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐊᓐ ᒫᒃ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐁ ᓂᑳᐦᐄᒉᐸᔨᐦᒡ ᐆ ᐁ ᐄᔑ ᐧᐄᐦᑕᒫᒉᒪᑲᐦᒡ ᐊᓂᑌ ᒥᔅᑯᓂᐦᒡ, ᐁᐅᒄ ᓃᐦᑖᐦᒡ ᒉ ᐃᔅᐸᔨᓂᔨᒡ ᐊᐧᐁᓐ ᔔᑳᔫ ᐊᓂᑌ ᐅᒥᐦᑯᐦᒡ᙮

STUDY ON WHETHER THE PLANTS AFFECT HOW OUR LIVER HANDLES SUGAR

This is Abir Nachar's MSc project.

Abir is screening the 17 plants to see whether they affect how the liver produces sugar. She has been looking at two processes that go on in the liver:

1) In our bodies, an enzyme called glucose-6-phosphatase instructs the liver to release sugar. If a plant blocks these instructions, the blood sugar levels will stay lower.

ᐊᓂᔮ ᐊᐧᐊᓂᒌ ᐊ ᔒᐧᐋᑭᒥᐦᐧᑳᒡ, ᐊᑯᑦ ᓂᒧᔮᐤ ᒥᔪᐱᔮᔮᐤ ᐊᓂᔮ ᑳ ᒦᓄᐧᐋᑭᒥᐦᐄᒐᐱᔮᔮᒡ ᐊᓂᑖ ᐲᐦᒋᔮᐤ᙮ ᐊᐅᒄ ᒫᒃ ᐊᓐ ᐊ ᐧᐄᐦ ᐅᔑᐦᑖᔮᐦᒡ ᐧᒫᐦᒡ ᐊ ᐃᔑᓈᑯᐦᒡ ᒑᐧᑳᓐ ᐲᐦᒋᔮᐤ ᐊᓐ ᐊᑳ ᒥᔪᐱᔮᔮᒡ ᒑ ᒌ ᐋᐱᑎᓰᒥᑭᐦᒡ ᑳ ᒦᓄᐧᐋᑭᒥᐦᐄᒐᐱᔮᔮᒡ, ᐊᒄ ᒫᒃ ᒑ ᒌ ᓂᑑᒋᔅᒑᔮᐦᑎᒫᐦᒡ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᐅᔮᑭᓂᔑᐦᒡ ᐊ ᐄᔑ ᓂᑑᒋᔅᒑᔮᐦᑎᒫᐦᒡ ᐊᓐ ᒦᓐ ᒑ ᒌ ᒥᔪᐱᔮᔮᒡ ᐊ ᐋᐱᑎᓰᒥᑭᐦᒡ ᑳ ᒦᓄᐧᐋᑭᒥᐦᐄᒐᐱᔮᔮᒡ᙮ ᐊᔮᐧᐃᒄ ᔖᔥ ᑳ ᒥᔅᑭᐦᒃ ᐋᕐᕆᓐᑦ ᐋᓫᔖᕐ ᑖᓂᑖ ᒑ ᒌ ᐅᐦᒋ ᐅᔑᐦᑖᑭᓂᐧᐃᔮᒡ ᒧᔮᒡ ᐊᓐ ᐅᔅᑯᓐ ᐊᐧᐊᓐ ᐊ ᐄᔑ ᓂᑑᒋᔅᒑᔮᐦᑖᑭᓂᐧᐃᔮᒡ ᐅᔮᑭᓂᔑᐦᒡ ᐅᐦᒋ ᐊᓂᔮ ᐹᔮᑯᔮᒡ ᐊ ᐃᔑᓈᑯᓂᔮᒡ ᐱᒦᔮᐤ ᐊ ᒌᑰᐱᔮᐦᑖᑦ᙮ ᐊᐅᒄ ᒫᒃ ᔖᔥ ᒑ ᒌ ᓂᑑᒋᔅᒑᔮᐦᑎᒫᐦᒡ ᐊᓂᐦᐄ 17 ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐧᐋᐱᐦᑎᒫᐦᒡ ᒑ ᒌ ᒦᓄᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡ ᐊᓐ ᒦᓐ ᒑ ᒌ ᐋᐱᑎᓰᒥᑭᐦᒡ ᑳ ᒦᓄᐧᐋᑭᒥᐦᐄᒐᐱᔮᔮᒡ᙮

ᐊ ᓂᑑᒋᔅᒑᔮᐦᑖᑭᓂᐧᐃᒡ ᑖᐧᐸ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔮᔮᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᒥᔅᑯᓂᐦᒡ ᐊᒄ ᒫᒃ ᒑ ᒌ ᒥᔪᐱᔮᔮᒡ ᒑ ᒌ ᐋᐱᑎᓰᒥᑭᐦᒡ ᔔᑳᐤ ᐊᓂᑖ ᐲᐦᒋᔮᐤ

ᐊᔮᐧᐃᒄ ᐅᔮ ᐋᐱᕐ ᓈᔖᕐ ᐊ ᐄᔑ ᓂᑑᒋᔅᒑᔮᐦᑎᐦᒃ ᐊᓂᔮ ᒑ ᒌ ᐱᑯᐦᑖᑦ MSc ᐅᒥᓯᓂᐦᐄᑭᓐ᙮

ᒉᐧᑳᒡ ᐋᐱᑎᓰᔅᑎᒻ ᐋᐱᕐ ᐊᓂᔮᐦ 17 ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊ ᓂᑑᒋᔅᒑᔮᐦᑎᐦᒃ ᑖᓐ ᐊ ᐄᔑ ᑖᐦᑭᐦᐄᒐᐱᔮᔮᐦᒡ ᐊᓂᑖ ᒥᔅᑯᓂᐦᒡ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᐅᔑᐦᐆᒥᑭᐦᒡ ᔔᑳᐤ ᒑ ᒌ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐊᓂᑖ ᐲᐦᒋᔮᐤ᙮ ᐊᔮᐧᐃᒄ ᐊᓂᔮ ᓃᔓ ᒉᐧᑳᔮᐤᐦ ᑳ ᐧᐋᐧᐋᐱᐦᑎᐦᒃ ᐋᐱᕐ ᐊᓂᔮ ᐊ ᐃᔅᐱᔮᔮᒡ ᐊᓂᑖ ᒥᔅᑯᓂᐦᒡ:

1) ᐊᓂᑖ ᐲᐦᒋᔮᐤ, ᐃᐦᑎᑯᓐ ᐊᓐ ᐹᔮᒄ ᒉᐧᑳᓐ ᐊ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐁᓐᔮᐃᒻ ᑳ ᐃᔑᓂᐦᑳᑖᒡ, ᐊᐅᒄ ᐊᓐ ᑭᓘᐧᑳᐅᔅ-6-ᐧᕚᔅᕚᑌᐃᔅ glucose-6-phosphatase ᐊ ᐃᔑᓂᐦᑳᑖᒡ, ᐊᐅᒄ ᐆ ᐊ ᐧᐄᐦᑎᒫᒋᒥᑭᐦᒡ ᒑ ᒌ ᐧᐄᐧᐄᐱᔮᔮᒡ ᔔᑳᐤ ᐊᓂᑖ ᐊ ᐃᐦᑎᑯᐦᒡ ᒥᔅᑯᓂᐦᒡ ᒑ ᒌ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐊᓂᑖ ᐲᐦᒋᔮᐤ᙮ ᐊᓐ ᒫᒃ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐊ ᓂᑳᐦᐄᒐᐱᔮᔮᒡ ᐆ ᐊ ᐄᔑ ᐧᐄᐦᑎᒫᒋᒥᑭᐦᒡ ᐊᓂᑖ ᒥᔅᑯᓂᐦᒡ, ᐊᐅᒄ ᓃᐦᑖᐦᒡ ᒑ ᐃᔅᐱᔮᔮᒡ ᐊᐧᐊᓐ ᔔᑳᔮᐤ ᐊᓂᑖ ᐅᒥᐦᑯᐦᒡ᙮

2) Another enzyme helps us to store sugar in our livers instead of putting it into the blood. In this case, we hope the plant will increase this effect, so sugar gets stored instead of being sent into the blood.

Abir is doing lab tests on all the plants to see if they affect either of these two processes. So far, it looks like some of the plants do both these things—just as insulin does. This could help people with diabetes to keep their blood sugars lower. Over the coming months, Abir will test the rest of the plants this way.

2) ᐊᓐ ᒦᓐ ᑯᑕᒃ ᐁᓐᓛᐃᒻ, ᐁᐅᒄ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᒉ ᒌ ᑳᓇᐧᐁᔨᐦᑖᑯᐦᒡ ᔔᑳᐤ ᐊᓂᑌ ᒋᔅᑯᓅᐦᒡ, ᐁᒄ ᒫᒃ ᐁᑳ ᒉ ᐃᐦᑎᑯᐦᒡ ᔔᑳᐤ ᐊᓂᑌ ᒋᒥᐦᑯᓅᐦᒡ᙮ ᐆ ᒫᒃ ᐁ ᐃᔅᐸᔨᐦᒡ, ᐁᐅᒄ ᐁ ᐸᑯᓭᔨᐦᑕᒫᐦᒡ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐆ ᒉ ᒌ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ, ᐁᒄ ᒫᒃ ᒉ ᒌ ᑳᓇᐧᐁᔨᐦᑖᑯᐦᒡ ᔔᑳᐤ ᐊᓂᑌ ᒥᔅᑯᓂᐦᒡ, ᐁᑳ ᒉ ᐃᔅᐸᔨᐦᒡ ᐊᓂᑌ ᒥᐦᑯᐦᒡ᙮

ᐁᔫᒄ ᐊᓂᔫ ᒥᓯᐧᐁ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᐋᐱᕽ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᔫ ᓃᔓᔨᒡ ᒉ ᒌ ᐃᔅᐸᔨᓂᔨᐦᒁᐤᐦ᙮ ᔖᔥ ᒫᒃ ᒋᔅᒉᔨᐦᑖᑯᓐ ᐸᔅᒡ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐆ ᑖᐱᔥᑯᓐ ᐁ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒁᐤᐦ—ᐧᒣᐦᒡ ᐊᓐ ᑳ ᒦᓇᐧᐋᑲᒥᐦᐄᒉᐸᔨᐦᒡ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ᙮ ᐁᔫᒄ ᒫᒃ ᒉ ᒌ ᐧᐄᒋᐦᐄᑯᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ ᓃᐦᑖᐦᒡ ᒉ ᒌ ᐃᔅᐸᔨᓂᔨᐦ ᔔᑳᔫ ᐊᓂᑌ ᐅᒥᐦᑯᐧᐋᐦᒡ᙮ ᐅᑌ ᒫᒃ ᒪᐦᒉᑐ ᐱᓯᒻᐦ ᐄᔑ ᓃᔥᑖᒥᐦᒡ, ᐁᔫᒄ ᒦᓐ ᒉ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᐋᐱᕽ ᐊᓂᔫᐦ ᑯᑕᒃᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᔫ ᒉ ᒌ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᓂᔨᐦᒁᐤᐦ᙮

ᐁ ᐧᐋᐧᐋᐸᐦᑖᑲᓈᐦᒡ ᑳᒋᒉᐳᒄ ᑲᔦ ᐧᐄᔕᒋᐳᑯᔥ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᒡ ᐊᓐ ᐁ ᑲᓇᐧᐁᔨᐦᑖᑯᐦᒡ ᐱᒦ ᐊᓂᑌ ᐲᐦᒋᔫ

ᐁᔫᒄ ᐅᔫ ᒣᕆᔨᒻ ᐅᒡᕘᓐ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᐊᓂᔫ ᒉ ᒌ ᐸᑯᐦᑖᐨ MSc ᐅᒪᓯᓇᐦᐄᑲᓐᐦ᙮

ᓂᓅᐦᑰ ᒉᐧᑳᓐ ᑖᐦᑲᐦᐄᒉᐸᔫ ᐊᓂᐨ ᒋᐱᒦᒥᓈ ᐊᓐ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᒉ ᒌ ᑳᓇᐧᐁᔨᐦᑖᑯᐦᒡ ᐱᒦ ᓀᔥᐨ ᒫᒃ ᐁᑎᑑ ᐊᐱᔒᔥ ᒉ ᒌ ᑳᓇᐧᐁᔨᐦᑖᑯᐦᒡ ᐱᒦ᙮ ᐁᐅᒄ ᒫᒃ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᒣᕆᔨᒻ, ᐁᔫᒄ ᐁ ᐧᐄᐦ ᒋᔅᒉᔨᐦᑕᐦᒃ ᒉᐅᒄ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓈᓐᐦ ᐁ ᐃᐦᑎᑯᓂᔨᐦᒁᐤᐦ ᐊᓂᐨ ᑳᒋᒉᐳᑯᐦᒡ ᑲᔦ ᐧᐄᔕᒋᐳᑯᔑᐦᒡ ᐊᓂᔫ ᒉ ᒌ ᐃᔑ ᐊᑖᐦᑲᐦᐄᒉᐸᔨᓂᔨᒡ ᐁ ᐃᔥᐱᔑ ᑳᓇᐧᐁᔨᐦᑖᑯᓂᔨᒡ ᐱᒦᔫ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᔖᔥ ᒫᒃ ᒋᔅᒉᔨᐦᑕᒻ ᐸᔅᒡ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓈᓐᐦ ᐁ ᐃᐦᑎᑯᓂᔨᐦᒁᐤᐦ ᐊᓂᐨ ᑳᒋᒉᐳᑯᐦᒡ᙮ ᐁᔫᒄ ᑲᔦ ᒉ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᐧᐄᔕᒋᐳᑯᔑᔫ᙮ ᒣᐧᑳᓃᐱᓂᐲᓯᒻ ᐃᔅᐸᔨᐦᒉ, ᒋᑳ ᒋᐦᒋᐸᔨᐦᑖᐤ ᐊᓂᔫ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᐅᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑖᓐ ᐁ ᐃᔅᐸᔨᓂᔨᒡ ᐁ ᐄᔑ ᑳᓇᐧᐁᔨᐦᑖᑯᓂᔨᒡ ᐱᒦᔫ ᐊᓂᑌ ᐲᐦᒋᔫ ᐊᓂᔫᐦ ᐋᐳᑯᔒᔥᐦ ᐁ ᐋᐸᒋᐦᐊᐨ᙮

Looking at how Labrador tea and marsh Labrador tea affect fat storage

This is Meriem Ouchfoun's MSc project

Many different things trigger our fat cells to store more or less fat. In this study, Meriem has been trying to find out which ingredients in Labrador tea and marsh Labrador tea affect the way our fat cells store fat. She has identified some of the active ingredients in Labrador tea. Next she will try to do the same thing for marsh Labrador tea. Starting in July, she will go beyond lab tests to look at whether the plants affect fat storage in live mice.

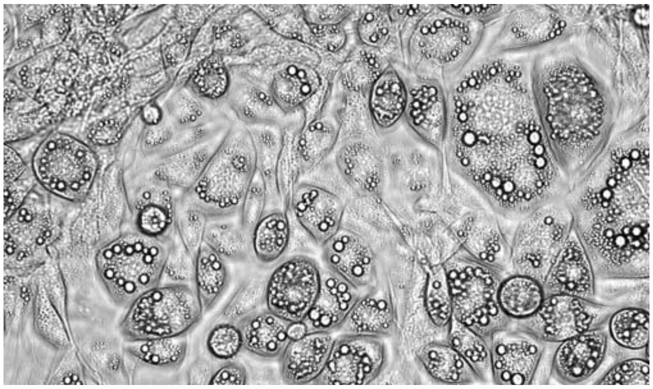
2) ᐊᓐ ᒦᓐ ᑯᑎᒃ ᐁᓐᓛᐃᒻ, ᐋᐅᒄ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᒑ ᒌ ᑭᓇᐧᐋᔨᐦᑖᑯᐦᒡ ᔔᑳᐤ ᐊᓂᑖ ᒋᔅᑯᓂᓅᐦᒡ, ᐋᒄ ᒫᒃ ᐋᑳ ᒑ ᐃᐦᑎᑯᐦᒡ ᔔᑳᐤ ᐊᓂᑖ ᒋᒥᐦᑯᓅᐦᒡ᙮ ᐆ ᒫᒃ ᐋ ᐃᔅᐱᔨᒡ, ᐋᐅᒄ ᐋ ᐱᑯᓰᔨᐦᑎᒫᒡ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐆ ᒑ ᒌ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ, ᐋᒄ ᒫᒃ ᒑ ᒌ ᑭᓇᐧᐋᔨᐦᑖᑯᐦᒡ ᔔᑳᐤ ᐊᓂᑖ ᒥᔅᑯᓂᐦᒡ, ᐋᑳ ᒑ ᐃᔅᐱᔨᒡ ᐊᓂᑖ ᒥᐦᑯᐦᒡ᙮

ᐋᔫᐧᐃᒄ ᐊᓂᔮ ᒥᓯᐧᐋ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐋᐱᕽ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᔮ ᓃᔓᔨᒡ ᒑ ᒌ ᐃᔅᐱᔨᓂᔨᒡᐦ᙮ ᔖᔥ ᒫᒃ ᒋᔅᒑᔨᐦᑖᑯᓐ ᐱᔅᒡ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐆ ᑖᐱᔥᑯᓐ ᐋ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ—ᒧᔫᒻ ᐊᓐ ᒑ ᒦᓇᐧᐋᑭᒥᐦᐄᒑᐱᔨᒡ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ᙮ ᐋᔫᐧᐃᒄ ᒫᒃ ᒑ ᒌ ᐧᐄᒋᐦᐄᑯᒡ ᐊᐧᐋᓂᒌ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᒡ ᓃᐦᑖᐦᒡ ᒑ ᒌ ᐃᔅᐱᔨᔨᒡ ᔔᑳᔮᐤ ᐊᓂᑖ ᐅᒥᐦᑯᐧᐋᐦᒡ᙮ ᐅᑖ ᒫᒃ ᑎᐦᑐ ᐱᓯᒼᐦ ᐄᔑ ᓃᔥᑖᒥᐦᒡ, ᐋᔫᐧᐃᒄ ᒦᓐ ᒑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐋᐱᕽ ᐊᓂᐦᐄ ᑯᑎᒃᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᔮ ᒑ ᒌ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᔨᒡᐦ᙮

ᐋ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡ ᑳᒋᒑᐱᒄ ᑭᔮ ᐧᐄᔑᒋᐱᑯᔥ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐊᓐ ᐋ ᑭᓇᐧᐋᔨᐦᑖᑯᐦᒡ ᐱᒦ ᐊᓂᑖ ᐲᐦᒋᔮᐤ

ᐋᔫᐧᐃᒄ ᐅᔮ ᒣᕆᔨᒻ ᐅᒡᕘᓐ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐊᓂᔮ ᒑ ᒌ ᐱᑯᐦᑖᐨ MSc ᐅᒥᓯᓂᐦᐄᑭᓐᐦ᙮

ᓂᓅᐦᑰ ᒑᐧᑳᓐ ᑖᐦᑭᐦᐄᒑᐱᔨᐤ ᐊᓂᐨ ᒋᐱᒦᒥᓂᐤ ᐊᓐ ᐊᑎᑑ ᒥᔥᑏ ᒑ ᒌ ᑭᓇᐧᐋᔨᐦᑖᑯᐦᒡ ᐱᒦ ᑭᔮ ᒫᒃ ᐊᑎᑑ ᐊᐱᔒᔥ ᒑ ᒌ ᑭᓇᐧᐋᔨᐦᑖᑯᐦᒡ ᐱᒦ᙮ ᐅᔮ ᒫᒃ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᒣᕆᔨᒻ, ᐋᔫᐧᐃᒄ ᐋ ᐧᐄᐦ ᒋᔅᒑᔨᐦᑎᐦᒃ ᒑᒄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓈᓐᐦ ᐋ ᐃᐦᑎᑯᓂᔨᒡᐦ ᐊᓂᐨ ᑳᒋᒑᐱᑯᐦᒡ ᑭᔮ ᐧᐄᔑᒋᐱᑯᔑᐦᒡ ᐊᓂᔮ ᒑ ᒌ ᑖᐦᑭᐦᐄᒑᐱᔨᔨᒡ ᐋ ᐃᔥᐱᔑ ᑭᓇᐧᐋᔨᐦᑖᑯᓂᔨᒡ ᐱᒦᔮᐤ ᐊᓂᑖ ᐲᐦᒋᔮᐤ᙮ ᔖᔥ ᒫᒃ ᒋᔅᒑᔨᐦᑎᒼ ᐱᔅᒡ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓈᓐᐦ ᐋ ᐃᐦᑎᑯᓂᔨᒡᐦ ᐊᓂᐨ ᑳᒋᒑᐱᑯᐦᒡ᙮ ᐋᔫᐧᐃᒄ ᐧᑳᔥᒡ ᐊᔮᐱᒡ ᒑ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐧᐄᔑᒋᐱᑯᔑᔮᐤ᙮ ᐱᔥᑯᐲᓯᒼ ᐃᔅᐱᔨᐦᒑ, ᒋᑭ ᒋᐦᒋᐱᔨᐦᑖᐤ ᐊᓂᔮ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐅᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑖᓐ ᐋ ᐃᔅᐱᔨᔨᒡ ᐋ ᐄᔑ ᑭᓇᐧᐋᔨᐦᑖᑯᓂᔨᒡ ᐱᒦᔮᐤ ᐊᓂᑖ ᐲᐦᒋᔮᐤ ᐊᓂᔮᐦ ᐋᐱᑯᔒᔥᐦ ᐋ ᐋᐱᒋᐦᐋᐨ᙮



ᐱᒦ ᐧᐄᓈ | ᐱᒦ ᐧᐃᔮᔮᐤ *Fat cells*

ᐁ ᐋᔨᒧᑌᒡ ᐊᓂᔫ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᓵᔥ ᑳ ᐅᑎᓐᑲᓄᐦᐧᑳᐤ

ᐸᔅᒡ ᐊᓂᔫᐦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᒌ ᓇᔅᑯᒧᓈᓅ ᒉ ᒌ ᒪᓯᓇᐦᐄᑲᓅᐦᐧᑳᐤᐦ ᐊᓂᑌ ᒥᓯᐦᑌᔅᑲᒥᐦᒡ ᑳ ᒪᓯᓇᐦᐄᑲᓅᐦᐧᑳᐤᐦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᐦᒡ, ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑕᐦᐧᑳᐤ ᑫᐧᑳᔫᐦ ᐅᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᐧᐋᐤᐦ᙮

1) “ᐁ ᑲᓄᐧᐋᐸᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐸᔅᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐁ ᓂᑲᐦᐄᒉᐸᔨᒡ ᑖᓐ ᐁᔨᔅᐸᐃᐦᐄᐧᐁᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᐦᒡ ᐊᓂᑌ ᒌᐧᐁᑎᓂᐦᒡ ᑳᓈᑖ ᐁ ᐅᐦᒋᐸᔨᐦᐧᑳᐤᐦ: ᒪᓯᓇᐦᐄᑲᓐ II᙮” ᐁᐅᒄ ᐆ ᒉ ᒪᓯᓇᐦᐄᑲᓅᐦᒡ ᐧᐋᐱᑯᓂᐲᓯᒻ 2009 ᐃᔅᐸᔨᐦᒉ ᐊᓂᑌ ᑳᓈᑖ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᐁ ᓈᓈᑲᒋᐦᑖᑲᓅᐦᒡ ᒥᔦᐱᒫᑎᓰᐧᐃᓐ ᑲᔦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐁᔫᒄ ᐅᔫ ᑳ ᒪᓯᓇᐦᐊᐦᐧᑳᐤ ᑌᔅᐲᓈ ᐦᐋᕐᐱᓛᔅ, ᓗᐧᐄ ᒫᕐᑏᓅ, ᐧᑳᓖ ᐦᐋᓕᔅ, ᑖᓂᔦᓪ ᐋᑌᔨᐧᐊᓛ-ᔅᐴᕐ, ᐋᒫᕐ ᓵᓛᒻ, ᐧᒑᓐ ᓛᒻᐯᕐ, ᑌᐃᓈ ᑫᐃᕝᔅ, ᑎᒧᑏ ᐧᒑᓐᔅ, ᒫᕐᒃ ᐸᓗᓐᑦᑮ, ᐋᓗᐃᓐ ᑯᓕᔦᕐ, ᐧᒑᓐ ᐋᕐᓈᓯᓐ, ᔅᑌᕙᓃ ᐯᓂᑦ, ᑲᔦ ᐱᔦᕐ ᐦᐋᑖᑦ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᑳ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ, ᐁᐅᒄ ᐊᓐ “ᐁ ᐧᐋᐧᐋᐸᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᑦ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᐦᒡ: ᒪᓯᓇᐦᐄᑲᓐ ᓃᔓ᙮”

2) “ᐁ ᒫᔑᐦᒉᐸᔨᐦᒡ ᐅᑑᔅᐲ ᑲᔦ ᒦᑐᔅ ᐅᐦᒋ ᐊᓐ ᐁ ᑖᐦᒋᐳᓈᓅᐦᒡ ᐅᐦᒋ ᐊᓂᔫ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓈᓅᐦᐧᑳᐤᐦ, ᐅᓕᐧᑳᓂᓐ ᑲᔦ ᔅᓛᐧᑳᕐᑎᓐ ᑳ ᐃᔑᓂᐦᑳᑌᐦᐧᑳᐤᐦ᙮” ᐁᐅᒄ ᒫᒃ ᐆ ᑳ ᐅᑎᓐᑲᓄᒡ ᐃᔅᑯᑎᒃ ᑳ ᑯᔨᔅᑯᓯᓇᐦᐄᑲᓅᐦᒡ ᑲᔦ ᐁᑯᑦ ᒉ ᒪᓯᓈᑌᒡ ᐊᓂᑦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓐᐦ ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮ ᐁᔫᒄ ᐅᔫ ᑳ ᒪᓯᓇᐦᐊᐦᐧᑳᐤ ᓗᐧᐄ ᒫᕐᑏᓅ, ᐋᓯᒻ ᒧᐦᐋᒫᑦ, ᐋᒫᕐ ᓵᓛᒻ, ᒉᓯᑳ ᐁᕐᕓᐃ, ᐧᑳᓖ ᐦᐋᓕᔅ, ᑲᔦ ᐱᔦᕐ ᐦᐋᑖᑦ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐁ ᒫᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ, ᐁᐅᒄ ᐊᓐ “ᐁ ᒫᔑᐦᒉᐸᔨᐦᒡ ᐁ ᑖᐦᒋᐳᓈᓅᐦᒡ ᐅᑑᔅᐲ ᑲᔦ ᒦᑐᔅ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

ᐋ ᐋᔨᒧᑖᒡ ᐊᓂᐦᐄ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᑳ ᓵᐳᐦᑐᐧᐋᐱᔨᐦᑖᑭᓂᐧᐃᒡᐦ

ᐱᔥᒡ ᐊᓂᐦᐄ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᒌ ᓂᔅᑯᒧᓈᓂᐤ ᒑ ᒌ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡᐦ ᐊᓂᑖ ᒥᓯᐦᑖᔅᑭᒥᐦᒡ ᑳ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡᐦ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᐦᒡ, ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᒑᐧᑳᔨᐤᐦ ᐅᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᐧᐋᐤᐦ᙮

1) “ᐋ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡᐦ ᐱᔥᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐋ ᐅᓈᒋᐱᔨᓈᓂᐧᐃᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ ᐊᓂᑖ ᒌᐧᐋᑎᓂᐦᒡ ᑳᓈᑖ ᐋ ᐅᐦᒋᐱᔨᐦᐧᑳᐤᐦ: ᒥᓯᓂᐦᐄᑭᓐ II᙮” ᐋᐅᒄ ᐆ ᒑ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡ ᒧᓵᐧᐋᐦᔮᐅᐲᓯᒻ 2009 ᐃᔅᐱᔨᒑ ᐊᓂᑖ ᑳᓈᑖ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᐋ ᓈᓈᑭᒋᐦᑖᑭᓂᐧᐃᒡ ᒥᔦᐱᒫᑎᓰᐧᐃᓐ ᑭᔮ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐋᔫᐧᐃᒄ ᐅᔮ ᑳ ᒥᓯᓂᐦᐊᐦᒡ ᑌᔅᐲᓈ ᐦᐋᕐᐱᓛᔅ, ᓗᐧᐄ ᒫᕐᑏᓅ, ᐧᑳᓖ ᐦᐋᓕᔅ, ᑖᓂᔦᓪ ᐋᑌᔨᐧᐊᓛ-ᔅᐴᕐ, ᐋᒫᕐ ᓵᓛᒻ, ᐧᒑᓐ ᓛᒻᐯᕐ, ᑌᐃᓈ ᑫᐃᕝᔅ, ᑎᒧᑏ ᐧᒑᓐᔅ, ᒫᕐᒃ ᐱᓗᓐᑦᑮ, ᐋᓗᐃ ᑯᓕᔦᕐ, ᐧᒑᓐ ᐋᕐᓈᓯᓐ, ᔅᑌᕕᓃ ᐹᓂᑦ, ᑭᔮ ᐱᔦᕐ ᐦᐋᑖᑦ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᑳ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ, ᐋᐅᒄ ᐊᓐ “ᐋ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡᐦ ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒐᐱᔨᒡᐦ ᐊᓂᑦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ: ᒥᓯᓂᐦᐄᑭᓐ ᓃᔓ᙮”

2) “ᐋ ᒫᔑᐦᒐᐱᔨᒡ ᐅᑑᔅᐲ ᑭᔮ ᒦᑐᔅ ᐅᐦᒋ ᐊᓐ ᐋ ᑖᐦᒋᐳᓈᓂᐧᐃᒡ ᐅᐦᒋ ᐊᓂᔮ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᒡᐦ, ᐅᓕᐧᑳᓂᓐ ᑭᔮ ᔅᓛᐧᑳᕐᑎᓐ ᑳ ᐃᔑᓂᐦᑳᑖᒡᐦ᙮” ᐋᐅᒄ ᒫᒃ ᐆ ᑳ ᓵᐳᐦᑐᐧᐋᐱᔨᐦᑖᑭᓂᐧᐃᒡ ᒥᔖ ᑳ ᑯᔨᔅᑯᓯᓂᐦᐄᑭᓂᐧᐃᒡ ᑭᔮ ᐋᑯᑦ ᒑ ᒥᓯᓈᑖᒡ ᐊᓂᑦ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓐᐦ ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮ ᐋᔫᐧᐃᒄ ᐅᔮ ᑳ ᒥᓯᓂᐦᐊᐦᒡ ᓗᐧᐄ ᒫᕐᑏᓅ, ᐋᓯᒻ ᒧᐦᐋᒫᑦ, ᐋᒫᕐ ᓵᓛᒻ, ᒉᓯᑳ ᐁᕐᕓᐃ, ᐧᑳᓖ ᐦᐋᓕᔅ, ᑭᔮ ᐱᔦᕐ ᐦᐋᑖᑦ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐋ ᒫᓯᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ, ᐋᐅᒄ ᐊᓐ “ᐋ ᒫᔑᐦᒐᐱᔨᒡ ᐋ ᑖᐦᒋᐳᓈᓂᐧᐃᒡ ᐅᑑᔅᐲ ᑭᔮ ᒦᑐᔅ” ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮

UPDATE ON ACCEPTED MANUSCRIPTS

Several reports have now been accepted for publication by scientific journals.

1) “Evaluation of the anti-diabetic potential of selected medicinal plant extracts from the Canadian Boreal Forest used to treat symptoms of diabetes: part II.” This will be printed in the June 2009 issue of the *Canadian Journal of Physiology and Pharmacology*. It was written by Despina Harbilas, Louis Martineau, Cory Harris, Danielle Adeyiwola-Spoor, Ammar Saleem, Jean Lambert, Dayna Caves, Timothy Johns, Marc Prentki, Alain Cuerrier, John Arnason, Steffany Bennett, and Pierre Haddad. The plain-language summary of this report is called “A look at how Iiyiyiu medicinal plants affect diabetes: part two.”

2) “Anti-adipogenic activities of *Alnus incana* and *Populus balsamifera* bark extract and their respective active principles, oregonin and salicortin.” This was accepted with corrections, and will appear in *Planta Medica*. It was written by Louis Martineau, Asim Muhammad, Ammar Saleem, Jessica Hervé, Cory Harris, John Arnason, and Pierre Haddad. The plain-language version is called “Fat-fighting potential of speckled alder and balsam poplar.”

ᐁ ᐋᔨᒧᑌᐦᑿᐤᐦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᑳ ᐃᑎᓴᐦᐄᑲᓅᐦᑿᐤᐦ ᐊᓂᑌ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᐦᒡ

ᐸᔅᒡ ᐊᓂᔫ ᑯᑕᒃᐦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᑳ ᒪᓯᓇᐦᐄᑲᓅᐦᑿᐤᐦ ᒌ ᐃᑎᓴᐦᐄᑲᓅᐦ ᐊᓂᑌ ᓇᓈᐦᑰ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᒉ ᒌ ᒪᓯᓇᐦᐄᑲᓅᐦᑿᐤᐦ, ᐁᔅᒄ ᒫᒃ ᒣᑿᒡ ᓂᑖᓯᓄᐗᑖᓈᓐ ᑖᐻ ᒉ ᓂᔅᑯᒧᓈᓅᐦᒡ ᐊᓂᔫ ᐁ ᐃᑎᓯᓈᑌᐦᑿᐤᐦ᙮ ᒷᐅᐦᐄ ᒫᒃ ᐊᓂᔫᐦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ:

1) “ᐁ ᐐᒋᐦᐄᐌᐸᔨᐦᑿᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᒌᐌᑎᓂᐦᒡ ᑳᓈᑖ ᐁ ᐅᐦᒋᐸᔨᐦᑿᐤᐦ ᒉ ᒌ ᐲᐦᑌᐸᔨᐦᒡ ᔒᑳᐤ ᐊᓂᑌ ᐎᔮᓂᐦᒡ, ᒬᐦᒡ ᐊᓐ ᒣᑦᐧᕙᕐᒥᓐ ᓂᑐᐦᑯᔨᓐ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ᙮” ᐁᔫᒄ ᐅᔫ ᑳ ᒪᓯᓇᐦᐊᐦᑿᐤ ᓗᐑ ᒫᕐᑏᓅ, ᑖᓂᔦᓪ ᐋᑌᔨᐗᓛ-ᔅᐴᕐ, ᑖᔮᓐ ᕙᓛᕐᓐ, ᐋᕐᕕᓐᑦ ᐋᕝᔖᕐ, ᒘᓐ ᐋᕐᓈᓯᓐ, ᑲᔦ ᐱᔦᕐ ᐦᐋᑖᑦ᙮ ᐁᑯᑌ ᐊᓂᑌ ᑳ ᐃᑎᓴᐦᐄᑲᓅᐦᒡ ᐆ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐊᓂᑌ ᒣᑖᐙᓚᓯᒻ Metabolism ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑲᓐ, ᐁᐅᒄ ᐊᓐ “ᑖᓐ ᐁ ᐄᔑ ᐐᒋᐦᐄᐌᐸᔨᐦᑿᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᓂᑐᐦᑯᔨᓈᐦᑿᐤᐦ ᐊᓂᔫ ᓃᐦᑖᐦᒡ ᒉ ᒌ ᐃᔅᐸᔨᐦᒡ ᔒᑳᐤ ᒥᐦᑯᐦᒡ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

2) “ᐁ ᐐᒋᐦᐄᐌᐸᔨᐦᑿᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓐᐦ ᒉ ᒌ ᐲᐦᑌᐸᔨᐦᒡ ᔒᑳᐤ ᐊᓂᑌ ᐎᔮᓂᐦᒡ, ᐅᐦᒋ ᐊᓂᔫ ᑯᕐᔅᑎᓐ quercetin ᑲᔦ ᑯᕐᔅᑎᓐ ᑲᓛᐃᑯᓵᐃᑦᔅ quercetin glycosides ᑳ ᐃᔑᓂᐦᑳᑌᐦᑿᐤᐦ, ᐁᐅᒄ ᐊᓂᔫ ᐐᔅᒋᒥᓈᓂᐦᒡ ᑳ ᐅᐦᒋᐸᔨᐦᒡ᙮” ᐁᔫᒄ ᐅᔫ ᑳ ᒪᓯᓇᐦᐊᐦᑿᐤ ᐦᐅᑖ ᐄᑦ, ᓗᐑ ᒫᕐᑏᓅ, ᐋᒫᕐ ᓵᓛᒻ, ᒧᐦᐋᒫᑦ ᐊᓯᒻ, ᑖᔮᓐ ᕙᓛᕐᓐ, ᐋᓛ ᐯᓐᐦᐋᑑ-ᐋᓐᑖᓘᓰ, ᓚᑎᔮ ᓂᔅᑛᕐ, ᐋᕐᕕᓐᑦ ᐋᕝᔖᕐ, ᒘᓐ ᐋᕐᓈᓯᓐ, ᑲᔦ ᐱᔦᕐ ᐦᐋᑖᑦ᙮ ᐁᑯᑌ ᐊᓂᑌ ᑳ ᐃᑎᓴᐦᐄᑲᓅᐦᒡ ᐆ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐊᓂᑌ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᒡ ᒦᒋᒻ ᑲᔦ ᐁ ᐄᔑ ᒥᔪᔥᑳᒉᒡ ᒦᒋᒻ *Molecular Nutrition & Food Research* ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐁ ᒪᓯᓇᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ, ᐁᐅᒄ ᐊᓂᔫ “ᑖᓐ ᐁ ᐄᔑ ᐐᒋᐦᐄᐌᐸᔨᐦᒡ ᐐᔅᒋᒥᓈᓐ ᓃᐦᑖᐦᒡ ᒉ ᒌ ᐃᔅᐸᔨᐦᒡ ᔒᑳᐤ ᒥᐦᑯᐦᒡ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

ᐋ ᐋᔨᒧᑖᒡᐦ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᑳ ᐃᑎᔑᐦᐄᑭᓂᐏᒡᐦ ᐊᓂᑖ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᐦᒡ

ᐱᔥᒡ ᐊᓂᐦᐄ ᑯᑎᒃᐦ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᑳ ᒥᓯᓂᐦᐄᑭᓂᐏᒡᐦ ᒌ ᐃᑎᔑᐦᐄᑭᓂᐤᐦ ᐊᓂᑖ ᓂᓈᐦᑰ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᒐ ᒌ ᒥᓯᓂᐦᐄᑭᓂᐏᒡᐦ, ᐋᔥᒄ ᒫᒃ ᒫᑿᒡ ᓂᔑᓂᐗᐦᑖᓈᓐ ᑖᐚ ᒐ ᓂᔅᑯᒧᓈᓂᐏᒡ ᐊᓂᐦᐄ ᐋ ᐃᑎᓯᓈᑖᒡᐦ᙮ ᒫᐅᐦᐄ ᒫᒃ ᐊᓂᐦᐄ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ:

1) “ᐋ ᐐᒋᐦᐄᐚᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᒌᐗᑎᓂᐦᒡ ᑳᓈᑖ ᐋ ᐅᐦᒋᐱᔨᒡᐦ ᒐ ᒌ ᐲᐦᑎᑖᐱᔨᒡ ᔒᑳᐤ ᐊᓂᑖ ᓵᐲᐅᑖᓂᐦᒡ, ᒨᔮᒻ ᐊᓐ ᒣᑦᐧᕙᕐᒥᓐ ᓂᑐᐦᑯᔨᓐ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ᙮” ᐋᔪᐏᒄ ᐅᔮ ᑳ ᒥᓯᓂᐦᐊᐦᒡ ᓗᐑ ᒫᕐᑏᓅ, ᑖᓂᔦᓪ ᐋᑌᔨᐗᓛ-ᔅᐴᕐ, ᑖᔮᓐ ᕙᓛᕐᓐ, ᐋᕐᕕᓐᑦ ᐋᕝᔖᕐ, ᒘᓐ ᐋᕐᓈᓯᓐ, ᑭᔮ ᐱᔦᕐ ᐦᐋᑖᑦ᙮ ᐋᑯᑖ ᐊᓂᑖ ᑳ ᐃᑎᔑᐦᐄᑭᓂᐏᒡ ᐆ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᒣᑖᐙᓚᓯᒻ Metabolism ᑳ ᐃᔑᓂᐦᑲᑖᒡ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ, ᐋᐅᒄ ᐊᓐ “ᑖᓐ ᐋ ᐄᔑ ᐐᒋᐦᐄᐚᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐏᒡᐦ ᐊᓂᔮ ᓃᐦᑖᐦᒡ ᒐ ᒌ ᐃᔅᐱᔨᒡ ᔒᑳᐤ ᒥᐦᑯᐦᒡ” ᑳ ᐃᔑᓂᐦᑲᑖᒡ᙮

2) “ᐋ ᐐᒋᐦᐄᐚᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓐᐦ ᒐ ᒌ ᐲᐦᑎᑖᐱᔨᒡ ᔒᑳᐤ ᐊᓂᑖ ᓵᐲᐅᑖᓂᐦᒡ, ᐅᐦᒋ ᐊᓂᐦᐄ ᑯᕐᔅᑎᓐ quercetin ᑭᔮ ᑯᕐᔅᑎᓐ ᑭᓛᐃᑯᓵᐃᑦᔅ quercetin glycosides ᑳ ᐃᔑᓂᐦᑲᑖᒡᐦ, ᐋᐅᒄ ᐊᓐ ᐐᓯᒋᒥᓂᐦᒡ ᑳ ᐅᐦᒋᐱᔨᒡ᙮” ᐋᔪᐏᒄ ᐅᔮ ᑳ ᒥᓯᓂᐦᐊᐦᒡ ᐦᐅᑖ ᐄᑦ, ᓗᐑ ᒫᕐᑏᓅ, ᐋᒫᕐ ᓵᓛᒻ, ᒧᐦᐋᒫᑦ ᐊᓯᒻ, ᑖᔮᓐ ᕙᓛᕐᓐ, ᐋᓛ ᐯᓐᐦᐋᑑ-ᐋᓐᑖᓘᓰ, ᓚᑎᔮ ᓂᔅᑛᕐ, ᐋᕐᕕᓐᑦ ᐋᕝᔖᕐ, ᒘᓐ ᐋᕐᓈᓯᓐ, ᑭᔮ ᐱᔦᕐ ᐦᐋᑖᑦ᙮ ᐋᑯᑖ ᐊᓂᑖ ᑳ ᐃᑎᔑᐦᐄᑭᓂᐏᒡ ᐆ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᐋ ᓂᑑᒋᔅᒋᔨᐦᑖᑭᓂᐏᒡ ᒦᒋᒻ ᑭᔮ ᐋ ᐄᔑ ᒥᔪᔥᑳᒑᒡ ᒦᒋᒻ *Molecular Nutrition & Food Research* ᑳ ᐃᔑᓂᐦᑲᑖᒡ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐋ ᒥᓯᓂᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ, ᐋᐅᒄ ᐊᓂᔮ “ᑖᓐ ᐋ ᐄᔑ ᐐᒋᐦᐄᐚᐱᔨᒡ ᐐᓯᒋᒥᓐ ᓃᐦᑖᐦᒡ ᒐ ᒌ ᐃᔅᐱᔨᒡ ᔒᑳᐤ ᒥᐦᑯᐦᒡ” ᑳ ᐃᔑᓂᐦᑲᑖᒡ᙮

UPDATE ON SUBMITTED MANUSCRIPTS

Several other reports have been sent to scientific journals, but we are still waiting to hear if the editors will accept them. The articles are:

1) “Enhancement of muscle cell glucose uptake by medicinal plant species of the Canadian boreal forest is mediated by a common, Metformin-like mechanism.” This was written by Louis Martineau, Danielle Adeyiwola-Spoor, Diane Vallerand, Arvind Afshar, John Arnason, and Pierre Haddad. It has been sent to the journal Metabolism. The plain-language summary of this article is called “How the healing plants work to lower blood sugar levels.”

2) “Stimulation of AMPK and glucose uptake in muscle cells by quercetin and quercetin glycosides, active principles of the medicinal plant Vaccinium vitis-idaea.” This was written by Hoda Eid, Louis Martineau, Ammar Saleem, Muhammad Asim, Diane Vallerand, Ali Benhaddou-Andaloussi, Lidia NistorBaldea, Arvind Afshar, John Arnason, and Pierre Haddad. It has been sent to the journal Molecular Nutrition & Food Research. The plain-language summary is called “How lowbush cranberry works to lower blood sugar levels.”

3) “ᐊᐧᐁᓰᓯᒡ ᐁ ᔑᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ ᐁ ᓂᑑᒋᔅᑫᔨᒫᑲᓅᐧᑖᐤ ᐁ ᐄᔑ ᐧᐄᒋᐦᐄᑯᐧᑖᐤ ᒫᔅᑯᒥᓈᓈᐦᑎᑯᔫ, ᐊᓂᔫ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ ᐁ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐄᓅᒡ ᐊᓂᑌ ᒉᐃᒥᔅ ᐯᐃ ᐊᔅᒌᐦᒡ ᐁ ᐧᐄᒋᐦᐄᓱᑦ ᐁ ᔑᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ᙮” ᐁᔫᑯ ᐅᔫ ᑳ ᒪᓯᓇᐦᐊᐦᐧᑳᐤ ᔫᔅ ᕓᔮᓈ, ᐋᓐᑐᐧᐋᓐ ᐸᐧᕓᐤ, ᓗᐧᐃ ᒫᕐᑏᓅ, ᒍᒐ ᑰᑐᕐ, ᐧᒑᓐ ᐋᕐᓈᓱᓐ, ᑲᔦ ᐱᔦᕐ ᐦᐋᑖᑦ᙮ ᐆ ᒫᒃ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ, ᐁᑯᑌ ᐊᓂᑌ ᑳ ᐃᑎᔕᐦᐄᑲᓅᐦᒡ ᐊᓂᑌ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᐦᒡ ᐋᐦᒌᐤᐦ ᐁ ᐃᔑᓈᑯᐦᒡ ᓂᑐᐦᑯᔨᓐᐦ *Evidence Based Complementary and Alternative Medicine* ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ, ᐁᐅᑯ ᐊᓐ “ᑖᓐ ᐁ ᐃᔅᐸᔨᐦᐄᑯᐧᑖᐤ ᐊᐧᐁᓰᓯᒡ ᐁ ᔑᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ ᐊᓂᔫ ᒫᔅᑯᒥᓈᓈᐦᑎᑯᔫ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

ᐁ ᐅᔅᒋᔩᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐁ ᐋᐸᑎᓰᐧᑖᐤ ᐊᓂᑌ ᐦᐋᑖᑦ ᓈᑉ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ

ᐧᒫᑯᐲᓯᒻ 4 ᑳ ᐃᔅᐸᔨᐦᒡ, ᐁᑯᑦ ᑳ ᒋᐦᒋᐸᔨᐦᑖᑦ ᐧᐋᑳᔅ ᓵᓛᒻ ᐁ ᐋᐸᑎᓰᑦ ᐅᑌ, ᐁᐅᑯ ᐧᐄᔨ ᒋᔅᑯᑕᒧᐧᐋᑲᓐ ᐁ ᐋᐸᑎᓯᑦ ᒉᐧᑳᒡ ᐁ ᓃᐱᓂᔨᒡ᙮ ᐁᔫᑯ ᐧᐄᔨ ᒉ ᐋᐸᑎᓰᐦᑲᐦᑕᐦᒃ ᐊᓂᔫ ᒦᑐᔅᐦ ᑲᔦ ᐊᓂᔫ ᐯᔮᑯ ᒉᐧᑳᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᒡ ᐊᓂᑦ ᒦᑐᓯᐦᒡ (ᓵᓕᐧᑳᕐᑎᓐ ᑳ ᐃᔑᓂᐦᑳᑌᔨᒡ) ᑖᐧᐯ ᒉ ᒌ ᑖᐦᑲᐦᐄᒉᐸᔨᓂᔨᒡ ᐊᓂᑦ ᐱᒦᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ ᐁᑯ ᒫᒃ ᒉ ᒌ ᒥᔦᐸᔨᓂᔨᒡ ᐁ ᐋᐸᑎᓰᒪᑲᓂᔨᒡ ᑳ ᒦᓅᐧᐋᐸᒥᐦᐄᒉᐸᔨᓂᔨᒡ᙮

ᑳᕐᓈᐃᓐ ᐧᐁᓗᑦ ᒋᑳ ᒋᐦᒋᐸᐃᔨᐦᑖᐅᒡ ᐁ ᐋᐱᑎᓯᐧᑖᐤ ᐁ ᐋᐱᐦᑑᑯᒋᓂᔨᒡᐦ ᐧᐋᐱᑯᓂᐲᓯᒻᐦ ᑲᔦ ᐁᔫᑯ ᒉ ᐧᐄᒋᐦᐋᑦ ᓕᑎᔮ ᓂᔅᐧᑖᕐ ᐊᓂᔫ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑕᒥᔨᒡᐦ᙮

ᒉᐧᑳᓃᐱᓂᐲᓯᒻ ᐊᑯᒋᓂᔨᐦᒉ ᒋᑳ ᒋᐦᒋᐸᔨᐦᑖᐤ ᒉᓂᕓᔦᕝ ᐯᓛᓐᔐᐃ ᐁ ᐋᐸᑎᓯᑦ᙮ ᐁᔫᑯ ᒉ ᐧᐄᓚᐸᑎᔩᒪᑦ ᐋᓗᐃ ᑰᓇᔦᕐ ᐊᓂᔫ ᐯᔮᑯ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ ᐁᑳ ᐁᔥᑯ ᐅᐦᒋ ᐧᐄᐦᑎᒨᐦᑕᐦᐧᑳᐤ ᒋᔐᐄᓅᒡ, ᐁᐅᑯ ᐊᓂᔫ ᔅᐧᑖᓐᑲᐧᑫᑉ stonecrop ᑳ ᐃᔑᓂᐦᑳᑌᔨᒡ᙮

ᐁᐅᑯ ᐆ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᐊᓐ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᐁ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐊᓂᑌ ᐦᐋᑖᑦ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᑫᔨᐦᑕᐦᒃ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑳ ᐅᐦᒋᐸᔨᐦᒡ᙮

3) “*In vivo* anti-diabetic activity of the ethanolic crude extract of *Sorbus decora* C.K.Schneid. (Rosacea), a medicinal plant used by Canadian James Bay Cree Nations to treat symptoms related to diabetes.” Written by Rose Vianna, Antoine Brault, Louis Martineau, Réjean Couture, John Arnason, and Pierre Haddad. The article has been sent to *Evidence Based Complementary and Alternative Medicine*. The plain-language summary is called “How mountain ash affects diabetes in live animals.”

3) “ᐊᐅᐦᑳᓂᒡ ᐋ ᔑᐧᐋᑭᒥᐦᐧᑳᒡ ᐋ ᓂᑑᒋᔅᒑᔨᒫᑭᓂᐧᐃᒡ ᐋ ᐄᔑ ᐧᐄᒋᐦᐄᑯᒡ ᒥᔅᑯᒥᔒᔨᐤ, ᐊᓂᔮ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔨᐤ ᐋ ᐋᐱᒋᐦᑖᒡ ᐄᔨᔨᐅᒡ ᐊᓂᑖ ᒉᐃᒥᔅ ᐯᐃ ᐊᔅᒌᐦᒡ ᐋ ᐧᐄᒋᐦᐄᓱᑦ ᐋ ᔑᐧᐋᑭᒥᐦᐧᑳᒡ᙮” ᐋᔦᐧᐃᑯ ᐅᔮ ᑳ ᒥᓯᓂᐦᐊᐦᒡ ᔫᔅ ᕓᔮᓈ, ᐋᓐᑐᐧᐋᓐ ᐱᐧᕓᐤ, ᓗᐧᐃ ᒫᕐᑏᓅ, ᒍᒐ ᑰᑐᕐ, ᐧᒑᓐ ᐋᕐᓈᓱᓐ, ᑭᔮ ᐱᔦᕐ ᐦᐋᑖᑦ᙮ ᐆ ᒫᒃ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ, ᐋᑯᑖ ᐊᓂᑖ ᑳ ᐃᑎᔑᐦᐄᑭᓂᐧᐃᒡ ᐊᓂᑖ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᐊᔨᐦᒡ ᐋ ᐃᔑᓈᑯᐦᒡ ᓂᑐᐦᑯᔨᓐᐦ *Evidence Based Complementary and Alternative Medicine* ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐋ ᒥᔨᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ, ᐋᐅᑯ ᐊᓐ “ᑖᓐ ᐋ ᐃᔅᐱᔨᐦᐄᑯᒡ ᐊᐅᐦᑳᓂᒡ ᐋ ᔑᐧᐋᑭᒥᐦᐧᑳᒡ ᐊᓂᔮ ᒥᔅᑯᒥᔒᔨᐤ” ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮

ᐋ ᐅᔅᑎᔩᒡ ᐊᐧᐋᓂᒌ ᐋ ᐋᐱᑎᔩᒡ ᐊᓂᑖ ᐦᐋᑖᑦ ᓈᑉ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ

ᐋᔑᐧᒫᑯᐲᓯᒼ 4 ᑳ ᐃᔅᐱᔨᒡ, ᐋᑯᑦ ᑳ ᒋᐦᒋᐱᔨᐦᑖᑦ ᐧᐋᑳᔅ ᓵᓛᒻ ᐋ ᐋᐱᑎᓰᑦ ᐅᑖ, ᐋᐅᑯ ᐧᐄᔨ ᒋᔅᑯᑎᒧᐧᐋᑭᓐ ᐋ ᐋᐱᑎᓯᑦ ᒫᐧᑳᒡ ᐋ ᓃᐱᓂᔨᒡ᙮ ᐋᔦᐧᐃᑯ ᐧᐄᔨ ᒫ ᐋᐱᑎᔒᔥᑎᐦᒃ ᐊᓂᔮ ᒦᑐᔅᐦ ᑭᔮ ᐊᓂᔮ ᐹᔨᑯ ᒫᐧᑳᔨᐤ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᐤ ᐊᓂᒡ ᒦᑐᓯᐦᒡ (ᓵᓕᐧᑳᕐᑎᓐ ᑳ ᐃᔑᓂᐦᑳᑖᔨᒡ) ᑖᐧᐹ ᒫ ᒌ ᑖᐦᑭᐦᐄᒫᐱᔨᔨᒡ ᐊᓂᒡ ᐱᒦᐦᒡ ᐊᓂᑖ ᐲᐦᒋᔨᐤ ᐋᑯ ᒫᒃ ᒫ ᒌ ᒥᔦᐱᔨᔨᒡ ᐋ ᐋᐱᑎᓰᒥᑭᓂᔨᐤ ᑳ ᒦᓅᐧᐋᑭᒥᐦᐄᒫᐱᔨᔨᐤ᙮

ᑳᕐᓈᐃᓐ ᐧᐁᓗᑦ ᒋᑭ ᒋᐦᒋᔨᐦᑖᐤ ᐋ ᐋᐱᑎᓯᒡ ᐋ ᐋᐱᐦᑑᑯᒋᓂᔨᐤᐦ ᒧᓵᐧᐋᐦᔮᐅᐲᓯᒼᐦ ᑭᔮ ᐋᔦᐧᐃᑯ ᒫ ᐧᐄᒋᐦᐋᒡ ᓕᑎᔮ ᓂᔅᐧᑖᕐ ᐊᓂᔮ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᐦᑎᒥᔨᐤᐦ᙮

ᐱᔥᑯᐲᓯᒼ ᐊᑯᒋᓂᔨᐦᒑ ᒋᑭ ᒋᐦᒋᐱᔨᐦᑖᐤ ᒉᓂᕓᔦᕝ ᐯᓛᓐᔐᐃ ᐋ ᐋᐱᑎᓯᒡ᙮ ᐋᔦᐧᐃᑯ ᒑ ᐧᐄᒑᐱᑎᓯᒫᒡ ᐋᓗᐃ ᑰᓇᔦᕐ ᐊᓂᔮ ᐹᔨᑯ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔨᐤ ᐋᑲ ᐋᔥᑯ ᐅᐦᒋ ᐧᐄᐦᑎᒨᐦᑎᐦᒡ ᒋᔐᔨᔨᐅᒡ, ᐋᐅᑯ ᐊᓂᔮ ᔅᐧᑖᓐᑭᐧᑫᑉ stonecrop ᑳ ᐃᔑᓂᐦᑳᑖᔨᒡ᙮

ᐋᐅᑯ ᐆ ᐊᐱᔒᔥ ᐋ ᒥᔨᓈᑖᒡ ᐊᓐ ᐊᑎᑑ ᒥᔥᑏᐦ ᐋ ᒥᔨᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᐦᐋᑖᑦ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᐦᑎᐦᒃ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑳ ᐅᐦᒋᐱᔨᒡ᙮

New members of the Haddad lab

Waqas Salam joined the lab on May 4 as a summer student. His project will look at whether balsam poplar and one of its active ingredients (called “salicortin”) stimulate fat cells to release a hormone that helps fight insulin resistance.

Caroline Ouellet will start mid-June and she will continue Lidia Nistor’s project.

Geneviève Bélanger will start in July. With Alain Cuerrier, she will be looking at a plant that was not named by the Cree elders, called stonecrop.

This is a simplified version of a more technical report prepared by the Haddad lab.

ᒪᓯᓇᐦᐄᑫᐧᐃᐣᐦ | ᒥᓯᓂᐦᐄᓛᐧᐃᐣᐦ Notes

B. ᑎᐹᒋᒨᓯᓂᐦᐄᑳᓐ ᐊᓂᑌ ᐋᕐᓂᓯᓐ ᒑᑉ ᐁ ᐅᐦᒋᐸᔨᐦᒡ

(ᐙᐙᒪᑲᓂᐲᓯᒻ – ᐧᒫᑯᐲᓯᒻ 2009)

ᐁ ᐅᔑᐦᑖᑲᓅᐦᒡ ᐁᑎᑑ ᐁ ᒥᔭᐸᔨᐦᒡ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓅᐦᒡ ᑫᒀᓐ

ᐁᐅᒄ ᐁ ᐅᒋᒫᐅᑦ ᐋᒫᕐ ᓵᓖᒻ ᐅᑌ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᐠ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐁᐅᒄ ᐐᔨ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑕᐦᒃ ᐁ ᓈᓂᑐᐙᐸᐦᑕᐦᒃ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓅᔨᐠ ᐐᓯᒋᒥᓈᓂᔮ᙮ ᐁᔮᒄ ᑲᔭ ᑳ ᓂᑑᒋᐢᑫᔨᐦᑕᐦᒃ ᐊᓂᔮ ᒪᐢᑯᒥᓈᓈᐦᑎᑯᓂᔮ ᐅᐦᒋ ᐊᓂᔮ ᐁ ᑲᓄᐙᐸᐦᑕᐦᒃ ᑖᓐ ᐁ ᐃᔥᐱᔑ ᐃᐦᑎᑯᓂᔨᒀᐤᐦ ᒥᑖᐦᑐ ᑫᒀᔮᐦ ᐁ ᓂᑐᐦᑯᔨᓅᔨᒀᐤᐦ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᐠ᙮ ᐅᔥᑳᐤ ᑫᒀᓐ ᐁ ᐋᐸᒋᐦᑖᔭᐦᐠ ᐊᓐ ᑫ ᒌ ᐄᔑ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᐠ ᑖᓐ ᐁ ᐃᔥᐱᔑ ᐃᐦᑎᑯᐦᐠ ᑫᒀᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᐠ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᐠ᙮ ᐁᐅᒄ ᒫᒃ ᐆ ᐁ ᐋᐸᒋᐦᑖᔭᐦᐠ ᐁ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᐠ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐧᑫᐦᐠ ᑳᒋᑫᐳᒄ ᑲᔭ ᐐᔕᒋᐳᑯᔥ᙮

ᐁᔮᒄ ᑲᔭ ᑳ ᐅᔑᐦᑖᑦ ᐋᒫᕐ ᐁ ᐅᔥᑳᔨᐠ ᑫ ᒌ ᐄᔑ ᓂᑑᒋᐢᑫᔨᒫᑲᓅᔨᐤᐦ ᐄᓈᐦᑎᒄᐦ, ᐊᓂᑦ ᐊᓂᔮ ᐐᔮᒌᐦᐠ ᑲᔭ ᐊᔑᑖᐦᑯᓐᐠ᙮ ᐁᔮᒄ ᒫᒃ ᑫ ᐐᒋᐦᐄᑯᑦ ᐋᔥᓖ ᑖᐅᓃᓐ ᐅᔮ ᑫ ᒌ ᓂᑑᒋᐢᑫᔨᐦᑕᐦᒃ ᑖᓐ ᐁ ᐄᔑ ᓂᑕᑯᐐᓄᑦ ᐄᓈᐦᑎᒄ ᐊᓂᑌ ᓇᓈᐦᑰ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᑦ᙮

ᐁ ᒋᐦᒋᐸᔨᐦᑖᑲᓅᐦᒡ ᐁ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓅᐦᒡ ᑖᐧᐯ ᐁ ᐐᒋᐦᐄᐌᐸᔨᐙᐧᑫᓐᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᐅᔥᑖᐸᔨᓈᓅᐦᒡ ᐁ ᐙᐱᓈᓅᐦᒡ

ᐃᐢᐱᓐ ᒫᐦᒋᐢᑕᐃ ᑳ ᓂᔥᑐᐐᔮᐦᐠ ᐊᓂᑌ ᐊᑖᐙ, ᐁᔮᒄ ᑳ ᒋᐦᒋᐸᔨᐦᑖᑦ ᓵᓐ ᓄᔭᓐ ᐁ ᐅᔥᑳᔨᐠ ᑫ ᒌ ᐄᔑ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓅᔨᒀᐤᐦ ᐊᓂᔮᐦ 17 ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐊᓂᔮ ᒫᒃ ᐁ ᐄᔑ ᓂᑑᒋᐢᑫᔨᐦᑕᐦᒃ, ᐁᑯᑦ ᑫ ᐅᐦᒋ ᒋᐢᑫᔨᐦᑕᐦᒃ ᑖᐧᐯ ᑫ ᒌ ᐐᒋᐦᐄᑯᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ ᐁᑳ ᑫ ᒌ ᐅᓈᑕᓂᔨᒀᐤᐦ ᐅᔥᒌᔑᑯᐙᐤᐦ᙮ ᐊᓂᔮ ᒫᒃ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᑖᑦ ᐁ ᐄᔑ ᓂᑑᒋᐢᑫᔨᐦᑕᐦᒃ, ᐁᔮᒄ ᐁ ᐋᐸᒋᐦᑖᑦ ᑰᐦᑰᔥᐦ ᐅᔥᒌᔑᑯᔮᐦ ᐁ ᐃᐢᐸᔨᓂᔨᒀᐤᐦ ᐁ ᐋᐸᒋᐦᑖᑦ ᐊᓂᔮᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐙᐱᑯᓂᐲᓯᒻ ᐃᐢᐸᔨᐦᑫ, ᓵᔥ ᒋᑳ ᒌᔥᑖᐤ ᐅᔮ ᐁ ᐄᔑ ᓂᑑᒋᐢᑫᔨᐦᑕᐦᒃ᙮

B. Report for John Arnason’s lab

(January – May 2009)

Developing better tests

Ammar Saleem is our expert in how to improve lab tests. He is working on strong new ways to look at the active ingredients in lowbush cranberries. He is also checking a way of “fingerprinting” showy mountain ash based on measuring ten of its ingredients. We have a new machine that is helping us put the final touches on our methods for “fingerprinting” plants. We are using it on important plants like Labrador tea and marsh Labrador tea.

B. ᑎᐹᒋᒨᓯᓂᐦᐄᑳᓐ ᐊᓂᑌ ᐋᕐᓂᓯᓐ ᒑᑉ ᐁ ᐅᐦᒋᐸᔨᐦᒡ

(ᒋᓵᔮᐢᑯᓂᐲᓯᒼ – ᐋᔑᐧᒫᑯᐲᓯᒻ 2009)

ᐋ ᐅᔑᐦᑖᑭᓂᐎᐠ ᐊᑎᑑ ᐋ ᒥᔭᐱᔨᐠ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒉᔨᐦᑖᑭᓂᐎᐠ ᒉᒀᓐ

ᐋᐅᒄ ᐋ ᐅᒋᒫᐅᑦ ᐋᒫᕐ ᓵᓖᒻ ᐅᑖ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒉᔨᐦᑎᒫᐦᐠ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐋᐅᒄ ᐐᔨ ᑳ ᐋᐱᑎᓰᔥᑎᐦᒃ ᐋ ᓈᓂᑐᐙᐱᐦᑎᐦᒃ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐎᔨᐠ ᐐᓯᒋᒥᓂᔨᐤ᙮ ᐋᔮᐎᒄ ᑭᔫ ᑳ ᓂᑑᒋᐢᒉᔨᐦᑎᐦᒃ ᐊᓂᔫ ᒥᐢᑯᒥᓈᓈᐦᑎᑯᓂᔨᐤ ᐅᐦᒋ ᐊᓂᔫ ᐋ ᑭᓄᐙᐱᐦᑎᐦᒃ ᑖᓐ ᐋ ᐃᔥᐱᔑ ᐃᐦᑎᑯᓂᔨᐠᐦ ᒥᑖᐦᑐ ᒉᒀᔨᐤᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐎᔨᐠᐦ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᐠ᙮ ᐅᔥᑳᐤ ᒉᒀᓐ ᐋ ᐋᐱᒋᐦᑖᔫᐦᐠ ᐋᓐ ᒉ ᒌ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑎᒫᐦᐠ ᑖᓐ ᐋ ᐃᔥᐱᔑ ᐃᐦᑎᑯᐦᐠ ᒉᒀᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐎᐠ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᐠ᙮ ᐋᐅᒄ ᒫᒃ ᐆ ᐋ ᐋᐱᒋᐦᑖᔫᐦᐠ ᐋ ᓂᑑᒋᐢᒉᔨᐦᑎᒫᐦᐠ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒧᔫᒻ ᑳᒋᒉᐱᒄ ᑭᔫ ᐐᔑᒋᐱᑯᔥ᙮

ᐋᔮᐎᒄ ᑭᔫ ᑳ ᐅᔑᐦᑖᑦ ᐋᒫᕐ ᐋ ᐅᔥᑳᔨᐠ ᒉ ᒌ ᐄᔑ ᓂᑑᒋᐢᒉᔨᒫᑭᓂᐎᔨᐤᐦ ᐄᔫᐦᑎᒄᐦ, ᐊᓂᑦ ᐊᓂᔫ ᐐᔫᒌᐦᐠ ᑭᔫ ᔑᐦᑖᐦᑯᓈᐹᐦᑎᑯᐦᐠ᙮ ᐋᔮᐎᒄ ᒫᒃ ᒉ ᐐᒋᐦᐄᑯᑦ ᐋᔥᓖ ᑖᐅᓃᓐ ᐅᔫ ᒉ ᒌ ᓂᑑᒋᐢᒉᐦᑎᐦᐠ ᑖᓐ ᐋ ᐄᔑ ᓂᑐᐦᑯᐦᔩᑦ ᐄᔫᐦᑎᒄ ᐊᓂᑖ ᓂᓈᐦᑰ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᑦ᙮

ᐋ ᒋᐦᒋᐱᔨᐦᑖᑭᓂᐎᐠ ᐋ ᓂᑑᒋᐢᒉᔨᐦᑖᑭᓂᐎᐠ ᑖᐧᐸ ᐋ ᐐᒋᐦᐄᐙᐱᔨᐠᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᐅᔥᑖᐱᔨᓈᓂᐎᐠ ᐋ ᐙᐱᓈᓂᐎᐠ

ᐃᐢᐱᓐ ᒫᐦᒋᐠ ᑳ ᓂᔥᑐᐳᔫᐦᐠ ᐊᓂᑖ ᐊᑖᐙ, ᐋᔮᐎᒄ ᑳ ᒋᐦᒋᐱᔨᐦᑖᑦ ᓵᓐ ᓄᔭᓐ ᐋ ᐅᔥᑳᔨᐠ ᒉ ᒌ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑖᑭᓂᐎᔨᐤᐦ ᐊᓂᔫᐦ 17 ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐊᓂᔫ ᒫᒃ ᐋ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑎᐦᒃ, ᐋᑯᑦ ᒉ ᐅᐦᒋ ᒋᐢᒉᔨᐦᑎᐦᒃ ᑖᐧᐸ ᒉ ᒌ ᐐᒋᐦᐄᑯᐠ ᐊᐙᓂᒌ ᐋ ᔒᐙᑭᒥᐦᒀᐠ ᐋᑳ ᒉ ᒌ ᐅᓈᑎᓂᔨᐠᐦ ᐅᔥᒌᔑᑯᐙᐤᐦ᙮ ᐊᓂᔫ ᒫᒃ ᐋ ᐄᔑ ᐱᒥᐱᔨᐦᑖᑦ ᐋ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑎᐦᒃ, ᐋᔮᐎᒄ ᐋ ᐋᐱᒋᐦᑖᑦ ᑰᐦᑰᔥᐦ ᐅᔥᒌᔑᑯᔨᐤᐦ ᐋ ᐃᐢᐱᔨᔨᐠᐦ ᐋ ᐋᐱᒋᐦᑖᑦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᒧᓵᐙᐦᔫᐅᐲᓯᒼ ᐃᐢᐱᔨᐦᒉ, ᓵᔥ ᒋᑭ ᒌᔥᑖᐤ ᐅᔫ ᐋ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑎᐦᒃ᙮

Ammar has also come up with a new way of testing bark and leaves from black spruce. This method will help Ashleigh Downing as she looks at how a plant’s healing properties vary with where it grows.

Beginning work on whether the plants help with vision problems

Since our last meeting in Ottawa, San Nguyen has been getting ready to run a new kind of test on the 17 plants. This test will check if the plants might help people with diabetes to avoid eye problems. To do the tests, we look at how the plants affect a

ᐁ ᐧᐄᐦ ᒋᔅᑫᔨᐦᑖᑲᓈᐦᐧᑳᐤᐦ ᐁ ᓂᑐᐦᑯᔨᓈᐦᐧᑳᐤᐦ ᑫᐧᑳᔩᐦ ᐊᓂᑦ ᓇᓈᐦᑰ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ

ᓵᔥ ᒌ ᒌᔥᑖᐤ ᐋᓯᒻ ᒧᐦᐋᒣᑦ ᐊᓂᔩ ᐁ ᐸᐦᑳᓂᐱᑎᐦᒃ ᓇᓈᐦᑰ ᑫᐧᑳᔩᐦ ᐁ ᓂᑐᐦᑯᔨᓈᔨᐧᑳᐤᐦ ᐊᓂᑦ ᐧᐄᔑᒋᐱᑯᔑᐦᒡ᙮ ᐁᔩᒄ ᒫᒃ ᑳ ᒥᔅᑲᐦᒃ ᓂᑯᐧᑖᔅᒡ ᐸᐦᑳᓐ ᐁ ᐃᑌᔨᐦᑖᑯᓂᔨᐧᑳᐤᐦ ᑫᐧᑳᔩᐦ ᐁ ᓂᑐᐦᑯᔨᓈᔨᐧᑳᐤᐦ᙮ ᐁᔩᒄ ᒫᒃ ᐅᔩ ᑳ ᐃᑎᓴᐦᐊᒃ ᐊᓂᑌ ᐦᐋᑖᑦ ᓈᑉ ᑫ ᐅᐦᒋ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓈᔨᐧᑳᐤᐦ ᑫ ᒌ ᒫᔑᐦᑫᐸᔨᓂᔨᐦᐧᑳᐤᐦ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓈᔨᒡ᙮ ᐊᓐ ᒫᒃ ᓵᔥ ᐁ ᒋᔅᑫᔨᐦᑖᑯᐦᐧᑳᐤᐦ ᑖᓐ ᐁ ᐊᑕ ᐃᐦᑎᑯᐦᒡ ᑫᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓈᐦᒡ ᐊᓂᑦ ᐧᐄᔑᒋᐱᑯᔑᐦᒡ, ᐁᐅᒄ ᓵᔥ ᑫ ᒌ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐃᔅᐸᐦᑖᔮᒡ ᒫᐅᒡ ᑫ ᒥᐧᔮᐧᑳᐤᐦ ᐁ ᒫᐅᐦᑐᓄᑲᓈᐦᐧᑳᐤᐦ ᐊᓂᔩᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᒄ ᒫᒃ ᒫᐅᒡ ᑫ ᒌ ᓂᑐᐦᑯᔨᓈᐧᑳᐤᐦ᙮

ᒉᐧᑳᒡ ᑲᓇᐧᐋᐱᐦᑕᒻ ᕖᑖ ᐋᐦᒣᑦ ᐊᓂᔩᐦ ᑫᐧᑳᔩᐦ ᐁ ᓂᑐᐦᑯᔨᓈᔨᐧᑳᐤᐦ ᐊᓂᑦ ᑳᒋᑫᐳᑯᐦᒡ ᑲᔦ ᐹᔅᒋᓈᐦᐧᑳᓂᐦᒡ, ᓀᔥᑦ ᒫᒃ ᑖᐧᐯ ᑫ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔩᐦᐧᑳᐤᐦ ᐁᑳ ᑫ ᒌ ᐅᓈᑕᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓈᐦᒡ ᐅᐦᒋ ᐊᓐ ᐋ ᐅᔥᑖᐸᔨᐦᐄᐧᐁᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓈᐦᒡ᙮

ᐁᑯᓐ ᐅᔩᐦ ᑳ ᑲᓇᐧᐋᐸᐦᑕᐦᒃ ᒍᓯᐃ ᐋᓐᑑᓂᔩ ᑲᒍᕉ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓈᔨᒡ ᑫᐧᑳᔩ ᐊᓂᑦ:

- ᑳᒋᑫᐳᒄ ᓃᐲᐦ
- ᐄᓈᐦᑎᒄ ᐊᔥᑖᐦᑯᓈᐹᐦᑎᑯᒡ ᑲᔦ ᐧᐄᔩᒌ
- ᐧᐋᒋᓈᑲᓐ ᐧᐄᔩᒌ

ᐁᑯᑦ ᒫᒃ ᐁ ᐸᐦᑳᓇᐱᑎᐦᒃ ᐊᓂᔩᐦ ᑫᐧᑳᔩᐦ ᐁ ᓂᑐᐦᑯᔨᓈᔨᐧᑳᐤᐦ, ᐁᒄ ᑫᒃ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑕᐦᒃ ᑖᐧᐯ ᑫ ᒌ ᓂᑐᐦᑯᔨᓈᔨᐧᑳᐤᐦ᙮ (ᐧᒉᐦᒡ ᐊᓐ, ᒋᑳ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔩᐦ-ᐋ ᐁᑳ ᑫ ᒌ ᐅᓈᑕᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓈᐦᒡ? ᐧᐄᒋᐦᐄᐧᐁᐸᔩ-ᐋ ᑫ ᒌ ᐲᐦᑌᐸᔨᐦᒡ ᓅᑳᐤ ᐊᓂᑌ ᐲᐦᒋᔩ?) ᐁᑯᑦ ᒫᒃ ᐧᐁᑖᒡ ᑫ ᒌ ᒋᔅᑫᔨᐦᑖᑯᐦᐧᑳᐤᐦ ᑖᓐ ᐁ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔩᐦ ᑫᐧᑳᔩᐦ ᐁ ᓂᑐᐦᑯᔨᓈᐦᐧᑳᐤᐦ᙮ ᐁᐅᒄ ᐊᓐ ᐧᒉᐦᒡ ᑳ ᒥᔅᑯᐧᐋᐦᑖᐧᑖᐤ ᒍᓯᐃ ᐋᓐᑑᓂᔩ ᑲᔦ ᒉᓇᔦᒻ ᐆᒡᔒᓐ ᐁ ᓂᑐᐦᑯᔨᓈᔨᒡ ᑫᐧᑳᔩᐦ ᐊᓂᑦ ᑳᒋᑫᐳᑯᐦᒡ ᐁ ᒫᔑᐦᑫᐸᔨᓂᔨᒡ ᐁᑳ ᑫ ᐊᑖᐦᒋᐳᓈᓈᔨᒡ᙮

particular chemical in pig eyes. These tests will be done in June.

IDENTIFYING THE INGREDIENTS IN DIFFERENT PLANTS

Asim Muhamed has finished separating all the different ingredients in marsh Labrador tea. He has found six distinct groups of ingredients, and sent them to the Haddad lab to be tested for diabetes-fighting activity. Now that we know what ingredients are in marsh Labrador tea, we can start tests to figure out the best time and place to collect the plant, so as to get the most healing effect.

ᐋ ᐧᐄᐦ ᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡᐦ ᒑᐧᑳᓂᐦᐄ ᐊᓂᑦ ᓂᓈᐦᑰ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ

ᓵᔥ ᒌ ᒌᔥᑖᐤ ᐋᓯᒻ ᒧᐦᐋᒣᑦ ᐊᓂᔮ ᐋ ᑎᐹᓂᐱᑎᐦᒃ ᓂᓈᐦᑰ ᒑᐧᑳᔨᐤᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡᐦ ᐊᓂᑦ ᐧᐄᔑᒋᐱᑯᔑᐦᒡ᙮ ᐋᔪᐧᐃᒄ ᒫᒃ ᑳ ᒥᔅᑭᐦᒃ ᑯᐧᑖᔅᒡ ᑎᐹᓐ ᐋ ᐃᑖᔨᐦᑖᑯᓂᔨᒡᐦ ᒑᐧᑳᔨᐤᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡᐦ᙮ ᐋᔪᐧᐃᒄ ᒫᒃ ᐅᔫ ᑳ ᐃᑎᔑᐦᐊᒃ ᐊᓂᑖ ᐦᐋᑖᑦ ᓈᑉ ᒑ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᔨᒡᐦ ᒑ ᒌ ᒫᔑᐦᑖᐱᔨᔨᒡᐦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᔨᒡ᙮ ᐊᓐ ᒫᒃ ᓵᔥ ᐋ ᒋᔅᒑᔨᐦᑖᑯᒡᐦ ᑖᓐ ᐋ ᐊᑎ ᐃᐦᑎᑯᐦᒡ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐊᓂᑦ ᐧᐄᔑᒋᐱᑯᔑᐦᒡ, ᐋᐅᒄ ᓵᔥ ᒑ ᒌ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐃᔅᐱᐦᑖᔫᒡ ᒫᐅᒡ ᒑ ᒥᐧᔫᒡᐦ ᐋ ᒫᐅᐦᑐᓂᑭᓂᐧᐃᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᒄ ᒫᒃ ᒫᐅᒡ ᒑ ᒌ ᓂᑐᐦᑯᔨᓂᐧᐃᒡᐦ᙮

ᒫᐧᑳᒡ ᐧᐋᐧᐋᐱᐦᑎᒧ ᕖᑖ ᐋᐦᒣᑦ ᐊᓂᔮᐦ ᒑᐧᑳᔨᐤᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡᐦ ᐊᓂᑦ ᑳᒋᒑᐱᑯᐦᒡ ᑭᔮ ᐹᔅᑎᓈᐦᐧᑳᑭᓂᐦᒡ, ᑭᔮ ᒫᒃ ᑖᐧᐹ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐋᑳ ᒑ ᒌ ᐅᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ ᐅᐦᒋ ᐊᓐ ᐋ ᐅᔥᑖᐱᔨᐦᐄᐧᐋᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ᙮

ᐋᔪᐧᐃᒄ ᒫᒃ ᑳ ᐧᐋᐧᐋᐱᐦᑎᐦᒃ ᒍᓯᐃ ᐋᓐᑑᓂᔮ ᑭᒍᕉ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᒑᐧᑳᔨᐤ ᐊᓂᑦ:

- ᑳᒋᒑᐱᒄ ᓃᐲᐦ
- ᐄᔫᐦᑎᒄ ᔑᐦᑖᐦᑯᓈᐹᐦᑎᒄ ᑭᔫ ᐧᐄᔩᒌ
- ᐧᐋᒋᓈᑭᓐ ᐧᐄᔩᒌ

ᐋᑯᑦ ᒫᒃ ᐋ ᑎᐹᓂᐱᑎᐦᒃ ᐊᓂᔫᐦ ᒑᐧᑳᔨᐤᐦ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡᐦ, ᐋᒄ ᒑᒃ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᑖᐧᐹ ᒑ ᒌ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡᐦ᙮ (ᒧᔫᒻ ᐊᓐ, ᒋᑭ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᐤᐦ-ᐋ ᐋᑳ ᒑ ᒌ ᐅᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ? ᐧᐄᒋᐦᐄᐧᐋᐱᔨᐤ-ᐋ ᒑ ᒌ ᐲᐦᑖᐱᔨᒡ ᓅᑳᐤ ᐊᓂᑖ ᐲᐦᒋᔨᐤ?) ᐋᑯᑦ ᒫᒃ ᓈᓈᒥᒌᒻ ᒑ ᒌ ᒋᔅᒑᔨᐦᑖᑯᒡᐦ ᑖᓐ ᐋ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐊᓂᐦᐄ ᒑᐧᑳᓂᐦᐄ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡᐦ᙮ ᐋᐅᒄ ᐊᓐ ᒧᔫᒻ ᑳ ᒥᔅᑯᐧᐋᐦᑖᒡ ᒍᓯᐃ ᐋᓐᑑᓂᔮ ᑭᔫ ᒉᓇᔦᒻ ᐆᒡᔒᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᒑᐧᑳᔨᐤ ᐊᓂᑦ ᑳᒋᒑᐱᑯᐦᒡ ᐋ ᒫᔑᐦᑖᐱᔨᔨᒡ ᐋ ᑖᐦᒋᐳᓈᓂᐧᐃᔨᒡ᙮

Fida Ahmed is looking at the ingredients in Labrador tea and stag's horn club moss, and whether they might protect nerves against damage from diabetes.

Jose Antonio Guerrero has been looking at the ingredients in:

- Labrador tea leaves
- Black spruce needles and bark
- Tamarack bark

He breaks the ingredients into groups, and then tests those groups to see if they have healing properties. (For instance, do they protect nerve cells?

ᐁ ᑏᐧᔮᐴᐦᒉᓈᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᓂᐲ ᓈᔥᑦ ᒫᒃ ᐃᔥᑯᑌᐧᐋᐴ ᐁ ᐋᐸᒋᐦᑖᑲᓈᐦᒡ

ᐁᔥᒄ ᒣᐧᑳᒡ ᓂᑑᒋᔅᒉᔨᐦᑕᒧᒡ ᐸᕈᓐᑕᓐ ᑲᔦ ᑳᕐᓛᐃᓐ ᐊᓂᔫ ᐊᐦᒌᐤᐦ ᒉ ᐄᔑ ᓂᑐᐦᑯᔨᓈᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐊᓐ ᓂᐲ ᓈᔥᑦ ᒫᒃ ᐄᔥᑯᑌᐧᐋᐴ ᐁ ᑏᐧᔮᐴᐦᒉᓈᐦᒡ᙮ ᐸᔅᒡ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᔫᒄ ᐁ ᐹᒋᐸᔨᐦᐄᑯᑦ ᐊᐧᐁᓐ ᐁ ᐋᐸᒋᐦᑖᑦ ᐊᓂᑦ ᓂᐲᐦᒡ ᐁ ᒌ ᑏᐧᔮᐴᐦᒉᓈᐦᒡ, ᐁᒄ ᒫᒃ ᐁᑳ ᐁ ᐃᔅᐸᔨᐦᒡ ᐊᓐ ᐃᔥᑯᑌᐧᐋᐴ ᐁ ᐋᐸᒋᐦᑖᑲᓈᐦᒡ ᐁ ᑏᐧᔮᐴᐦᒉᓈᐦᒡ᙮ ᐁᐅᒄ ᒫᒃ ᐁ ᐃᑌᔨᐦᑕᒫᐦᒡ ᐊᓂᔫ ᐸᔅᒡ ᒉᐧᑳᔫᐦ ᐁ ᓂᑐᐦᑯᔨᓈᐦᒡ ᐁ ᑎᐦᑳᐹᐧᐁᐦᐧᑳᐤᐦ ᐊᓂᑦ ᓂᐲᐦᒡ, ᐁᒄ ᒫᒃ ᐁᑳ ᑎᐦᑳᐹᐧᐁᐦᐧᑳᐤᐦ ᐊᓂᑦ ᐃᔥᑯᑌᐋᐴᐦᒡ᙮ ᐁᔫᒄ ᒫᒃ ᐅᔫ ᓈᔥᒡ ᐁᑌᔨᑎᒃ ᒉ ᑲᓇᐧᐋᑎᐦᒃ ᐸᕈᓐᑕᓐ᙮ ᐁᔫᒄ ᑲᔦ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᑳᕐᓛᐃᓐ ᑖᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᒉᐸᔨᓂᔨᒡ ᐊᓂᔫ ᐊᔨᑲᑖᔑᔫ ᐊᓂᑦ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᐄᓱᒪᑲᐦᒡ ᒉᐧᑳᓐ ᐲᐦᒋᔫ ᐊᓂᑦ ᐊᓂᔫ ᒌᓐᔅ genes ᑳ ᐃᔑᓂᐦᑳᑌᐦᐧᑳᐤᐦ ᐊᓐᑦ ᐁᐅᒡ ᐊᓂᔅᒉᐸᐃᔨᒄ ᐁᐃᔑ ᓂᐦᑖᐅᒌᒄ ᓈᔅᑦ ᐁᔨᑌᔨᑖᑯᓰᒄ᙮

ᐋ ᑏᐧᔮᐴᐦᒑᓂᐧᐃᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᓂᐲ ᑭᔮ ᒫᒃ ᐃᔥᑯᑖᐳᐃ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡ

ᐋᔥᒄ ᒫᐧᑳᒡ ᓂᑑᒋᔅᒑᔨᐦᑎᒧᒡ ᐱᕈᓐᑎᓐ ᑭᔮ ᑳᕐᓛᐃᓐ ᐊᓂᔮ ᐊᔨᐦᒡ ᒑ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐊᓐ ᓂᐲ ᑭᔮ ᒫᒃ ᐄᔥᑯᑖᐳᐃ ᐋ ᑏᐧᔮᐴᐦᒑᓂᐧᐃᒡ᙮ ᐱᔥᒡ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᔨᐧᐃᒄ ᐋ ᐹᒋᐱᔨᐦᐄᑯᑦ ᐊᐧᐋᓐ ᐋ ᐋᐱᒋᐦᑖᑦ ᐊᓂᑦ ᓂᐲᐦᒡ ᐋ ᒌ ᑏᐧᔮᐴᐦᒑᓂᐧᐃᒡ, ᐋᒄ ᒫᒃ ᐋᑳ ᐋ ᐃᔅᐱᔨᒡ ᐊᓐ ᐃᔥᑯᑖᐳᐃ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡ ᐋ ᑏᐧᔮᐴᐦᒑᓂᐧᐃᒡ᙮ ᐋᐅᒄ ᒫᒃ ᐋ ᐃᑖᔨᐦᑎᒫᐦᒡ ᐊᓂᔮ ᐱᔥᒡ ᒑᐧᑳᔨᐤ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐋ ᑎᐦᑳᐹᐧᐋᒡᐦ ᐊᓂᑦ ᓂᐲᐦᒡ, ᐋᒄ ᒫᒃ ᐋᑳ ᑎᐦᑳᐹᐧᐋᒡᐦ ᐊᓂᑦ ᐃᔥᑯᑖᐴᐦᒡ᙮ ᐋᔨᐧᐃᒄ ᒫᒃ ᐅᔮ ᓈᔥᒡ ᐋ ᒧᒋᐦᐄᑯᑦ ᐱᕈᓐᑎᓐ᙮ ᐋᔨᐧᐃᒄ ᑭᔮ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᑳᕐᓛᐃᓐ ᑖᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᔨᒡ ᐊᓂᔮ ᐊᔨᑭᑖᔑᔨᐤ ᐊᓂᑦ ᐋ ᐄᔑ ᐱᒥᐱᔨᐦᐄᓱᒥᑭᐦᒡ ᒑᐧᑳᓐ ᐲᐦᒋᔨᐤ ᐊᓂᑦ ᐊᓂᔮ ᒌᓐᔅ genes ᑳ ᐃᔑᓂᐦᑳᑖᒡᐦ᙮

Do they help our bodies absorb sugar?) In this way, we gradually find out which ingredients are having an effect. For instance, Jose Antonio and Meriem Ouchfoun were able to identify some of the fat-fighting ingredients in Labrador tea.

MAKING PLANT TEA WITH WATER VS ALCOHOL

Brendan and Caroline are continuing to look at the whether you get different results when you dissolve the plants in alcohol rather than in water. A few of the plants cause inflammation (heat and swelling) when you dissolve them in water, but not when you dissolve them in alcohol. We think this is because some ingredients only dissolve in water, and others only dissolve in alcohol. Brendan is very interested in this. Also, Caroline has been looking at how pitcher plants affect the way our genes work.

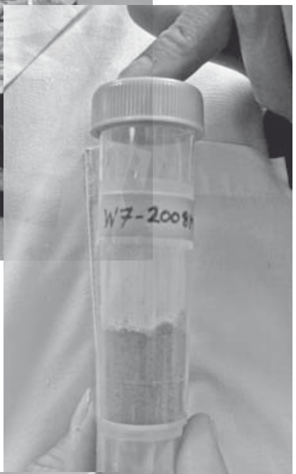
ᑖᓂᑌ ᒉ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐦᒉᓅᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ

ᐁᔫᒄ ᑳ ᐃᑖᐸᑎᓯᑦ ᐧᒑᓇᕦᓐ ᕓᓀᔦᐃ ᐁ ᓂᑐᐦᑯᔨᓂᐦᒉᑦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒌ ᐋᐸᒋᐦᑖᑲᓅᔨᐦᐧᑳᐤᐦ ᐊᓂᑌ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐊᓂᑌ ᐅᑖᐦᒡ ᑳ ᐄᔑ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᒡ, ᐁᐅᒄ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᐄᓂᒥᓈᓐ ᑲᔦ ᐧᐄᓴᒋᒥᓈᓐ ᓃᐦᑖᐦᒡ ᒉ ᒌ ᐃᔅᐸᔨᓂᔨᒡ ᐊᐧᐁᓐ ᐊᓂᔫ ᓈᔥᒡ ᒥᔥᑕᐦᐄ ᐁ ᐃᐦᑎᑯᓂᔨᒡ ᔔᑳᔫ ᐅᒥᐦᑯᐦᒡ᙮ ᐁᐅᒄ ᒫᒃ ᔖᔥ ᐁ ᐧᐄᐦ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᐊᓂᔫᐦ ᑯᑕᒃᐦ 15 ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᔮᐸᒡ ᐧᒣᐦᒡ ᐁ ᐃᔑᓈᑯᐦᐧᑳᐤᐦ ᐅᔫ ᓃᔥᑕᒻ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᐅᒄ ᐊᓐ ᑖᐧᐯ ᔮᐸᒡ ᒉ ᐄᔑ ᓂᑐᐦᑯᔨᓅᐦᐧᑳᐤᐦ᙮ ᐧᒫᐅᔫ ᒫᒃ ᑳ ᐃᐦᑎᐧᑖᐤ ᐧᒑᓇᕦᓐ ᑲᔦ ᐅᐧᐄᒑᐸᑎᓰᒫᑲᓐᐦ:

1. ᐁ ᓂᑐᐦᑯᔨᓂᐦᒉᐧᑖᐤ ᐊᓂᔫ ᒦᑐᔅ ᐧᐄᔫᒌ ᐊᓂᔫ ᒉ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑕᒥᔨᒡᐦ ᑌᔅᐲᓈ ᐦᐋᕐᐱᓛᔅ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐁᔫᒄ ᑳ ᐹᐸᑯᓇᐦᐧᑳᐤ ᐊᓂᔫ ᐧᐄᔫᒌᔫ, ᐁᒄ ᑳ ᐱᒋᔅᒋᐳᑖᐧᑖᐤ, ᐁᒄ ᑳ ᑏᐧᔮᐴᐦᒉᐧᑖᐤ ᐃᔥᑯᑌᐴᐦᒡ, ᐁᒄ ᒦᓐ ᑳ ᐹᓯᐦᐧᑳᐤ᙮

ᑖᓂᑖ ᒑ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐦᒑᓂᐧᐃᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ

ᐋᔪᐧᐃᒄ ᑳ ᐃᑖᐱᑎᓯᑦ ᐧᒑᓂᕠᓐ ᕓᓀᔦᐃ ᐋ ᓂᑐᐦᑯᔨᓂᐦᒑᑦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᔨᒡᐦ ᐊᓂᑖ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐊᓂᑖ ᐅᑖᐦᒡ ᑳ ᐄᔑ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᒡ, ᐋᐅᒄ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᐄᔨᒥᓐ ᑭᔮ ᐧᐄᓯᒋᒥᓐ ᓃᐦᑖᐦᒡ ᒑ ᒌ ᐃᔅᐱᔨᔨᒡ ᐊᐧᐋᓐ ᐊᓂᔮ ᓈᔥᒡ ᒥᔥᑏ ᐋ ᐃᐦᑎᑯᓂᔨᒡ ᔔᑳᔨᐤ ᐅᒥᐦᑯᐦᒡ᙮ ᐋᐅᒄ ᒫᒃ ᔖᔥ ᐋ ᐧᐄᐦ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᐊᓂᐦᐄ ᑯᑎᒃᐦ 15 ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᔮᐱᒡ ᐧᒫᐦᒡ ᐋ ᐃᔑᓈᑯᒡᐦ ᐆ ᓃᔥᑎᒻ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᐅᒄ ᐊᓐ ᑖᐧᐹ ᐊᔮᐱᒡ ᒑ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᒡᐦ᙮ ᒫᐅᔮ ᒫᒃ ᑳ ᐃᐦᑎᒡ ᐧᒑᓂᕠᓐ ᑭᔮ ᐅᐧᐄᒑᐱᑎᓰᒫᑭᓐᐦ:



1. ᐋ ᓂᑐᐦᑯᔨᓂᐦᒑᒡ ᐊᓂᔮ ᒦᑐᔅ ᐧᐄᔫᒌ ᐊᓂᔮ ᒑ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑎᒥᔨᒡᐦ ᑖᔅᐲᓈ ᐦᐋᕐᐱᓛᔅ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐋᔦᐧᐃᒄ ᑳ ᐹᐱᑯᓂᐦᒡ ᐊᓂᔮ ᐧᐄᔫᒌᔨᐤ, ᐋᒄ ᑳ ᐱᒋᔅᒋᐳᑖᒡ, ᐋᒄ ᑳ ᑏᐧᔮᐴᐦᒑᒡ ᐃᔥᑯᑖᐴᐦᒡ, ᐋᒄ ᒦᓐ ᑳ ᐹᓯᐦᒡ᙮

PREPARING THE PLANT SAMPLES FOR THE TESTS

Jonathan Ferrier has been preparing some of the plants for the other labs to use. Our past tests have shown that blueberry and cranberry help fight high blood sugar. Now we want to look at 15 other plants in the same family, to see if they might do this too. Here is what Jonathan and his colleagues have been doing:

1. Making samples of balsam poplar bark for Despina Harbilas' project. They have peeled the bark off, ground it up, dissolved it in alcohol, and dried it.

2. ᐁ ᒫᐅᐦᑐᓇᐦᐧᑳᐤ ᓀᐤ ᑎᐹᐯᑲᐦᐄᑲᓐ kg. ᐊᓂᔫ ᐧᐄᔕᒋᐳᑯᔥᐦ ᐊᓂᑌ ᐧᐋᐸᒣᑯᔥᑐᐦᒡ ᐁ ᐧᐄᒋᐦᐄᑯᑦ ᐧᑳᓃ ᐦᐋᓚᔅ᙮ ᐁ ᐧᐋᐧᐋᐸᐦᑕᐦᐧᑳᐤ ᑖᓐ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓅᔨᒡ ᐅᔫ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᔫ ᐋᓯᒼ ᐁ ᐧᐄᒋᐦᐄᑯᐧᑖᐤ᙮

3. ᐁ ᓂᑐᐦᑯᔨᓂᐦᒉᐧᑖᐤ ᓂᔮᔨᓐ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᐄᓂᒥᓈᓂᐦᒡ ᐁ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ:
    - ᐄᓂᒥᓈᐦ
    - ᑳ ᐊᐱᔖᔑᐧᑳᐤᐦ ᐄᓂᒥᓈᐦ
    - ᓂᔅᒋᒥᓈᐦ
    - ᑳ ᒥᔖᐧᑳᐤᐦ ᐄᓂᒥᓈᐦ
    - ᓂᒋᑯᒥᓈᐦ

ᒉᒃ ᒫᒃ ᑳ ᒌᔥᑖᑲᓅᐦᒡ ᐁ ᓂᑐᐦᑯᔨᓂᐦᒉᓅᐦᒡ, ᐁᑯᑦ ᓇᓈᐦᑰ ᑳ ᐃᐦᑎᓈᓅᐦᒡ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᒡ᙮ ᐁᐅᒄ ᐁ ᐧᐄᐦ ᐧᐋᐸᐦᑕᒫᐦᒡ ᑖᐧᐯ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐁ ᒫᔑᐦᒉᐸᔨᐦᐧᑳᐤᐦ ᐁ ᑖᐦᒋᐳᓈᓅᐦᒡ, ᓀᔥᑦ ᒫᒃ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᐁᑳ ᒉ ᒌ ᐅᓈᒋᐸᔨᐦᐄᐧᐁᒡ ᒉᐧᑳᓐ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐆ ᒫᒃ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ, ᐁᐅᒄ ᒉ ᒫᐅᐦᑐᓀᑲᓅᐦᒡ ᐊᓐ ᒉᐧᑳᓐ ᐁ ᐄᔑ ᒥᔥᑯᐧᐋᐦᑖᑲᓅᐦᒡ, ᐁᒄ ᒫᒃ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᒉ ᒌ ᒋᔅᒉᔨᐦᑖᑯᐦᒡ ᑖᓐ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐄᓂᒥᓈᓐ᙮

ᐁᐅᒄ ᐆ ᐊᐱᔒᔥ ᐁ ᒥᓯᓈᑌᒡ ᐅᐦᒋ ᐊᓐ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᐁ ᒥᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑲᓐ ᐊᓂᑌ ᑳ ᐅᐦᒋᐸᔨᐦᒡ ᐋᕐᓂᓯᓐ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮

2. ᐋ ᒫᐅᐦᑐᓂᐦᒡ ᓈᐤ ᑎᐹᐹᔥᑯᒋᑭᓐ kg. ᐊᓂᔮ ᐧᐄᔑᒋᐱᑯᔥᐦ ᐊᓂᑖ ᐧᐋᐱᒫᑯᔥᑐᐦᒡ ᐋ ᐧᐄᒋᐦᐄᑯᑦ ᐧᑳᓃ ᐦᐋᓚᔅ᙮ ᐋ ᐧᐋᐧᐋᐱᐦᑎᐦᒡ ᑖᓐ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᐅᔮ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᔨᐤ ᐋᓯᒼ ᐋ ᐧᐄᒋᐦᐄᑯᒡ᙮

3. ᐋ ᓂᑐᐦᑯᔨᓂᐦᒑᒡ ᓂᔮᔪ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᐄᔨᒥᓂᐦᒡ ᐋ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ:
    - ᐄᔨᒥᓈᐦ
    - ᑳ ᐊᐱᔖᔑᒡᐦ ᐄᔨᒥᓈᐦ
    - ᓂᔅᒋᒥᓈᐦ
    - ᑳ ᒥᔖᒡᐦ ᐄᔨᒥᓈᐦ
    - ᓂᒋᑯᒥᓈᐦ

ᒑᒃ ᒫᒃ ᑳ ᒌᔥᑖᑭᓂᐧᐃᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐦᒑᓂᐧᐃᒡ, ᐋᑯᑦ ᓂᓈᐦᑰ ᑳ ᐃᐦᑎᓈᓂᐧᐃᒡ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ᙮ ᐋᐅᒄ ᐋ ᐧᐄᐦ ᐧᐋᐱᐦᑎᒫᐦᒡ ᑖᐧᐹ ᒐ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐋ ᒫᔑᐦᑖᐱᔨᒡᐦ ᐋ ᑖᐦᒋᐳᓈᓂᐧᐃᒡ, ᑭᔮ ᒫᒃ ᒐ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᐋᑳ ᒐ ᒌ ᐅᓈᒋᐱᔨᐦᐄᐧᐋᒡ ᒐᐧᑳᓐ ᐊᓂᑖ ᐲᐦᒋᔨᐤ᙮ ᐆ ᒫᒃ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᒐ ᒫᐅᐦᑐᓂᑭᓂᐧᐃᒡ ᐊᓐ ᒐᐧᑳᓐ ᐋ ᐄᔑ ᒥᔥᑯᐧᐋᐦᑖᑭᓂᐧᐃᒡ, ᐋᒄ ᒫᒃ ᐊᑎᑑ ᒥᔥᑏ ᒐ ᒌ ᒋᔅᒐᔨᐦᑖᑯᐦᒡ ᑖᓐ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐄᔨᒥᓐ᙮

ᐋᐅᒄ ᐆ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᑖᒡ ᐅᐦᒋ ᐊᓐ ᐊᑎᑑ ᒥᔥᑏᐦ ᐋ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᑳ ᐅᐦᒋᐱᔨᒡ ᐋᕐᓂᓯᓐ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮

2. Collecting four kg of marsh Labrador tea in Whapmagoostui with Cory Harris. Looking at the plants' properties with Asim.
3. Preparing leaves from five plants in the same family as lowbush blueberry:
    - northern blueberry
    - dwarf bilberry
    - highbush blueberry
    - oval-leaf blueberry
    - bog bilberry

Once the samples are ready, we want to run several kinds of tests on them. We want to look at their ingredients, check if they help fight fat, and see if they protect cells against damage by AGEs (harmful particles). Our tests will also feed into a larger project aimed at describing the characteristics of plants in the blueberry family.

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

ᒪᓯᓇᐦᐄᑫ·ᐃᓐᐦ | ᒥᓯᓂᐦᐄᓛ·ᐃᓐᐦ Notes

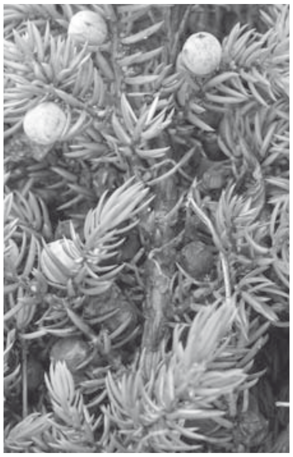
C. ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐊᓂᑌ ᐧᕚᔅᑎᕐ ᓛᑉ ᐁ ᐅᐦᒋᐸᔨᐦᒡ

(ᐧᐋᐧᐋᒪᑲᓂᐲᓯᒻ – ᐧᒫᑯᐲᓯᒻ 2009)

ᐅᑎᐦ ᐁ ᐃᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᑯᑦ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᐦᒡ ᐁᑳ ᑫ ᒌ ᐅᓈᐦᐄᑫᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒌᑰ ᐁ ᐋᐸᒋᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐧᐁᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ — ᓄᔥᑦ ᑲᔦ ᐧᑫᔥᑌ ᑫ ᒌ ᐃᔅᐸᔨᐦᒡ᙮ ᐆ ᒫᒃ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ, ᓇᓈᐦᑰ ᐃᔑ ᑎᑯᓐ ᐁᐃᔑ ᑲᓄᐧᐋᐸᐦᑖᑲᓅᒡ᙮ ᐊᓐ ᓅᔥᑕᒻ ᐧᐋ ᐃᔑ ᒋᔅᑫᐃᐦᑕᒫᐦᒡ ᑫ ᒌ ᐊᑖᐦᑲᐦᐄᑫᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐊᓐ ᑖᓂᑌ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᒋᔅᑕᐦᒋᔒᓅᐦ ᑫ ᒌ ᐲᐦᑌᐸᔨᐦᐧᑳᐤᐦ ᐧᐁᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐊᓐ ᒦᓐ ᑯᑕᒃ ᑫᐧᑳᓐ ᐁ ᐧᐄᐦ ᓂᑑᒋᔅᑫᐃᑕᒫᐦᒡ, ᐁᐅᒄ ᐊᓐ ᐁᑖᐦᑲᐦᐄᑫᐸᔨᐦᐧᑫ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓐ ᐁ ᐃᔥᐱᔑ ᐲᐦᑌᐸᔨᐦᒡ ᐧᐁᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐ ᐊᓂᑌ ᒌᔫᓇᐦᒡ᙮ ᐊᓐ ᒫᒃ ᒫᐦᒋᔅᑕᐃ ᐧᐋ ᐃᔑ ᓂᑐᒋᔅᑫᐃᑕᒫᐦᒡ ᑖᓐ ᐁ ᐃᔥᐱᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐊᓐ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᐲᐦᒋᔫ, ᐊᓂᑌ ᐁ ᐃᐦᑎᑯᐦᒡ ᒋᒥᐦᑯᓈᐦᒡ᙮

1. ᐁ ᑲᓄᐧᐋᐸᐦᑖᑲᓅᐦᒡ ᑫ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᐧᐋᐧᑫᓐᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓐ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᒋᔅᑕᐦᒋᔒᓅᐦ ᐅᐦᒋ ᐊᓐ ᑫ ᒌ ᐲᐦᑌᐸᔨᐦᐧᑳᐤᐦ ᐧᐁᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑌ ᐲᐦᒋᔫ

ᐊᓐ ᐸᔅᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ ᑫᐧᑳᓐ, ᓂᐧᐋ ᓂᑑᒋᔅᑫᐃᑌᓈᓐ ᑖᓐ ᐁᐃᔑ ᐊᑖᐦᑲᐦᐄᑫᐸᔨᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᒥᑕᐦᒋᔒᐦᒡ ᐊᓐᑦ ᐁᓇᔮᐃᒻᔅ ᑳ ᐃᔑᓂᐦᑳᑌᒡ—ᐁᐅᒄ ᐆ ᑫᐧᑳᓐ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑌ ᒥᑕᐦᒋᔒᐦᒡ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᑫ ᒌ ᐲᐦᑌᐸᔨᐦᒡ ᒦᒋᒻ ᑲᔦ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐁᐅᒄ ᐁ ᐧᐄᐦ ᑫᔥᑎᓈᐦᐅᔮᐦᒡ ᐁᑳ ᑫ ᐊᑖᐦᑲᐦᐄᑫᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔫ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐊᓐ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐁᓇᔮᐃᒻᔅ ᑳ ᐃᔑᓂᐦᑳᑌᒡ, ᐁᐅᒄ ᒫᒃ ᐁᑳ ᑫ ᐊᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᐊᓐ ᑫ ᒌ ᐧᐄᒋᐦᐄᑯᔨᐦᒄ ᐁ ᐋᐸᒋᐦᑖᔨᐦᒄ ᐧᐁᒥᔥᑎᑯᔒᐤ ᔒᐧᐋᑲᒥᐦᐧᑫᐤ



C. Report for the Foster lab

(January – May 2009)

Recall that in this lab, we are testing whether the healing plants could interfere with western drugs — or vice-versa. We are looking at this in several different ways. First, we want to know if the plants interfere with how our bodies digest western drugs. Second, we want to know if the plants affect how much western drug we absorb. Finally, we are looking at how long the plant ingredients stay active in our blood.

C. ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᐧᕚᔅᑎᕐ ᓛᑉ ᐋ ᐅᐦᒋᐱᔨᒡ

(ᒋᓈᔮᔅᑯᓂᐲᓯᒼ – ᐋᔑᐧᒫᑯᐲᓯᒻ 2009)

ᐅᑎᐦ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᑯᑦ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᑖᐧᐹ ᒑ ᒌ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒌᑰ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡᐦ ᐧᐋᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ — ᑭᔮ ᒫᒃ ᐧᑳᔥᑖ ᒑ ᒌ ᐃᔅᐱᔨᒡ᙮ ᐆ ᒫᒃ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ, ᓂᓈᐦᑰ ᒑᐧᑳᓐ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐤ᙮ ᐋᐅᒄ ᐊᓐ ᓅᔥᑎᒻ ᐋ ᐧᐄᐦ ᐧᐋᐱᐦᑎᒫᐦᒡ ᒑ ᒌ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐊᓐ ᑖᓂᑖ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᒋᑎᐦᒋᔒᓂᐤᐦ ᒑ ᒌ ᐲᐦᑎᑖᐱᔨᒡᐦ ᐧᐋᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ᙮ ᐊᓐ ᒦᓐ ᑯᑎᒃ ᒑᐧᑳᓐ ᐋ ᐧᐄᐦ ᐧᐋᐱᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᐊᓐ ᑖᐧᐹ ᒑ ᒌ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓐ ᐋ ᐃᔥᐱᔑ ᐲᐦᑎᑖᐱᔨᒡᐦ ᐧᐋᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑖ ᒥᑎᐦᒋᔒᐦᒡ᙮ ᐊᓐ ᒫᒃ ᒫᐦᒋᒡ ᒑᐧᑳᓐ ᐋ ᐧᐄᐦ ᐧᐋᐱᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐃᔥᐱᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ, ᐊᓂᑖ ᐋ ᐃᐦᑎᑯᐦᒡ ᒋᒥᐦᑯᓈᐦᒡ᙮

1. ᐋ ᐧᐄᐦ ᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡ ᒑ ᒌ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᒋᑎᐦᒋᔒᓂᐤᐦ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᐲᐦᑎᑖᐱᔨᒡᐦ ᐧᐋᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ

ᐊᓐ ᐱᔥᒡ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᒑᐧᑳᓐ, ᐋᐅᒄ ᐊᓐ ᐹᔨᑦ ᒑᐧᑳᓐ ᐋ ᐧᐄᐦ ᐧᐋᐱᐦᑎᒫᐦᒡ ᒑ ᒌ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᒥᑎᐦᒋᔒᐦᒡ ᐊᓂᐦᐄ ᐁᓇᔮᐃᒻᔅ ᑳ ᐃᔑᓂᐦᑳᑖᒡᐦ—ᐋᐅᒄ ᐆ ᒑᐧᑳᓐ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑖ ᒥᑎᐦᒋᔒᐦᒡ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᒑ ᒌ ᐲᐦᑎᑖᐱᔨᒡ ᒦᒋᒻ ᑭᔮ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ᙮ ᐋᐅᒄ ᐋ ᐧᐄᐦ ᒑᔥᑎᓈᐦᐅᔮᐦᒡ ᐋᑳ ᒑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐊᓐ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐁᓇᔮᐃᒻᔅ ᑳ ᐃᔑᓂᐦᑳᑖᒡᐦ, ᐋᐅᒄ ᒫᒃ ᐋᑳ ᒑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐊᓐ ᒑ ᒌ ᐧᐄᒋᐦᐄᑯᔨᐦᒄ ᐋ ᐋᐱᒋᐦᑖᔨᐦᒄ ᐧᐋᒥᔥᑎᑯᔒᐤ ᔒᐧᐋᑭᒥᐦᐧᑳᐤ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐋᐅᒄ ᐊᓐ

1. Looking at whether the plants interfere with how we digest western drugs

In some of our tests, we are looking at how the plants affect enzymes—things in our body that help us digest foods and drugs. We want to be sure that the plants don't interfere with the particular enzymes that our bodies use to handle western diabetes drugs. We have been looking at whether it makes a difference how strong a tea you make with the plant. We began by looking at Labrador tea and marsh Labrador tea. Now we are looking at common juniper. We are finding that the plants release more and more ingredients into

ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐁᐅᒄ ᐊᓐ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᐊᓐ ᐁᑎᑑ ᐁ ᒪᔥᑯᐧᐋᑲᒪᒡ ᐁ ᒌ ᑏᐧᔮᐳᐦᒉᓅᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐋᐦᒌᐤᐦ ᒉᐧᑳᓐ ᒉ ᒌ ᐃᔅᐸᔨᐦᒡ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᒡ᙮ ᐁᐅᒄ ᔖᔥ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᑳᒋᒉᐳᒄ ᑲᔦ ᐧᐄᔕᒋᐳᑯᔥᐦ᙮ ᐁᐅᒄ ᑲᔦ ᒣᐧᑳᒡ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᑳᐦᑳᒌᒥᓈᐦᑎᒄ᙮ ᐁᐅᒄ ᒫᒃ ᐁ ᐧᐋᐸᐦᑕᒫᐦᒡ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᐁ ᐧᐄᐧᐄᐸᔨᐦᒡ ᒉᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐊᓐ ᐁᑎᑑ ᒋᓀᐅᔥ ᐁ ᑏᐧᔮᐳᐦᒉᓅᐦᒡ᙮ ᐊᓐ ᒫᒃ ᐁᑎᑑ ᒋᓀᐅᔥ ᐁ ᐅᓯᑲᓅᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐁ ᑏᐧᔮᐳᐦᒉᓅᐦᒡ, ᐁᐅᒄ ᐁᑎᑑ ᐁ ᐃᔑᓈᑯᐦᒡ ᒉ ᒌ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᒡ ᒉ ᒌ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐊᓂᔫᐦ ᑯᑕᒃᐦ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᐋᐸᒋᐦᑖᑲᓅᐦᐧᑳᐤᐦ᙮

2. ᐁ ᓂᑑᒌᔅᒉᐃᑖᑲᓅᐦᒡ ᒉ ᒌ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓐ ᑖᓐ ᐁ ᐃᔥᐱᔑ ᐲᐦᑌᐸᔨᐦᐧᑳᐤᐦ ᐧᐁᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑌ ᐲᐦᒋᔫ

ᐁᐅᒄ ᑲᔦ ᔖᔥ ᑳ ᒋᐦᒋᐸᔨᐦᑖᔮᐦᒡ ᑖᐧᐯ ᒉ ᒌ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔫ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᐲᐦᒡ ᒥᑕᐦᒋᔒᐦᒡ, ᐁᐅᒄ ᐊᓐ ᐋᐦᒌᐤᐦ ᒉ ᒌ ᐃᔅᐸᔨᐦᒡ ᑖᓐ ᐁ ᐃᔥᐱᔑ ᐲᐦᑌᐸᔨᐦᐧᑳᐤᐦ ᐧᐁᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐆ ᒫᒃ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ, ᐁᐅᒄ ᒉ ᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᒉᐧᑳᓐ ᐊᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐊᓂᑌ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ ᐁ ᔖᐳᔅᑳᒉᒪᑲᐦᒡ ᐊᓂᑌ ᒥᑕᐦᒋᔒᐦᒡ᙮ ᐁᑯᑦ ᒫᒃ ᒉ ᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᒉᐧᑳᓐ ᐊᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑌ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ ᒉ ᑖᐦᑲᐦᐅᑯᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐁ ᐱᒫᑎᓰᐧᑖᐤ᙮

3. ᐁ ᑲᓄᐧᐋᑖᑲᓅᐦᒡ ᑖᓐ ᐁ ᐃᔥᐱᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᐲᐦᒋᔫ ᐊᓂᑌ ᐁ ᐃᐦᑎᑯᐦᒡ ᒥᒥᐦᑯᓈᐦᒡ

ᐸᔅᒡ ᐊᓐ ᒉᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ, ᓇᒧᐃ ᒋᓀᐅᔥ ᐃᐦᑎᑯᓐ ᐊᓂᑌ ᒥᐦᑯᐦᒡ, ᐁᑯᑦ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔫ ᐁᓐᔫᐃᒻᔅ ᐁ ᐃᐦᑎᑯᐦᐧᑳᐤᐦ ᐊᓂᑌ ᐲᐦᒋᔫ ᐁ ᐊᑕ ᐱᔦᐦᒋᐦᑖᒉᒪᑲᐦᒡ ᐊᓐ ᐁ ᒌ ᐃᐦᑎᑯᐦᒡ ᒉᐧᑳᓐ ᐲᐦᒋᔫ᙮ ᑯᑕᒃ ᒫᒃ ᒉᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ, ᑮᐹ ᒋᓀᐅᔥ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑌ ᒥᐦᑯᐦᒡ, ᐁᐅᒄ ᒫᒃ ᒋᓀᐅᔥ ᐁ

water over time. So the longer you boil a plant tea, the more likely it is to interfere with other drugs.

2. LOOKING AT WHETHER THE PLANTS AFFECT HOW MUCH WESTERN DRUG WE ABSORB

We are also starting to look at whether the plants act on gut cells to change how well they absorb western drugs. These studies will show which ingredients in the plants enter into gut cells. This will help us predict which ingredients will have effects in live human beings.

ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᐊᓐ ᐊᑎᑑ ᐋ ᒥᔥᑯᐧᐋᑭᒥᒡ ᐋ ᒌ ᑏᐧᔮᐳᐦᒑᓂᐧᐃᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᔨᐦᒡ ᒑᐧᑳᓐ ᒑ ᒌ ᐃᔅᐱᔨᒡ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ᙮ ᐋᐅᒄ ᔖᔥ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᑳᒋᒑᐱᒄ ᑭᔮ ᐧᐄᔑᒋᐱᑯᔥᐦ᙮ ᐋᐅᒄ ᑭᔮ ᒫᐧᑳᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᑲᐦᑳᒌᒥᓈᐦᑎᒄ᙮ ᐋᐅᒄ ᒫᒃ ᐋ ᐧᐋᐱᐦᑎᒫᐦᒡ ᐊᑎᑑ ᒥᔥᑏ ᐋ ᐧᐄᐧᐄᐱᔨᒡ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐊᓐ ᐊᑎᑑ ᓈᐅᔥ ᐋ ᑏᐧᔮᐳᐦᒑᓂᐧᐃᒡ᙮ ᐊᓐ ᒫᒃ ᐊᑎᑑ ᓈᐅᔥ ᐋ ᐅᓯᑭᓂᐧᐃᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐋ ᑏᐧᔮᐳᐦᒑᓂᐧᐃᒡ, ᐋᐅᒄ ᐊᑎᑑ ᐋ ᐃᔑᓈᑯᐦᒡ ᒑ ᒌ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᒑ ᒌ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐊᓂᐦᐄ ᑯᑎᒃᐦ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡᐦ᙮

2. ᐋ ᐧᐄᐦ ᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡ ᒑ ᒌ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓐ ᑖᓐ ᐋ ᐃᔥᐱᔑ ᐲᐦᑎᑖᐱᔨᒡᐦ ᐧᐋᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ

ᐋᐅᒄ ᑭᔮ ᔖᔥ ᑳ ᒋᐦᒋᐱᔨᐦᑖᔮᐦᒡ ᑖᐧᐹ ᒑ ᒌ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᐲᐦᒡ ᒥᑎᐦᒋᔒᐦᒡ, ᐋᐅᒄ ᐊᓐ ᐊᔨᐦᒡ ᒑ ᒌ ᐃᔅᐱᔨᒡ ᑖᓐ ᐋ ᐃᔥᐱᔑ ᐲᐦᑎᑖᐱᔨᒡᐦ ᐧᐋᒥᔥᑎᑯᔒᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ᙮ ᐆ ᒫᒃ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᒑ ᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᒑᐧᑳᓐ ᐊᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐊᓂᑖ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ ᐋ ᔖᐧᐸᐹᐧᐋᐱᔨᒡ ᐊᓂᑖ ᒥᑎᐦᒋᔒᐦᒡ᙮ ᐋᑯᑦ ᒫᒃ ᒑ ᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᒑᐧᑳᓐ ᐊᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑖ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ ᒑ ᑖᐦᑭᐦᐆᑯᒡ ᐊᐧᐋᓂᒌ ᐋ ᐱᒫᑎᓰᒡ᙮

3. ᐋ ᐧᐄᐦ ᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡ ᑖᓐ ᐋ ᐃᔥᐱᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ ᐊᓂᑖ ᐋ ᐃᐦᑎᑯᐦᒡ ᒥᒥᐦᑯᓈᐦᒡ

ᐱᔥᒡ ᐊᓐ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ, ᓂᒧᔨ ᓈᐅᔥ ᐃᐦᑎᑯᓐ ᐊᓂᑖ ᒥᐦᑯᐦᒡ, ᐋᑯᑦ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐊᓂᐦᐄ ᐁᓐᔫᐃᒻᔅ ᐋ ᐃᐦᑎᑯᒡᐦ ᐊᓂᑖ ᐲᐦᒋᔨᐤ ᐋ ᐊᑎ ᐱᔮᐦᒋᐦᑖᒐᒥᑭᐦᒡ ᐊᓐ ᐋ ᒌ ᐃᐦᑎᑯᐦᒡ ᒑᐧᑳᓐ ᐲᐦᒋᔨᐤ᙮ ᑯᑎᒃ ᒫᒃ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ, ᑮᐧᐹ ᓈᐅᔥ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑖ ᒥᐦᑯᐦᒡ, ᐋᐅᒄ ᒫᒃ ᓈᐅᔥ ᐋ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ᙮ ᐊᓐ ᒫᒃ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐋᑳ ᓈᐅᔥ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑖ ᒥᐦᑯᐦᒡ, ᐋᐅᒄ ᓅᐦᑖᔒᔥ

3. LOOKING AT HOW LONG THE PLANT INGREDIENTS STAY ACTIVE IN OUR BLOOD

Some ingredients only stay in the blood for a short time, until our enzymes use them up or get rid of them. Other ingredients may stay in the blood and have effects for a very long time. If an ingredient leaves the blood really quickly, it doesn't have much time to have healing effects. On the other hand, if it stays around for a long time and the person keeps taking more, it could build up to harmful levels. So we want to know if the enzymes act on the plant ingredients to take them out of the blood. We have been testing Labrador tea to

ᑖᐦᑲᐦᐋᒉᐸᔨᐦᒡ᙮ ᐊᓐ ᒫᒃ ᒉᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐁᑳ ᒋᓀᐅᔥ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑌ ᒥᐦᑯᐦᒡ, ᐁᐅᒄ ᓅᐦᑖᔒᔥ ᐁ ᐃᔥᐱᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᒉ ᒋ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᒉ ᒋ ᒦᓄᐧᐋᑎᓰᑦ ᐊᐧᐁᓐ ᐁ ᓂᑐᐦᑯᐦᐄᓱᑦ᙮ ᐊᓐ ᒫᒃ ᒋᓀᐅᔥ ᐁ ᐃᐦᑎᑯᐦᒡ ᒉᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐊᓂᑌ ᒥᐦᑯᐦᒡ, ᐁᑯᑦ ᒉᒃ ᓅᔥᒡ ᒥᔥᑕᐦᐄ ᒉ ᒋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ, ᐁᒄ ᒫᒃ ᒉ ᒋ ᐧᐄᔦᔅᑑᑖᑯᑦ ᐊᐧᐁᓐ᙮ ᐁᐅᒄ ᒫᒃ ᐁ ᐧᐄᐦ ᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᐁ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐊᓂᔫ ᐁᓐᒑᐃᒻᔅ ᒉ ᒋ ᐧᐄᐧᐄᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᒉᐧᑳᔫᐦ ᐁ ᓂᑐᐦᑯᔨᓅᐦᐧᑳᐤᐦ ᐊᓂᑌ ᒥᐦᑯᐦᒡ᙮ ᐁᐅᒄ ᔖᔥ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᑳᒋᒉᐳᒄ ᒉ ᒋ ᐧᐋᐸᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐊᓂᔫ ᐁᓐᒑᐃᒻᔅ᙮ ᓇᓈᐦᑰ ᒫᒃ ᒉᐧᑳᓐ ᓂᒌ ᐧᐋᐸᐦᑌᓈᓐ᙮ ᐸᔅᒡ ᐊᓐ ᒉᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐊᓂᑦ ᑳᒋᒉᐳᑯᐦᒡ, ᐁᐅᒄ ᒋᓀᐅᔥ ᐁ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑌ ᒥᐦᑯᐦᒡ, ᐁᒄ ᒫᒃ ᐸᔅᒡ ᐊᓐ ᒉᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ, ᐧᐄᐸᒡ ᐧᐄᐧᐄᐸᔫ ᐅᐦᒋ ᐊᓐ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐸᔅᒡ ᐁ ᐃᔑᓈᑯᐦᐧᑳᐤᐦ ᐁᓐᒑᐃᒻᔅ᙮

ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᒉᐧᑳᒡ ᐁ ᒪᓯᓇᐦᐄᑲᓅᐦᐧᑳᐤᐦ

ᒉᐧᑳᒡ ᓂᒪᓯᓇᐦᐁᓈᓐ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐋᒉᐸᔨᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᒌ ᑏᐧᔮᐴᐦᒉᓅᐦᒡ ᐊᓂᔫ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐁᓐᒑᐃᒻᔅ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐁᐅᒄ ᐊᓐ "ᐁ ᐄᔑ ᑖᐦᑲᐦᐋᒉᐸᔨᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᒌ ᑏᐧᔮᐴᐦᒉᓅᐦᐧᑳᐤᐦ ᐊᓐ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐯᔭᑯᔨᒡ ᐁᓐᒑᐃᒻ ᐊᓂᑌ ᐲᐦᒋᔫ, ᐁᐅᒄ ᐊᓐ Human Cytochrome P450-Mediated Metabolism ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮"

ᐁᐅᒄ ᒦᓐ ᑳ ᒪᓯᓇᐦᐊᒫᐦᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐊᓐ ᑖᓂᑌ ᒫᐅᒡ ᐁ ᒥᐧᔮᒡ ᒉ ᒋ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᒡ ᑯᕒᔅᑎᓐ Quercetin ᑳ ᐃᔑᓂᐦᑳᑌᒡ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᒉᐧᑳᓐ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ ᐊᓂᔫ ᐊᐧᐁᓰᓯᒡ ᐁ ᐋᐸᒋᐦᐋᑲᓅᐧᑖᐤ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ (ᐊᓐ ᑯᕒᔅᑎᓐ ᑳ ᐃᔑᓂᐦᑳᑌᒡ ᒉᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ, ᐁᐅᒄ ᐊᓐ ᐯᔭᑯᔨᒡ ᒉᐧᑳᓐ ᐁ ᐃᔑᓈᑯᐦᒡ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐊᓂᑌ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ ᐁ ᐃᐦᑎᑯᐦᒡ᙮) ᐊᓂᑌ ᒫᒃ ᑯᑕᑲᒡ ᐊᐧᐁᓂᒌ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᔫᒄ ᒉ ᐧᐄᒋᐦᐄᑯᐧᑖᐤ ᐅᔫ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᔫ, ᐁᐅᒄ ᒫᒃ ᐯᔭᑯᓂᐦᒡ ᒉ ᐃᔑᓈᑯᐦᒡ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᒉᐧᑳᓐ᙮

ᐋ ᐃᔥᐱᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᒑ ᒋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᒑ ᒋ ᒦᓄᐧᐋᑎᓰᑦ ᐊᐧᐋᓐ ᐋ ᓂᑐᐦᑯᐦᐄᓱᑦ᙮ ᐊᓐ ᒫᒃ ᓅᐅᔥ ᐋ ᐃᐦᑎᑯᐦᒡ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐊᓂᑖ ᒥᐦᑯᐦᒡ, ᐋᑯᑦ ᒑᒃ ᓅᔥᒡ ᒥᔥᑏ ᒑ ᒋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑖ ᐲᐦᒋᔨᐤ, ᐋᒄ ᒫᒃ ᒑ ᒋ ᐱᐦᒋᐳᐦᐄᑯᑦ ᐊᐧᐋᓐ᙮ ᐋᐅᒄ ᒫᒃ ᐋ ᐧᐄᐦ ᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᐋ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐊᓂᐦᐄ ᐁᓐᒑᐃᒻᔅ ᒑ ᒋ ᐧᐄᐧᐄᐱᔨᒡᐦ ᐊᓂᐦᐄ ᒑᐧᑳᓂᐦᐄ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡᐦ ᐊᓂᑖ ᒥᐦᑯᐦᒡ᙮ ᐋᐅᒄ ᔖᔥ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᑳᒋᒑᐱᒄ ᒑ ᒋ ᐧᐋᐱᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐊᓂᐦᐄ ᐁᓐᒑᐃᒻᔅ᙮ ᓂᓈᐦᑰ ᒫᒃ ᒑᐧᑳᓐ ᓂᒌ ᐧᐋᐱᐦᑖᓈᓐ᙮ ᐱᔥᒡ ᐊᓐ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐊᓂᑦ ᑳᒋᒑᐱᑯᐦᒡ, ᐋᐅᒄ ᓅᐅᔥ ᐋ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑖ ᒥᐦᑯᐦᒡ, ᐋᒄ ᒫᒃ ᐱᔥᒡ ᐊᓐ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ, ᐧᐄᐱᒡ ᐧᐄᐧᐄᐱᔨᐤ ᐅᐦᒋ ᐊᓐ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐱᔥᒡ ᐋ ᐃᔑᓈᑯᒡᐦ ᐁᓐᒑᐃᒻᔅ᙮

ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᒑᐧᑳᒡ ᐋ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡᐦ

ᒑᐧᑳᒡ ᓂᒥᓯᓂᐦᐊᓈᓐ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᒋ ᑏᐧᔮᐴᐦᒑᓂᐧᐃᒡ ᐊᓂᔫ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐁᓐᒑᐃᒻᔅ ᐊᓂᑖ ᐲᐦᒋᔨᐤ᙮ ᐋᐅᒄ ᐊᓐ "ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᒋ ᑏᐧᔮᐴᐦᒑᓂᐧᐃᒡᐦ ᐊᓐ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐹᔨᑯᔨᒡ ᐁᓐᒑᐃᒻ ᐊᓂᑖ ᐲᐦᒋᔨᐤ, ᐋᐅᒄ ᐊᓐ Human Cytochrome P450-Mediated Metabolism ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮"

ᐋᐅᒄ ᒦᓐ ᑳ ᒥᓯᓂᐦᐊᒫᐦᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓐ ᑖᓂᑖ ᒫᐅᒡ ᐋ ᒥᐧᔮᒡ ᒑ ᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᑯᕒᔅᑎᓐ Quercetin ᑳ ᐃᔑᓂᐦᑳᑖᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᒑᐧᑳᓐ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ ᐊᓂᔮ ᐊᐅᐦᑳᓂᒡ ᐋ ᐋᐱᒋᐦᐊᑭᓂᐧᐃᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ (ᐊᓐ ᑯᕒᔅᑎᓐ ᑳ ᐃᔑᓂᐦᑳᑖᒡ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ, ᐋᐅᒄ ᐊᓐ ᐹᔨᑯᔨᒡ ᒑᐧᑳᓐ ᐋ ᐃᔑᓈᑯᐦᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐊᓂᑖ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ ᐋ ᐃᐦᑎᑯᐦᒡ᙮) ᐊᓂᑖ ᒫᒃ ᑯᑎᑭᒡ ᐊᐧᐋᓂᒌ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᔦᐧᐃᒄ ᒑ ᐧᐄᒋᐦᐄᑯᒡ ᐅᔮ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᔨᐤ, ᐋᐅᒄ ᒫᒃ ᐹᔨᑯᓂᐦᒡ ᒑ ᐃᔑᓈᑯᐦᒡ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᒑᐧᑳᓐ᙮

see how the enzymes act on it. So far, the results are mixed. Some of the ingredients in Labrador tea seem to stay around in the blood, while others get used up by various enzymes.

ARTICLES BEING DRAFTED

We are starting to write an article about how the plant teas affect enzymes. It will be called

"The Effect of Leisure and Medicinal Teas on the Activity of Human Cytochrome P450-Mediated Metabolism."

We also wrote a paper about the best way to look at Quercetin in animal studies. (Quercetin is one of the ingredients we found in the plants.) The other researchers in the project will use this paper, so that we all do our tests the same way.

POSTER PRESENTATIONS

People in this lab will present posters at some meetings in June. The first poster talks about how the plants affect the enzymes. The second one talks whether plants might affect how cells absorb other diabetes drugs. The posters titles are:

ᒪᓯᓇᐦᐄᑲᓐᐦ ᐁ ᐧᐋᐸᐦᑏᐧᐋᓅᐦᐧᑳᐤᐦ

ᐅᒌ ᐁ ᐃᐦᑖᐧᑖᐤ ᐋᐧᐁᓂᒌ ᐁ ᐋᐸᑎᓰᐧᑖᐤ ᐁ ᓂᑑᒋᐢᑫᔨᐦᑕᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᔫᒄ ᑫ ᐧᐋᐸᐦᑏᐧᐁᐧᑖᐤ ᒪᓯᓇᐦᐄᑲᓐᐦ ᐁ ᐧᐋᐸᐦᑏᐧᐋᓅᐦᐧᑳᐤᐦ ᑫᐧᑳᒡ ᐁ ᓂᔥᑐᐧᐄᓈᓅᐦᒡ ᐧᐋᐱᑯᓂᐲᓯᒼ ᐁ ᐃᐢᐸᔨᐦᒡ᙮ ᐊᓐ ᓅᔥᑕᒼ ᒪᓯᓇᐦᐄᑲᓐ, ᐁᐅᒄ ᐊᓐ ᐁ ᒪᓯᓈᑌᒡ ᑖᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑌ ᐁ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐁᓇᓵᐃᒼᐢ ᐊᓂᑌ ᐲᐦᒋᔫ ᑳ ᐃᐦᑎᑯᐦᐧᑳᐤᐦ᙮ ᐊᓐ ᒦᓐ ᑯᑕᒃ, ᐁᐅᒄ ᐁ ᒪᓯᓈᑌᒡ ᑖᓐ ᑫ ᒌ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑫ ᒌ ᐱᐦᑌᐸᔨᐦᐧᑳᐤᐦ ᔒᐧᐋᑲᒥᐦᐧᑳᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐅᔫᐦ ᒫᒃ ᒪᓯᓇᐦᐄᑲᓐᐦ, ᐁᐅᑯᓐᐦ ᐅᔫᐦ:

- ᒋᑳ ᒌ ᓇᑳᐦᐄᑫᐸᔫᐦᐊ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᒌ ᑏᐧᔖᐳᐦᑫᓅᐦᐧᑳᐤᐦ ᐅᐦᒋ ᐊᓐ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ Cytochrome P450 3A4 ᐊᓐ ᑳ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ? ᐆ ᒫᒃ ᒪᓯᓇᐦᐄᑲᓐ, ᐁᐅᒄ ᑫ ᐧᐋᐸᐦᑏᐧᐋᓅᐦᒡ ᐊᓂᑌ ᐁ ᓂᔥᑐᐧᐄᓈᓅᐦᒡ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᐋᔨᒧᑖᑲᓅᐦᒡ, ᐧᐋᐱᑯᓂᐲᓯᒼ June 3-6, 2009᙮ ᐁᔫᒄ ᑳ ᐅᔑᐦᑖᐧᑖᐤ ᑎᓅᓵ ᑖᒼ, ᓅᐤ ᓛᐤ, ᐱᔦᕐ ᐦᐋᑖᑦ, ᐧᒑᓐ ᐋᕐᓈᓯᓐ, ᑲᔦ ᐸᕿᔨᓐ ᐧᐹᔥᑎᕐ᙮
- ᐯᔮᒄ ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓐ ᑖᐦᑲᐦᐄᑫᐸᔫ ᐊᓐ ᐁ ᐄᔑ ᐱᒥᐸᔨᐦᐄᓱᒪᑲᐦᒡ Caco-2 cells ᑳ ᐃᔑᓂᐦᑳᑌᐦᐧᑳᐤᐦ ᑫᐧᑳᔫᐦ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐁᐅᒄ ᐆ ᔮᐸᒡ ᑫ ᐧᐋᐸᐦᑏᐧᐋᓅᐦᒡ ᐆ ᐁ ᓂᔥᑐᐧᐄᓈᓅᐦᒡ᙮ ᐁᔫᒄ ᐅᔫ ᑳ ᐅᔑᐦᑖᐧᑖᐤ ᐅᒃᐧᕋᑖᐅᒋᒃ, ᒪᒃᐧᑖᓇᓪ, ᐧᐹᐯᔥᑯ, ᒧᐦᐋᒫᑦ, ᐧᐋᓪᔥ-ᕈᓭᓪ, ᓵᓖᒼ, ᐧᐹᔥᑎᕐ, ᑲᔦ ᐋᕐᓈᓯᓐ᙮

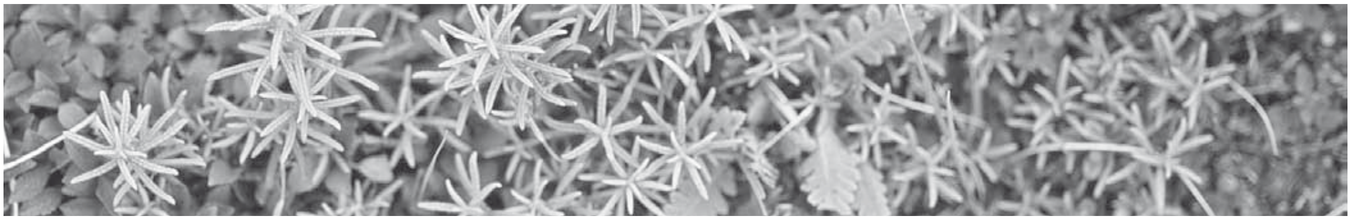
ᐁᐅᒄ ᐆ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᐅᐦᒋ ᐊᓐ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᑳ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᑳ ᒪᓯᓇᐦᐄᑲᓄᐧᐃᐦᒡ ᐊᓂᑌ ᐧᐹᔥᑎᕐ ᑖᐸ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮

ᒥᓯᓂᐦᐄᑭᓐᐦ ᐋ ᐧᐋᐱᐦᑏᐧᐋᓂᐧᐃᒡᐦ

ᐅᒌ ᐋ ᐃᐦᑖᒡ ᐊᐧᐋᓂᒌ ᐋ ᐋᐱᑎᓰᒡ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑎᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᔫᐧᐃᒄ ᒑ ᐧᐋᐱᐦᑏᐧᐋᒡ ᒥᓯᓂᐦᐄᑭᓐᐦ ᐋ ᐧᐋᐱᐦᑏᐧᐋᓂᐧᐃᒡᐦ ᒑᐧᑳᒡ ᐋ ᓂᔥᑐᔨᓈᓂᐧᐃᒡ ᒧᓵᐧᐋᐦᔕᐅᐲᓯᒧ ᐋ ᐃᐢᐱᔨᒡ᙮ ᐊᓐ ᓅᔥᑎᒼ ᒥᓯᓂᐦᐄᑭᓐ, ᐋᐅᒄ ᐊᓐ ᐋ ᒥᓯᓈᑖᒡ ᑖᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑖ ᐋ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐁᓇᓵᐃᒼᐢ ᐊᓂᑖ ᐲᐦᒋᔫᐤ ᑳ ᐃᐦᑎᑯᒡᐦ᙮ ᐊᓐ ᒦᓐ ᑯᑎᒃ, ᐋᐅᒄ ᐋ ᒥᓯᓈᑖᒡ ᑖᓐ ᒑ ᒌ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒌ ᐱᐦᑎᑖᐱᔨᒡᐦ ᔒᐧᐋᑭᒥᐦᐧᑳᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᓂᑖ ᐲᐦᒋᔫᐤ᙮ ᐅᐦᐄ ᒫᒃ ᒥᓯᓂᐦᐄᑭᓐᐦ, ᐁᐅᑯᓐᐦ ᐅᐦᐄ:

- ᒋᑭ ᒌ ᓂᑳᐦᐄᒑᐱᔨᐤᐦᐊ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᒌ ᑏᐧᔖᐳᐦᒑᓂᐧᐃᒡᐦ ᐅᐦᒋ ᐊᓐ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ Cytochrome P450 3A4 ᐊᓐ ᑳ ᐃᐦᑎᑯᐦᒡ ᐊᓂᑖ ᐲᐦᒋᔫᐤ? ᐆ ᒫᒃ ᒥᓯᓂᐦᐄᑭᓐ, ᐋᐅᒄ ᒑ ᐧᐋᐱᐦᑏᐧᐋᓂᐧᐃᒡ ᐊᓂᑖ ᐋ ᓂᔥᑐᐧᐄᓈᓂᐧᐃᒡ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᐋᔨᒧᑖᑭᓂᐧᐃᒡ, ᐧᐋᐱᑯᓂᐲᓯᒼ June 3-6, 2009᙮ ᐋᔫᐧᐃᒄ ᑳ ᐅᔑᐦᑖᒡ ᑎᓅᓵ ᑖᒼ, ᓅᐤ ᓛᐤ, ᐱᔦᕐ ᐦᐋᑖᑦ, ᐧᒑᓐ ᐋᕐᓈᓯᓐ, ᑭᔮ ᐱᕿᔨᓐ ᐧᐹᔥᑎᕐ᙮
- ᐹᔨᒄ ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓐ ᑖᐦᑭᐦᐄᒑᐱᔫ ᐊᓐ ᐋ ᐄᔑ ᐱᒥᐱᔨᐦᐄᓱᒥᑭᐦᒡ Caco-2 cells ᑳ ᐃᔑᓂᐦᑳᑖᒡᐦ ᒑᐧᑳᓂᐦᐄ ᐊᓂᑖ ᐲᐦᒋᔫᐤ᙮ ᐋᐅᒄ ᐆ ᐊᔮᐱᒡ ᒑ ᐧᐋᐱᐦᑏᐧᐋᓂᐧᐃᒡ ᐆ ᐋ ᓂᔥᑐᐧᐄᓈᓂᐧᐃᒡ᙮ ᐋᔫᐧᐃᒄ ᐅᔮ ᑳ ᐅᔑᐦᑖᒡ ᐅᒃᐧᕋᑖᐅᒋᒃ, ᒥᒃᐧᑖᓂᓪ, ᐧᐹᐯᔥᑯ, ᒧᐦᐋᒫᑦ, ᐧᐋᓪᔥ-ᕈᓭᓪ, ᓵᓖᒼ, ᐧᐹᔥᑎᕐ, ᑭᔮ ᐋᕐᓈᓯᓐ᙮

ᐋᐅᒄ ᐆ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᑖᒡ ᐅᐦᒋ ᐊᓐ ᐊᑎᑑ ᒥᔥᑏ ᑳ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᑳ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡ ᐊᓂᑖ ᐧᐹᔥᑎᕐ ᑖᐸ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮



- Can Teas Inhibit Cytochrome P450 3A4? This poster will be presented at the Canadian Society for Pharmaceutical Sciences conference, June 3-6, 2009. It was prepared by Teresa Tam, Riu Liu, Pierre Haddad, John Arnason, and Brian Foster.
- A Cree anti-diabetic botanical alters gene transcript changes in Caco-2 cells. This poster will be presented at the same conference. It was prepared by Ogrodowczyk, McDonald, Popesku, Muhammad, Walshe-Roussel, Saleem, Foster, and Arnason.

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

ᒪᓯᓇᐦᐄᑫᐧᐃᓐᐦ | ᒥᓯᓂᐦᐄᓛᐧᐃᓐᐦ Notes

D. ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐊᓂᑌ ᐯᓂᑦ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᐅᐦᒋᐸᔨᐦᒡ

(ᐧᐄᐧᐄᒪᑲᓂᐲᓯᒻ – ᐧᒫᑯᐲᓯᒻ 2009)

ᐁ ᑎᐹᑐᑌᒡ

ᐅᑌ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᐅᒄ ᐁ ᐃᔑ ᓂᑑᒋᐢᒉᐃᑕᑲᓅᐦᒡ ᑖᐧᐯ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁᑳ ᒉ ᒌ ᐅᓈᑕᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ ᐊᓂᔫ ᐁ ᐅᔥᑖᐸᔨᐦᐄᑯᑦ ᐊᐧᐁᓐ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᑦ᙮ ᐊᓂᔫ ᓈᔥᒡ ᓃᐦᑖᐦᒡ ᓄᔥᑦ ᒫᒃ ᓈᔥᒡ ᐄᔥᐱᒥᐦᒡ ᐁ ᐃᐦᑎᑯᓂᔨᒡ ᐊᐧᐁᓐ ᔔᑳᔫ ᐅᒥᐦᑯᐦᒡ, ᐁᑯᑦ ᒉ ᒌ ᐅᓈᑕᓂᔨᒡ ᐊᐧᐁᓐ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᑦ—ᐁᐅᒄ ᐆ ᐁ ᐃᐢᐸᔨᑦ ᐊᐧᐁᓐ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᑦ᙮ ᐊᓂᔫ ᒫᒃ ᐁ ᐊᑕ ᐅᓈᑕᓂᔨᒡ ᐊᐧᐁᓐ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᑦ, ᐁᑯᑦ ᒉ ᒌ ᐧᐄᓴᑲᒪᐦᒋᐦᐅᑦ ᐅᓯᑦᐦ ᑲᔪ ᐅᑕᐦᒌᐦ, ᐁ ᒫᐢᒋᐸᔨᑦ, ᑲᔪ ᐁᑳ ᒌ ᒥᔪᐱᒧᐦᑌᑦ᙮ ᐁᑯᑦ ᑲᔪ ᒉ ᒌ ᐅᓈᑕᓂᔨᒡᐦ ᐊᐧᐁᓐ ᐅᔥᒌᔑᒄᐦ ᑲᔪ ᑯᑕᒋᔫ ᒉᐧᑳᔫ ᒉ ᒌ ᐅᔥᑖᐸᔨᐦᐄᑯᑦ ᐅᒥᔪᐱᒫᑎᓯᐧᐃᓂᐦᒡ᙮ ᐁᐅᒄ ᒫᒃ ᐁ ᓂᑑᒋᐢᒉᔨᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ᙮ ᐁᐅᒄ ᓈᔥᒡ ᐯᐦᑳᒡ ᐁ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑕᒫᐦᒡ ᐆ, ᐁᐅᒄ ᐊᓐ ᐁ ᑲᓇᐧᐋᐸᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐃᐢᐸᔨᐦᒡ ᐲᐦᒡ ᐊᓂᑌ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ ᐊᓐ ᐊᐦᒌᐤᐦ ᒉ ᒌ ᐃᐢᐸᔨᐦᒡ ᒉᐧᑳᓐ ᐊᓐ ᐁ ᐊᑕ ᐅᓈᑕᐦᒡ᙮

ᐁ ᓂᑑᒋᐢᒉᐃᒫᑲᓄᑦ ᐄᓈᐦᑎᒄ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᐁᑳ ᒉ ᒌ ᐅᓈᑕᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ

ᐊᓂᑌ ᒫᒃ ᐋᕐᓈᓯᓐ ᑲᔪ ᑰᓇᔪᐃ ᓛᐸᐢ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᐅᒄ ᑳ ᐧᐋᐧᐋᐸᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᑦ ᐄᓈᐦᑎᒄ ᐁᑳ ᓈᔥᒡ ᒥᔥᑕᐦᐄ ᒉ ᒌ ᐅᓈᑕᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ ᐅᐦᒋ ᐊᓐ ᓈᔥᒡ ᐄᔥᐱᒥᐦᒡ ᓄᔥᑦ ᓈᔥᒡ ᓃᐦᑖᐦᒡ ᐁ ᐃᐦᑎᑯᐦᒡ ᔔᑳᐤ ᐊᓂᑌ ᒥᐦᑯᐦᒡ᙮ ᐧᒫᐅᔫ ᒫᒃ ᑳ ᐃᔑ ᓂᑑᒋᐢᒉᐃᑕᐦᒃ ᐋᔥᓖ ᑖᐅᓃᓐ ᐊᓂᔫ ᐊᐦᒌᐤᐦ ᒉ ᒌ ᐃᑌᔨᑖᑯᓯᑦ ᐁ ᐄᔑ ᓂᑐᐦᑯᐃᓄᔨᐦᒡ ᐅᔫᐦ ᒥᔥᑎᑯᐦ ᐅᐦᒋ ᐊᓂᔫ:

D. ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᐯᓂᑦ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᐦᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᐅᐦᒋᐱᔨᒡ

(ᒋᓵᔮᐢᑯᓂᐲᓯᒼ – ᐋᔑᐧᒫᑯᐲᓯᒻ 2009)

ᐋ ᑎᐹᑐᑖᒡ

ᐅᑖ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᐦᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᐅᒄ ᐋ ᐧᐄᐦ ᐧᐋᐧᐋᐱᐦᑎᑭᓂᐧᐃᒡ ᑖᐧᐹ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋᑳ ᒑ ᒌ ᐅᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᓈᓂᐧᐃᒡ ᐊᓂᔮ ᐋ ᐅᔥᑖᐱᔨᐦᐄᑯᑦ ᐊᐧᐋᓐ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᑦ᙮ ᐊᓂᔮ ᓈᔥᒡ ᓃᐦᑖᐦᒡ ᑭᔮ ᒫᒃ ᓈᔥᒡ ᐄᔥᐱᒥᐦᒡ ᐋ ᐃᐦᑎᑯᓂᔨᒡ ᐊᐧᐋᓐ ᔔᑳᔨᐤ ᐅᒥᐦᑯᐦᒡ, ᐋᑯᑦ ᒑ ᒌ ᐅᓈᑎᓂᔨᒡ ᐊᐧᐋᓐ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᑦ—ᐋᐅᒄ ᐆ ᐋ ᐃᐢᐱᔨᑦ ᐊᐧᐋᓐ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᑦ᙮ ᐊᓂᔮ ᒫᒃ ᐋ ᐊᑎ ᐅᓈᑎᓂᔨᒡ ᐊᐧᐋᓐ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᑦ, ᐋᑯᑦ ᒑ ᒌ ᐧᐄᓯᑭᒥᐦᒋᐦᐅᑦ ᐅᓯᑦᐦ ᑭᔮ ᐅᑎᐦᒌᐦ, ᐋ ᒫᐢᒋᐱᔨᑦ, ᑭᔮ ᐋᑳ ᒌ ᒥᔪᐱᒧᐦᑖᑦ᙮ ᐋᑯᑦ ᑭᔮ ᒑ ᒌ ᐅᓈᑎᓂᔨᒡᐦ ᐊᐧᐋᓐ ᐅᔥᒌᔑᒄᐦ ᑭᔮ ᑯᑎᒋᔨᐤ ᒑᐧᑳᔨᐤ ᒑ ᒌ ᐅᔥᑖᐱᔨᐦᐄᑯᑦ ᐅᒥᔪᐱᒫᑎᓯᐧᐃᓂᐦᒡ᙮ ᐋᐅᒄ ᒫᒃ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡᐦ ᐊᓂᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᓈᓂᐧᐃᒡ᙮ ᐋᐅᒄ ᓈᔥᒡ ᐹᐦᑳᒡ ᐋ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑎᒫᐦᒡ ᐆ, ᐋᐅᒄ ᐋᓐ ᐋ ᐧᐋᐧᐋᐱᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐃᐢᐱᔨᒡ ᐲᐦᒡ ᐊᓂᑖ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᓈᓂᐧᐃᒡ ᐊᓐ ᐊᔨᐦᒡ ᒑ ᒌ ᐃᐢᐱᔨᒡ ᒑᐧᑳᓐ ᐊᓐ ᐋ ᐊᑎ ᐅᓈᑎᐦᒡ᙮

ᐋ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡ ᐄᔮᐦᑎᒄ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᐋᑳ ᒑ ᒌ ᐅᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᓈᓂᐧᐃᒡ

ᐊᓂᑖ ᒫᒃ ᐋᕐᓈᓯᓐ ᑭᔮ ᑰᓇᔪᐃ ᓛᐸᐢ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᐦᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᐅᒄ ᑳ ᐧᐋᐧᐋᐱᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᐄᔮᐦᑎᒄ ᐋᑳ ᓈᔥᒡ ᒥᔥᑏ ᒑ ᒌ ᐅᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᓈᓂᐧᐃᒡ ᐅᐦᒋ ᐊᓐ ᓈᔥᒡ ᐄᔥᐱᒥᐦᒡ ᑭᔮ ᓈᔥᒡ ᓃᐦᑖᐦᒡ ᐋ ᐃᐦᑎᑯᐦᒡ ᔔᑳᐤ ᐊᓂᑖ ᒥᐦᑯᐦᒡ᙮ ᒫᐅᔮ ᒫᒃ ᑳ ᐧᐋᐧᐋᐱᐦᑎᐦᒃ ᐋᔥᓖ ᑖᐅᓃᓐ ᐊᓂᔮ ᐊᔨᐦᒡ ᒑ ᒌ ᐄᔑ ᓂᑐᐦᑯᓰᐦᒡ ᐅᔮᐦ ᒥᔥᑎᑯᐦ ᐅᐦᒋ ᐊᓂᔮ:

D. Report for the Bennett Lab

(January – May 2009)

Background

This lab focuses on whether the healing plants can help prevent the nerve damage that diabetes causes. Nerve cells get hurt when blood sugar is either too low or too high—which happens with diabetes. This damage can lead to pain in the feet and hands, lameness, and trouble walking. It can also cause eye problems and other kinds of problems. In this lab, we have been looking at how the healing plants affect nerve cells. We are also looking more closely at what happens inside a nerve cell to set off changes that end by doing damage.

Looking at black spruce and protection of nerve cells

With the Arnason and Cuerrier labs, we have been looking at how black spruce protects cells against damage from too much or too little sugar. Ashleigh Downing has been looking at whether the tree has different effects depending on:

- whether it grows near the coast or inland (Waskaganish or Mistissini)

- ᐋᐦᒌᐤᐦ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᑦ ᐊᓐ ᒥᔥᑎᒄ, ᐊᓂᑌ ᐯᔓᒡ ᐧᐄᓂᐯᑯᐦᒡ ᓀᔥᑦ ᒫᒃ ᓅᐦᒋᒦᐦᒡ (ᐧᐋᔅᑳᐦᐄᑲᓂᔥ ᓀᔥᑦ ᒥᔅᑎᓯᓃ)
- ᐋᐦᒌᐤᐦ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᑦ ᐊᓐ ᒥᔥᑎᒄ, ᐊᓂᑌ ᒪᔅᒉᑯᐦᒡ ᓀᔥᑦ ᒫᒃ ᐸᑯᒡ
- ᑖᓐ ᐁᑎᑑ ᒉ ᒥᔪᐸᔨᐦᒡ ᐁ ᓂᑐᐦᑯᔨᓂᐦᒉᓅᐦᒡ, ᐁᐅᒄ ᐊᓐ ᐧᐄᔫᒌ, ᓀᔅᑦ ᐊᔥᑖᐦᑯᓐ, ᓀᔥᑦ ᒫᒃ ᐅᔥᐧᑫᒎᔥ

ᐊᓂᔫ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᐋᔥᓵ, ᐁᔫᒄ ᑳ ᒥᔅᑯᐧᐋᐦᑖᑦ ᒥᓯᐧᐁ ᐊᓐ ᐁ ᐃᓯᓈᑯᓯᑦ ᐄᓈᐦᑎᒄ (ᐊᔥᑖᐦᑯᓂᒡ, ᐅᔥᐧᑫᒎᔥ, ᑲᔦ ᐧᐄᔫᒌ) ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᒉ ᐅᐦᒋ ᓈᑲᑐᐧᐁᔨᐦᑕᒧᒪᑲᐦᒡ ᐁᑳ ᒉ ᒌ ᐅᓈᑕᐦᒡ ᐊᓐ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ ᐊᓐ ᓈᔥᒡ ᐄᔥᐱᒥᐦᒡ ᐁ ᐃᐦᑎᑯᐦᒡ ᔔᑳᐤ᙮ ᐊᓐ ᐅᔥᐧᑫᒎᔥ ᑲᔦ ᐧᐄᔫᒌ, ᐁᐅᒄ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ, ᐃᔥᐱᔑ ᐧᐄ ᐊᓐ ᐊᔥᑖᐦᑯᓐ᙮ ᑮᐹ ᑳ ᑯᔥᑯᐦᐄᑯᔮᐦᒡ ᐆ, ᐧᐁᓯᓐ ᐧᑫᔥᑌ ᐃᓯᓈᑯᓰ ᐊᓐ ᒥᓇᐦᐄᒄ᙮ ᐁᐅᒄ ᒫᒃ ᐆ ᐁ ᐧᐋᐸᐦᑕᒥᐦᒄ ᐋᑕ ᔮᐸᒡ ᒉᑳᑦ ᐁ ᐃᓯᓈᑯᓯᐧᑖᐤ ᒥᔥᑎᑯᐦᒡ, ᐋᐦᒌᐤᐦ ᒋᑳ ᒌ ᓂᑐᐦᑯᔨᓅ᙮

ᐁᐅᒄ ᒉᒃ ᑳ ᑲᓄᐧᐋᐸᐦᑕᒫᐦᒡ ᐋᐦᒌᐤᐦ ᒉ ᐄᔑ ᓂᑐᐦᑯᓰᑦ ᐄᓈᐦᑎᒄ ᐅᐦᒋ ᐊᓂᑌ ᐋᐦᒌᐤᐦ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᑦ᙮ ᐁᐅᒄ ᒫᒃ ᑳ ᐃᔑ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᒡ ᐯᔨᑯᓐᒡ ᐁᔨᑌᔨᑖᑯᓃᒡ ᐁᐃᔑ ᓂᑕᐦᑯᐧᐄᓅᑦ ᑖᓂᑦ ᒥᒄ ᐁ ᐊᑕ ᓂᐦᑖᒋᑦ, ᐁᒄ ᒥᒄ ᐊᓐᑦ ᐁᐊᔥᑖᐦᑯᓅᑦ ᒌ ᓂᑐᐦᑯᔨᓅ ᐊᓂᑌ ᓅᐦᒋᒦᐦᒡ ᐁ ᒌ ᓂᐦᑖᐅᒋᑦ᙮ ᐸᔅᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐧᐄᒋᐦᐄᐧᐁᐸᔫᐦ ᒉ ᓈᑲᑐᐧᐁᔨᐦᑕᒧᒪᑲᐦᒡ ᐁᑳ ᒉ ᒌ ᐅᓈᑕᐦᒡ ᒉᐧᑳᓐ ᐲᐦᒋᔫ, ᒥᒄ ᑎᑯᓐ ᔮᐸᒡ ᐁᔨᔅᐸᐃᒡ ᐁᐅᔑᐦᐅᒪᑲᒡ ᐊᓐ ᒉᐧᑳᓐ ᑳ ᐧᐄ ᑲᓄᐧᐁᔨᑖᑲᓄᒡ ᓇᒧᐧᐄ ᒫᒃ ᔮᐱᒡ ᒥᐧᔮᐤ ᐆ ᐁᐃᔑᐸᐃᒡ᙮ ᐁᐅᒄ ᒫᒃ ᐆ ᑲᔦ ᑳ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ, ᐁᐅᒄ ᒫᒃ ᑲᐃᔑ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᒡ ᐊᓐ ᐧᐄᔫᒌ ᐁᔨᔅᐸᐃᐦᐄᐧᐁᒡ ᐁᐅᔑᐦᐅᒪᑲᒡ ᐊᓐ ᒉᐧᑳᓐ ᑳ ᐧᐄ ᑲᓄᐧᐁᔨᑖᑯᒡ, ᑕᑯᓃᔫ ᐊᓐᑦ ᐁᔨᑌᔨᑖᑯᓃᒡ ᐧᐁᐦᒡ ᐃᔅᐸᐃᒡ ᐆᔪ᙮ ᓇᒧᐃ ᐅᐦᒋ ᐃᔅᐸᔫ ᐊᓐ ᐁ ᐋᐸᒋᓯᑦ ᐊᔥᑖᐦᑯᓐ᙮ ᐁᐅᒄ ᒫᒃ ᐁᑎᑑ ᒋᐹᐦ ᒥᐧᔮᔓ ᐁ ᓂᑐᐦᑯᔨᐦᒉᓅᐦᒡ ᐊᔥᑖᐦᑯᓐᒡ ᒉ ᒌ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᒉ ᐅᐦᒋ ᓈᑲᑐᐧᐁᔨᐦᑕᒧᒪᑲᐦᒡ ᐁᑳ ᒉ ᒌ ᐅᓈᑕᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ᙮

- ᐊᔨᐦᒡ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᑦ ᐊᓐ ᒥᔥᑎᒄ, ᐋᑯᑖ ᐊᓂᑖ ᐹᔓᒡ ᐧᐄᓂᐹᑯᐦᒡ ᑭᔮ ᒫᒃ ᓅᐦᒋᒦᐦᒡ (ᐧᐋᔅᑳᐦᐄᑭᓂᔥ ᑭᔮ ᒥᔅᑎᓯᓃ)
- ᐊᔨᐦᒡ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᑦ ᐊᓐ ᒥᔥᑎᒄ, ᐋᑯᑖ ᐊᓂᑖ ᒥᔅᒑᑯᐦᒡ ᑭᔮ ᒫᒃ ᐱᑯᒡ
- ᑖᓐ ᐊᑎᑑ ᒑ ᒥᔪᐱᔨᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐦᒑᓂᐧᐃᒡ, ᐋᐅᒄ ᐊᓐ ᐧᐄᔫᒌ, ᔑᐦᑖᐦᑯᓈᐹᐦᑎᒄᐦ, ᑭᔮ ᒫᒃ ᐅᔥᐧᑳᒍᔥ

ᐊᓂᔮ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᐋᔥᓵ, ᐋᔪᐧᐃᒄ ᑳ ᒥᔅᑯᐧᐋᐦᑖᑦ ᒥᓯᐧᐋ ᐊᓐ ᐋ ᐃᓯᓈᑯᓯᑦ ᐄᔮᐦᑎᒄ (ᔑᐦᑖᐦᑯᓈᐱᒄᐦ, ᐅᔥᐧᑳᒍᔥ, ᑭᔮ ᐧᐄᔫᒌ) ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᒑ ᐅᐦᒋ ᓈᑭᑐᐧᐋᔨᐦᑎᒧᒥᑭᐦᒡ ᐋᑳ ᒑ ᒌ ᐅᓈᑎᐦᒡ ᐊᓐ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ ᐊᓐ ᓈᔥᒡ ᐄᔥᐱᒥᐦᒡ ᐋ ᐃᐦᑎᑯᐦᒡ ᔔᑳᐤ᙮ ᐊᓐ ᐅᔥᐧᑳᒍᔥ ᑭᔮ ᐧᐄᔫᒌ, ᐋᐅᒄ ᐊᑎᑑ ᒥᔥᑏ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ, ᐃᔥᐱᔑ ᐧᐄ ᐊᓐ ᔑᐦᑖᐦᑯᓈᐹᐦᑎᒄᐦ᙮ ᑮᐧᐹ ᑳ ᑯᔥᑯᐦᐄᑯᔮᐦᒡ ᐆ, ᐧᐋᔥ ᐧᑳᔥᑖ ᐃᓯᓈᑯᓯᐤ ᐊᓐ ᒥᓂᐦᐄᒄ᙮ ᐋᐅᒄ ᒫᒃ ᐆ ᐋ ᐧᐋᐱᐦᑎᒥᐦᒄ ᐋᑦ ᐊᔮᐱᒡ ᒑᑲᑦ ᐋ ᐃᓯᓈᑯᓯᒡ ᒥᔥᑎᑯᐦᒡ, ᐊᔨᐦᒡ ᒋᑳ ᒌ ᓂᑐᐦᑯᔨᓂᐤ᙮

ᐋᐅᒄ ᒑᒃ ᑳ ᐧᐋᐧᐋᐱᐦᑎᒫᐦᒡ ᐊᔨᐦᒡ ᒑ ᐄᔑ ᓂᑐᐦᑯᓰᑦ ᐄᔮᐦᑎᒄ ᐅᐦᒋ ᐊᓂᑖ ᐊᔨᐦᒡ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᑦ᙮ ᐋᐅᒄ ᒫᒃ ᑳ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᒡ ᐋᑳ ᐊᔨᐦᒡ ᐅᐦᒋ ᓂᑐᐦᑯᓰᑦ ᑖᓂᑦ ᒥᒄ ᐋ ᐊᑎ ᓂᐦᑖᒋᑦ, ᒥᒄ ᐊᓂᐦᐄ ᔑᐦᑖᐦᑯᓈᐹᐦᑎᒄᐦ ᒌ ᓂᑐᐦᑯᔨᓂᐤ ᐊᓂᑖ ᓅᐦᒋᒦᐦᒡ ᐋ ᒌ ᓂᐦᑖᐅᒋᑦ᙮ ᐱᔥᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᐤᐦ ᒑ ᓈᑭᑐᐧᐋᔨᐦᑎᒧᒥᑭᐦᒡ ᐋᑳ ᒑ ᒌ ᐅᓈᑎᐦᒡ ᒑᐧᑳᓐ ᐲᐦᒋᔨᐤ, ᒥᒄ ᒫᒃ ᐊᔮᐱᒡ ᒋᑭ ᒌ ᒥᓯᐦᑖᐱᔨᐤ ᐊᓐ ᐋ ᐅᓈᑎᐦᒡ ᒑᐧᑳᓐ, ᐋᐅᒄ ᒫᒃ ᐆ ᓂᒧᔨ ᒥᐧᔮᔑᐤ᙮ ᐋᐅᒄ ᒫᒃ ᐆ ᑭᔮ ᑳ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᒫᒃ ᑳ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᒡ ᐊᓐ ᐧᐄᔫᒌ ᐋ ᒌ ᒥᓯᐦᑖᐱᔨᒡ ᐊᓐ ᐅᓈᑎᐦᒡ ᒑᐧᑳᓐ ᐊᓂᑖ ᐲᐦᒋᔨᐤ, ᒥᒄ ᐊᓐ ᐱᔥᒡ ᒑᐧᑳᓐ ᐋ ᐃᔑᓈᑯᐦᒡ᙮ ᓂᒧᔨ ᐅᐦᒋ ᐃᔅᐱᔨᐤ ᐊᓐ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᒡᐦ ᔑᐦᑖᐦᑯᓈᐹᐦᑎᒄᐦ᙮ ᐋᐅᒄ ᒫᒃ ᐊᑎᑑ ᒋᐱᐦ ᒥᐧᔮᔑᐤ ᐋ ᓂᑐᐦᑯᔨᐦᒑᓂᐧᐃᒡ ᔑᐦᑖᐦᑯᓈᐹᐦᑎᒄᐦ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᒑ ᐅᐦᒋ ᓈᑭᑐᐧᐋᔨᐦᑎᒧᒥᑭᐦᒡ ᐋᑳ ᒑ ᒌ ᐅᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ᙮

- whether it grows in a bog or in a forest
- whether you use the bark, the needles, or the cone

In lab tests, Ashleigh has found that all parts of black spruce (needles, cones, and bark) protect nerve-like cells against damage from too much sugar. The cones and bark seem to have more protective effect than needles. We were a bit surprised by this, since the opposite was true for white spruce. This shows us again that even plants in the same family can have very different effects.

We then looked at whether black spruce had different effects on nerve cells depending on where the trees grew. We were interested to see that the bark had effects no matter where the tree grew, but the needles only had effects if the tree had grown inland. Some plants protect cells against damage, but also make them multiply, which is not good. We tested for this too, and found that

ᐊᓂᑌ ᐋᕐᓈᓯᓐ ᓛᑉ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᐅᒄ ᐁ ᐧᐄᐦ ᒋᔅᑫᔨᐦᑕᒫᐦᐠ ᑫᐧᑳᓐ ᐁ ᐃᐦᑎᑯᐦᐠ ᐁ ᓂᑐᐦᑯᔨᓅᐦᐠ ᐊᓂᑦ ᐧᐄᔩᒌᐦᐠ, ᐅᔥᐧᑫᒎᔑᐦᐠ, ᑲᔦ ᐊᔥᑖᐦᑯᓂᐠ ᐆ ᐧᐁᐠ ᐃᔅᐸᔨᐦᐄᐧᐁᐠ᙮ ᐁᐅᒄ ᑳ ᐧᐋᐸᐦᑕᒫᐦᐠ ᐊᓐ ᐧᐄᔩᒌ ᑲᔦ ᐅᔥᐧᑫᒎᔥ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᐁ ᐃᐦᑎᑯᐦᐠ ᐸᔅᐠ ᑫᐧᑳᔩᐦ ᐁ ᓂᑐᐦᑯᔨᓅᐧᑳᐤᐦ ᐃᔥᐱᔑ ᐧᐄ ᐊᔥᑖᐦᑯᓐ᙮ ᐁᔥᒄ ᒫᒃ ᓇᒧᐃ ᒥᓯᐧᐁ ᓂᒋᔅᑫᔨᐦᑌᓈᓐ ᑫᐧᑳᓐ ᐁ ᐃᐦᑎᑯᐦᐠ ᐊᓂᑦ ᐧᐄᔩᒌᐦᐠ ᐁ ᓂᑐᐦᑯᔨᓅᐦᐠ, ᐁᐅᒄ ᐆ ᒣᐧᑳᐠ ᐁᔥᒄ ᐁ ᐋᐸᑎᓰᐦᑲᐦᑕᒫᐦᐠ᙮ ᐁᐅᒄ ᑲᔦ ᑲᐃᔑ ᐧᐋᐸᐦᑕᒫᐦᐠ ᐸᔅᐠ ᐊᓂᔩᐦ ᐊᓐ ᐁᐃᔑ ᑎᑯᐠ ᐁᓂᑕᐦᐧᑮᓄᐧᐁᔭᑖᑯᐦᐠ ᑫᐧᑳᓐ ᒨᒄ ᐊᓂᑦ ᐊᔥᑖᐦᑯᓂᐠ ᐁ ᐃᑎᑯᐦᐠ᙮ ᐁᑯᓐ ᒫᒃ ᐅᔩᐦ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᐠ ᔮᐧᐊᐅᐧᑫᓐ ᐅᔩᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐁᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐁᐧᐄ ᑲᓄᐧᐁᔨᑖᑲᓄᐠ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᐠ᙮

ᓂᒌ ᐧᐋᐸᐦᑏᐧᐁᓈᓐ ᐆ ᑳ ᐄᔑ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᐠ ᓅᐧᓲᐤ ᐁᓂᔥᑐᐧᐄᓈᓅᐦᐠ:

- ᑳ ᓂᔥᑐᐧᐄᓈᓅᐦᐠ ᑳᑕᐦᑯᓯᑦ ᐲᓯᒻ 2009 ᐊᓂᑌ ᑳ ᐋᐸᑎᓰᐦᑲᐦᑕᐦᐧᑳᐤ ᐁ ᓂᑑᒋᔅᑫᔨᐦᑕᐦᐧᑳᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐊᔅᒌᐦᐠ ᐁ ᐅᐦᒋᐸᔨᓂᔨᐦᐧᑳᐤᐦ
- ᑳ ᓂᔥᑐᐧᐄᓈᓅᐦᐠ ᑳ ᒫᒨᐱᐧᑖᐤ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑕᐦᐧᑳᐤ ᒥᑎᐦᑉ ᐧᒫᑯᐲᓯᒻ 2009 ᑳ ᐃᔅᐸᔨᐦᐠ᙮

ᒦᓐ ᒫᒃ ᑫᑦ ᐃᑏᔮᐦᐠ, ᐁᑎᑑ ᓂᐧᐄᐦ ᒪᓯᓇᐦᐁᓈᓐ ᐊᓐ ᑫᐧᑳᓐ ᐁ ᐄᔑ ᒋᔅᑫᔨᐦᑖᑯᐦᐠ ᐁᒄ ᒫᒃ ᑫ ᑎᐹᑐᑎᒫᐦᐠ ᐊᓐ ᐁ ᐄᔑ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᐠ᙮ ᐁᒄ ᒌ ᑲᓄᐧᐋᑕᐦᐧᑳᐧᐁᓐᐠ ᒋᔓᐄᓅᒃ ᐊᓂᔩ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᔩ, ᐁᒄ ᑫ ᐃᑎᔑᐦᐋᒫᐦᐠ ᐊᓂᑌ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐠ ᒥᓯᐦᑌᔅᑲᒥᐠ ᐁ ᒪᓯᓇᐦᐄᑲᓅᐦᐠ ᐊᓐᑦ ᐁ ᒪᓯᓈᑌᐠ ᑫᐧᑳᓐ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑖᑲᓅᐦᐠ᙮

ᐁ ᐧᐋᐧᐋᐸᐦᑖᑲᓅᐦᐠ ᐁ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐧᐋᒋᓈᑲᓐ ᑲᔦ ᒦᑐᔅ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᐠ ᐯᔕᐠ ᑎᐦᑕᐧᑳᑲᓂᔮᐲᐦᐠ

ᐁᐅᒄ ᑲᔦ ᐁ ᐧᐋᐧᐋᐸᐦᑕᒫᐦᐠ ᐊᓂᔩ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᐠ ᐊᓂᑦ ᑎᐦᑕᐧᑳᑲᓂᔮᐲᐦᐠ ᐯᔕᐠ ᑳ ᐃᐦᑎᑯᐦᐠ᙮ ᐁᐅᒄ ᐊᓐ ᐁ ᐧᐋᐧᐋᐸᐦᑕᒫᐦᐠ ᑖᓐ ᐁ ᐃᔅᐸᔨᐦᐠ ᐊᓂᑦ ᐲᐦᐠ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᐠ᙮ ᓇᓈᐦᑰ ᐁ ᐃᔑᓈᑯᐦᐠ

ᐊᓂᑖ ᐋᕐᓈᓯᓐ ᓛᑉ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᐠᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᐅᒄ ᐋ ᐧᐄᐦ ᒋᔅᒑᔨᐦᑎᒫᐦᐠ ᒑᐧᑳᓐ ᐋ ᐃᐦᑎᑯᐦᐠ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᐠ ᐊᓂᑦ ᐧᐄᔩᒌᐦᐠ, ᐅᔥᐧᑳᒍᔑᐦᐠ, ᑭᔦ ᔑᐦᑖᐦᑯᓈᐹᐦᑎᑯᐦᐠ ᐆ ᐋ ᐃᔅᐱᔨᐦᐄᐧᐋᐠ᙮ ᐋᐅᒄ ᑳ ᐧᐋᐱᐦᑎᒫᐦᐠ ᐊᓐ ᐧᐄᔩᒌ ᑭᔦ ᐅᔥᐧᑳᒍᔥ ᐊᑎᑑ ᒥᔥᑏ ᐋ ᐃᐦᑎᑯᐦᐠ ᐱᔥᐠ ᒑᐧᑳᓂᐦᐄ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᐠᐦ ᐃᔥᐱᔑ ᐧᐄ ᔑᐦᑖᐦᑯᓈᐹᐦᑎᒄᐦ᙮ ᐋᔥᒄ ᒫᒃ ᓂᒧᔨ ᒥᓯᐧᐊ ᓂᒋᔅᒑᔨᐦᑖᓈᓐ ᒑᐧᑳᓐ ᐋ ᐃᐦᑎᑯᐦᐠ ᐊᓂᑦ ᐧᐄᔩᒌᐦᐠ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᐠ, ᐋᐅᒄ ᐆ ᒫᐧᑳᐠ ᐋᔥᒄ ᐋ ᐋᐱᑎᔒᔥᑎᒫᐦᐠ᙮ ᐋᐅᒄ ᑭᔦ ᑳ ᐧᐋᐱᐦᑎᒫᐦᐠ ᐱᔥᐠ ᐊᓂᐦᐄ ᒑᐧᑳᓂᐦᐄ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᐠᐦ ᒥᒄ ᐊᓂᑦ ᔑᐦᑖᐦᑯᓈᐹᑎᐦᑯᐦᐠ ᐋ ᐃᑎᑯᐠᐦ᙮ ᐋᐅᒄ ᒫᒃ ᐆ ᒫᐧᑳᐠ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᐠ ᑖᐧᐸ ᒑ ᒌ ᐧᐄᒋᐦᐄᐧᐊᐱᔨᐠᐦ ᐋᑲ ᒑ ᒌ ᐅᓈᑎᐦᐠ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᐠ᙮

ᓂᒌ ᐧᐋᐱᐦᑏᐧᐋᓈᓐ ᐆ ᑳ ᐄᔑ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᐠ ᐊᓐ ᓅᐧᓲᐤ ᑳ ᓂᔥᑐᔨᓈᓂᐧᐃᐠ:

- ᑳ ᓂᔥᑐᔨᓈᓂᐧᐃᐠ ᒋᔔᐲᓯᒼ 2009 ᐊᓂᑖ ᑳ ᐋᐱᑎᔒᔥᑎᐦᐠ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᐠ ᓂᑐᐦᑯᔨᓐᐦ ᐊᔅᒌᐦᐠ ᐋ ᐅᐦᒋᐱᔨᔨᐠᐦ
- ᑳ ᓂᔥᑐᔨᓈᓂᐧᐃᐠ ᑳ ᒫᒧᐱᐠ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᐠ ᒥᑎᐦᑉ ᐋᔑᐧᒫᑯᐲᓯᒻ 2009 ᑳ ᐃᔅᐱᔨᐠ᙮

ᒑᒃ ᒫᒃ, ᐊᑎᑑ ᓂᐧᐄᐦ ᒥᓯᓂᐦᐊᓈᓐ ᐊᓐ ᒫᐧᑳᓐ ᐋ ᐄᔑ ᒋᔅᒑᔨᐦᑖᑯᐦᐠ ᑭᔦ ᓂᑭ ᒥᓯᓂᐦᐊᓈᓐ ᐊᓐ ᒑᐧᑳᓐ ᑳ ᐄᔑ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᐠ᙮ ᒥᔔ ᒫᒃ ᒐ ᐧᐊᐧᐋᐱᐦᑎᐦᐠ ᒋᔔᔨᔨᐅᐠ ᐊᓂᔩ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᔨᐤ, ᐋᒄ ᒑ ᐃᑎᔑᐦᒫᐦᐠ ᐊᓂᑖ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᒥᓯᐦᑖᔅᑭᒥᐠ ᐋ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᐠ ᐊᓐ ᐋ ᐧᐄᓯᓈᑖᐠ ᒑᐧᑳᓐ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᐠ᙮

ᐋ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐧᐃᐠ ᐋ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᐠᐦ ᐧᐋᒋᓈᑭᓐ ᑭᔦ ᒦᑐᔅ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᐠ ᐹᔕᐠ ᐅᑎᐦᐹᐅᑭᓈᔮᐲᐦᐠ

ᐋᐅᒄ ᑭᔦ ᐋ ᐧᐊᐧᐋᐱᐦᑎᒫᐦᐠ ᐊᓂᔮ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᐠ ᐊᓂᑦ ᐅᑎᐦᐹᐅᑭᓈᔮᐲᐦᐠ ᐹᔕᐠ ᑳ ᐃᐦᑎᑯᐦᐠ᙮ ᐋᐅᒄ ᐊᓐ ᐋ ᐧᐊᐧᐋᐱᐦᑎᒫᐦᐠ ᒑᓐ ᐋ ᐃᔅᐱᔨᐠ ᐊᓂᑦ ᐲᐦᐠ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᐠ᙮ ᓂᓈᐦᑰ ᐋ ᐃᔑᓈᑯᐦᐠ ᐱᒦ ᐃᐦᑎᑯᓐ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᐠ,

the bark did make the cells multiply under some conditions. The needles did not to this. This would make the needles a better choice for protecting nerve cells against damage.

With the Arnason lab, we are trying to find out which ingredients in the bark, cones, and needles cause these effects. We notice that the bark and cones contain more of some kinds of ingredients than the needles do. So far, we haven't figured out what most of the ingredients in the bark are, so we're still working on this. We also notice that a few specific ingredients are only present in the needles. We are testing those ingredients to see if they are the ones that help protect nerve cells.

We presented these findings at two meetings:

- The meeting of the Natural Health Product Research Society in February 2009
- The meeting of the Canadian Association for Neuroscience in May 2009.

Next, we want to add a bit more information and then write an article about these results. After the elders have reviewed the article, we will send it to a scientific journal.

ᐱᒦ ᐃᐦᑎᑯᓐ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ, ᐁᐅᒄ ᐆ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᒉ ᒌ ᐋᔔᐸᔨᐦᒡ ᒉᐧᑳᓐ ᒉ ᐄᔑ ᒋᔅᒉᔨᐦᑕᒧᒪᑲᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ᙮ ᐆ ᒫᒃ ᒉᐧᑳᓐ ᐁ ᐋᔔᐸᔨᐦᒡ ᒉ ᐅᐦᒋ ᒋᔅᒉᔨᐦᑕᒧᒪᑲᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ, ᐁᐅᒄ ᐁ ᐧᐄᐦᑕᒫᒉᒪᑲᐦᒡ ᐋᐦᒌᐤᐦ ᒉ ᐃᔅᐸᔨᐦᒡ ᒉᐧᑳᓐ ᐊᓂᑌ ᐲᐦᒋᔫ—ᐸᔅᒡ ᒫᒃ ᒥᐧᔫᐤ ᐁᒄ ᒫᒃ ᐸᔅᒡ ᓇᒧᐃ ᒥᐧᔫᐤ᙮ ᐊᓐ ᒫᒃ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᐦᒡ, ᐋᐦᒌᐤᐦ ᐃᔅᐸᔫ ᐊᓐ ᐁ ᐃᔥᐱᔑ ᐃᐦᑎᑯᐦᒡ ᐱᒦ ᐊᓂᑦ ᐲᐦᒡ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ᙮ ᐁᐅᒄ ᒫᒃ ᐆ ᐁ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᒡ ᐊᓐ ᐁ ᐧᐄᐦ ᐋᔔᐸᔨᐦᒡ ᒉᐧᑳᓐ ᐁ ᐧᐄᐦᑕᒫᒉᒪᑲᐦᒡ ᐊᓂᑌ ᐲᐦᒋᔫ, ᐁᐅᒄ ᒫᒃ ᐁ ᐊᑕ ᑖᐦᑲᐦᐄᒉᐸᔨᐦᒡ ᐁ ᐄᔑ ᐋᐸᑎᓰᒪᑲᐦᒡ ᐊᓐ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ᙮

ᐅᔥᑳᐤ ᐊᓐ ᐁ ᐃᐦᑎᔫᐦᒡ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ, ᐁᐅᒄ ᐊᓐ ᐁ ᐧᐄᐦ ᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐃᔑᓈᑯᐦᒡ ᐊᓐ ᐱᒦ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᒉ ᒌ ᐋᔔᐸᔨᐦᒡ ᒉᐧᑳᓐ ᐁ ᐧᐄᐦ ᐧᐄᐦᑕᒫᒉᒪᑲᐦᒡ ᐊᓂᑌ ᐲᐦᒡ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ᙮ ᐆ ᒫᒃ ᒉ ᒌ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ, ᐁᐅᒄ ᓃᔓᔨᒡ ᐁ ᐃᔨᓈᑯᔨᐧᑖᐤ ᐋᐱᑯᔒᔑᒡ ᐁ ᐋᐸᒋᐦᐄᒋᐦᐧᑖᐤ, ᐁᔫᒄ ᐊᓂᔫ ᐁ ᐃᑖᔅᐱᓄᐧᑖᐤ 1 ᑳ ᐃᑎᓯᓈᑌᔨᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᔨᒡ᙮ ᐁᐅᒄ ᒫᒃ ᓃᔥ ᐁ ᐃᑌᔨᐦᑕᒫᐦᒡ ᐁ ᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᒉᐧᑳᓐ ᐊᓐ ᐋᐦᒌᐤᐦ ᐁ ᐃᔅᐸᔨᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᐋᔔᐸᔨᐦᒡ ᒉᐧᑳᓐ ᐁ ᐧᐄᐦ ᐧᐄᐦᑕᒫᒉᒪᑲᐦᒡ ᐊᓂᑌ ᐲᐦᒡ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ ᐅᐦᒋ ᐊᓐ ᐋᐱᑯᔒᔥ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᑦ ᐊᓂᔫ 1 ᑳ ᐃᑎᓯᓈᑌᔨᒡ ᐁ ᐃᑖᔅᐱᓄᑦ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᑦ᙮

ᐁᐅᒄ ᒫᒃ ᓃᔥ ᒉ ᐧᐄᐦ ᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᔮᐸᒡ ᐆ ᐁ ᐃᔑᓈᑯᐦᒡ ᐊᓂᑦ 2 ᑳ ᐃᑎᓯᓈᑌᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᐦᒡ—ᐁᔫᒄ ᐅᔫ ᐁ ᒥᐦᒉᑕᐧᑖᐤ ᐄᓅᒡ ᐁ ᐃᑖᔅᐱᓄᐧᑖᐤ᙮ ᐆ ᒫᒃ ᑖᐧᐯ ᐁ ᐃᔑᓈᑯᐦᒡ, ᐁᐅᒄ ᒫᔥᑯᒡ ᒉ ᒌ ᐧᐄᒋᐦᑖᑲᓅᐦᒡ ᐁᑳ ᒉ ᒌ ᐅᓈᑕᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ ᐅᐦᒋ ᐊᓐ ᐁ ᐅᔥᑖᐸᔨᐦᐄᐧᐁᒡ 2 ᑳ ᐃᑎᓯᓈᑌᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᐦᒡ᙮ ᐊᓂᑌ ᒫᒃ "ᐋᑖᑦ ᓈᑉ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᐧᑳᐤ" ᓂᐦᑖᐅᒋᐦᒋᑲᓐ", ᐁᐅᒄ ᓃᔥ ᐁ ᐃᐦᑖᐧᑖᐤ ᐋᐱᑯᔒᔑᒡ ᐊᓂᔫ ᐁ ᐃᑖᔅᐱᓄᐧᑖᐤ 2 ᑳ ᐃᑎᓯᓈᑌᔨᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᔨᒡ᙮ ᐁᔫᒄ ᒫᒃ ᐁ ᔑᒫᑲᓅᐧᑖᐤ ᐧᐋᒋᓈᑲᓐ" ᑲᔦ ᒦᑐᔅ"᙮ ᐊᓂᒌ ᒫᒃ ᐋᔥᓃ ᒪᒃᒣᐃᓐ ᑲᔦ ᑫᐃᑏ ᐧᒫᓇᓐ, ᐁᔫᒄ ᒉᐧᑳᒡ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ ᐊᓂᔫ"

ᐋᐅᒄ ᐆ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᒑ ᒌ ᐋᔔᐱᔨᒡ ᒑᐧᑳᓐ ᒑ ᐄᔑ ᒋᔅᒑᔨᐦᑎᒧᒥᑭᐦᒡ ᐊᓂᑖ ᐲᐦᒋᔨᐤ᙮ ᐆ ᒫᒃ ᒑᐧᑳᓐ ᐋ ᐋᔔᐱᔨᒡ ᒑ ᐅᐦᒋ ᒋᔅᒑᔨᐦᑎᒧᒥᑭᐦᒡ ᐊᓂᑖ ᐲᐦᒋᔨᐤ, ᐋᐅᒄ ᐋ ᐧᐄᐦᑎᒫᒑᒥᑭᐦᒡ ᐊᔨᐦᒡ ᒑ ᐃᔅᐱᔨᒡ ᒑᐧᑳᓐ ᐊᓂᑖ ᐲᐦᒋᔨᐤ—ᐱᔥᒡ ᒫᒃ ᒥᐧᔫᐤ ᐋᒄ ᒫᒃ ᐱᔥᒡ ᓂᒧᔨ ᒥᐧᔫᐤ᙮ ᐊᓐ ᒫᒃ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ, ᐊᔨᐦᒡ ᐃᔅᐱᔨᐤ ᐊᓐ ᐋ ᐃᔥᐱᔑ ᐃᐦᑎᑯᐦᒡ ᐱᒦ ᐊᓂᑦ ᐲᐦᒡ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ᙮ ᐋᐅᒄ ᒫᒃ ᐆ ᐋ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐊᓐ ᐋ ᐧᐄᐦ ᐋᔔᐱᔨᒡ ᒑᐧᑳᓐ ᐋ ᐧᐄᐦᑎᒫᒑᒥᑭᐦᒡ ᐊᓂᑖ ᐲᐦᒋᔨᐤ, ᐋᐅᒄ ᒫᒃ ᐋ ᐊᑎ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐋ ᐄᔑ ᐋᐱᑎᓰᒥᑭᐦᒡ ᐊᓐ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ᙮

ᐅᔥᑳᐤ ᐊᓐ ᐋ ᐃᐦᑎᔫᐦᒡ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᐊᓐ ᐋ ᐧᐄᐦ ᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐃᔑᓈᑯᐦᒡ ᐊᓐ ᐱᒦ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᒑ ᒌ ᐋᔔᐱᔨᒡ ᒑᐧᑳᓐ ᐋ ᐧᐄᐦ ᐧᐄᐦᑎᒫᒑᒥᑭᐦᒡ ᐊᓂᑖ ᐲᐦᒡ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ᙮ ᐆ ᒫᒃ ᒑ ᒌ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᓃᔓᔨᒡ ᐋ ᐃᔨᓈᑯᔨᒡ ᐋᐱᑯᔒᔑᒡ ᐋ ᐋᐱᒋᐦᐄᒋᐦᒡ, ᐋᔦᐧᐃᒄ ᐊᓂᔮ ᐋ ᐃᑖᔅᐱᓈᒡ 1 ᑳ ᐃᑎᓯᓈᑖᔨᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᔨᒡ᙮ ᐋᐅᒄ ᒫᒃ ᓃᔥ ᐋ ᐃᑖᔨᐦᑎᒫᐦᒡ ᐋ ᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᒑᐧᑳᓐ ᐊᓐ ᐊᔨᐦᒡ ᐋ ᐃᔅᐱᔨᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᐋᔔᐱᔨᒡ ᒑᐧᑳᓐ ᐋ ᐧᐄᐦ ᐧᐄᐦᑎᒫᒑᒥᑭᐦᒡ ᐊᓂᑖ ᐲᐦᒡ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ ᐅᐦᒋ ᐊᓐ ᐋᐱᑯᔒᔥ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᑦ ᐊᓂᔮ 1 ᑳ ᐃᑎᓯᓈᑖᔨᒡ ᐋ ᐃᑖᔅᐱᓈᑦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᑦ᙮

ᐋᐅᒄ ᒫᒃ ᓃᔥ ᒑ ᐧᐄᐦ ᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᐋᔮᐱᒡ ᐆ ᐋ ᐃᔑᓈᑯᐦᒡ ᐊᓂᑦ 2 ᑳ ᐃᑎᓯᓈᑖᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ—ᐋᔦᐧᐃᒄ ᐅᔮ ᐋ ᒥᐦᒑᑎᒡ ᐄᔨᔨᐅᒡ ᐋ ᐃᑖᔅᐱᓈᒡ᙮ ᐆ ᒫᒃ ᑖᐧᐸ ᐋ ᐃᔑᓈᑯᐦᒡ, ᐋᐅᒄ ᒫᔥᑯᒡ ᒑ ᒌ ᐧᐄᒋᐦᑖᑭᓂᐧᐃᒡ ᐋᑳ ᒑ ᒌ ᐅᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ ᐅᐦᒋ ᐊᓐ ᐋ ᐅᔥᑖᐱᔨᐦᐄᐧᐋᒡ 2 ᑳ ᐃᑎᓯᓈᑖᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ᙮ ᐊᓂᑖ ᒫᒃ "ᐋᑖᑦ ᓈᑉ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ" ᓂᐦᑖᐅᒋᐦᒋᑭᓐ", ᐋᐅᒄ ᓃᔥ ᐋ ᐃᐦᑖᒡ ᐋᐱᑯᔒᔑᒡ ᐊᓂᔮ ᐋ ᐃᑖᔅᐱᓈᒡ 2 ᑳ ᐃᑎᓯᓈᑖᔨᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᔨᒡ᙮ ᐋᔦᐧᐃᒄ ᒫᒃ ᐋ ᔑᒫᑭᓂᐧᐃᒡ ᐧᐋᒋᓈᑭᓐ" ᑭᔦ ᒦᑐᔅ"᙮ ᐊᓂᒌ ᒫᒃ ᐋᔥᓃ ᒥᒃᒣᐃᓐ ᑭᔦ ᑫᐃᑏ ᐧᒫᓇᓐ, ᐋᔦᐧᐃᒄ ᒫᐧᑳᒡ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᐊᓂᔮ" ᐋᐱᑯᔒᔥ"

Looking at how tamarack and balsam poplar affect nerves around the spine

We are also looking at a particular part of the nerves that connect to the spine. Here we are looking not just at the cell, but at what happens *inside* the cell. Nerve cells contain some fats that act as messengers. These messengers send signals to the cell telling it to change in certain ways—ways that can be either good or bad. One way that diabetes damages nerve cells is by changing the balance of these fats. This affects the signals, which in turn affect how the nerve cell works.

Using a new kind of test, we have been trying to identify exactly which kinds of fats act as messengers inside the cell. To do this, we have been using two groups of rats that have something like Type 1 diabetes. We think we have identified some of the "messengers" that change when a rat has Type 1 diabetes.

ᐋᐱᑯᔒᔥᐦ ᐅᑎᐦᑕᐧᑳᑲᓂᔮᐲᐦ᙮ ᐁᔥᒄ ᒉᐧᑳᒡ ᐱᒥᐸᔫ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᒡ᙮

ᐁ ᐁᑲᓄᐧᐋᐸᐦᑖᑲᓅᐦᒡ ᑖᓐ ᐁ ᐄᔑ ᐊᑖᐦᑲᐦᐄᒉᐸᔨᐦᒡ ᑳᒋᒉᐳᒄ ᑏ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ

ᐊᓐ ᒫᒃ ᑳ ᓂᑑᒋᔅᒉᔨᒪᒋᐦᐧᑖᐤ ᐋᐱᑯᔒᔑᒡ, ᐁᐅᒄ ᑳ ᐧᐄᐦᑕᒫᑯᔮᐦᒡ ᒉᒄ ᐱᒦ ᒉ ᓂᑑᒋᔅᒉᐃᑕᒫᐦᒡ ᐊᓐ ᐁ ᐅᐦᒋ ᐋᔖᐸᔨᐦᒡ ᒉᐧᑳᓐ ᐁ ᐧᐄᐦᑕᒫᒉᒪᑲᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ᙮ ᐊᓐ ᒫᒃ ᐋᐦᒌᐤᐦ ᐁ ᐃᔅᐸᔨᐦᒡ ᐱᒦ ᐊᓂᑦ ᐁ ᐃᐦᑎᑯᐦᒡ ᐲᐦᒡ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ, ᐁᐅᒄ ᐁ ᐃᔅᐸᔨᐦᒡ ᐁ ᐊᑕ ᐅᓈᑕᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ᙮ ᐁᐅᒄ ᐁ ᐃᑌᔨᐦᑕᒫᐦᒡ ᐁᑦ ᐋᓂᔅᒉᐸᐃᒡ ᐁ ᐃᔅᐸᔨᐦᒡ ᒉᐧᑳᓐ ᐊᓐ ᐁ ᐊᑕ ᐅᓈᑕᐦᒡ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ, ᐊᓐ ᐱᒦ ᐁ ᐅᐦᒋ ᐋᔖᐸᔨᐦᒡ ᐁ ᐧᐄᐦᑕᒫᒉᒪᑲᐦᒡ ᒉᐧᑳᓐ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ, ᐁᐅᒄ ᑌᑖᐅᒡ ᐁ ᐃᐦᑎᑯᐦᒡ᙮ ᒫᔥᑯᒡ ᒫᒃ ᐃᔑᓈᑯᓐ ᒉ ᒌ ᒋᐱᐦᒋᐦᑖᑲᓅᐦᒡ ᐆ ᐁᑦ ᐋᓂᔅᒉᐸᐃᒡ ᐁᐃᔅᐸᔨᐦᒡ ᐁ ᐊᑦ ᐅᓈᑕᐦᒡ ᐊᓐᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ᙮ ᐁᔫᒄ ᒫᒃ ᒉᐧᑳᒡ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᕖᑖ ᐋᐦᒉᑦ ᐊᓂᔫ ᒉᐧᑳᔫ ᐁ ᓂᑐᐦᑯᔨᓅᔨᑦ ᐊᓂᑦ ᑳᒋᒉᐳᑯᐦᒡ ᐊᓂᔫ ᒉ ᒌ ᐄᔑ ᓇᑳᐦᐄᒉᐸᔨᓂᔨᑦ ᐁ ᐊᑕ ᐅᓈᑕᐦᒡ ᐊᓐᑦ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ᙮

ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᐁ ᒌ ᓇᔅᑯᒧᐧᑖᐤ ᒋᔐᐄᓅᒡ ᑲᔦ ᑳ ᐧᐄᒋᐦᐋᐧᒌᐤ ᐊᐧᐁᔫᐦ ᐁᒌ ᓂᔅᑲᒧᐧᑖᐤ ᒋᑲ ᒌ ᐅᔑᐦᑖᑲᓄᔫ ᒪᓯᓇᐦᐄᑲᓂᔫ

ᔖᔥ ᓀᐤ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ ᔮᐧᑳᐤ ᒌ ᑲᓄᐧᐋᐸᐦᑕᒧᒡ ᒋᔐᐄᓅᒡ ᑲᔦ ᑳ ᐧᐄᒋᐦᐋᐧᒌᐤ ᐊᐧᐁᔫᐦ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᔨᒡᐦ, ᑲᔦ ᐁᔫᒄ ᑳ ᓂᔅᑯᒧᐧᑖᐤ ᒉ ᒌ ᐅᔑᐦᑖᑲᓄᔨᒡ ᐅᔫᐦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ᙮ ᔖᔥ ᒉᐧᑳᒡ ᓂᑖᐸᑎᓰᐦᑲᐦᑌᓈᓐ ᒉ ᒌ ᐅᔑᐦᑖᔮᐦᒡ ᐊᓂᔫᐦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ᙮ ᐁᐅᑯᓐᐦ ᐅᔫᐦ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐᐦ:

1. ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᑳ ᒪᓯᓇᐦᐊᐦᐧᑳᐤ ᐋᕐᓈᓯᓐ, ᐯᓂᑦ, ᑲᔦ ᑳ ᐧᐄᒑᐸᑎᓰᒪᐧᑖᐤ, ᐧᒫᐅᔫ ᐁ ᐃᔑᓂᐦᑳᑌᔨᒡ “ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓐ ᐊᔨᑲᑖᔥ

Now we need to know whether these messengers are also involved in Type 2 diabetes—the kind most Iiyiyiuch have. If they are, then acting on these messengers might help prevent some of the nerve damage that goes with Type 2 diabetes. The Haddad lab already has some mice with Type 2 diabetes, to which it has been feeding tamarack and balsam poplar. So Ashleigh McLean and Katy Morin have started to look at the spine cells from those particular mice. This work is still ongoing.

ᐅᑎᐦᐹᐅᑭᓈᔮᐲᐦ᙮ ᐋᔥᒄ ᒫᐧᑳᒡ ᐱᒥᐱᔮᐤ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ᙮

ᐋ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐧᐃᒡ ᑖᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒐᐱᔨᒡ ᑳᒋᒐᐱᒄ ᑏ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ

ᐊᓐ ᒫᒃ ᑳ ᓂᑑᒋᔅᒑᔨᒥᒋᐦᒡ ᐋᐱᑯᔒᔑᒡ, ᐋᐅᒄ ᑳ ᐧᐄᐦᑎᒫᑯᔮᐦᒡ ᒑᒄ ᐱᒦ ᒐ ᐧᐋᐧᐋᐱᐦᑎᒫᐦᒡ ᐊᓐ ᐋ ᐅᐦᒋ ᐋᔖᐱᔨᒡ ᒐᐧᑳᓐ ᐋ ᐧᐄᐦᑎᒫᒐᒥᑭᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ᙮ ᐊᓐ ᒫᒃ ᐊᔨᐦᒡ ᐋ ᐃᔅᐱᔨᒡ ᐱᒦ ᐊᓂᑦ ᐋ ᐃᐦᑎᑯᐦᒡ ᐲᐦᒡ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ, ᐋᐅᒄ ᐋ ᐃᔅᐱᔨᒡ ᐋ ᐊᑎ ᐅᓈᑎᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᒡ ᐊᐧᐋᓂᒌ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᒡ᙮ ᐋᐅᒄ ᐋ ᐃᑖᔨᐦᑎᒫᐦᒡ ᐋᔅᓂᒐ ᐋ ᐃᔅᐱᔨᒡ ᒐᐧᑳᓐ ᐊᓐ ᐋ ᐊᑎ ᐅᓈᑎᐦᒡ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ, ᐊᓐ ᐱᒦ ᐋ ᐅᐦᒋ ᐋᔖᐱᔨᒡ ᐋ ᐧᐄᐦᑎᒫᒐᒥᑭᐦᒡ ᒐᐧᑳᓐ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ, ᐋᐅᒄ ᑖᑖᐅᒡ ᐋ ᐃᐦᑎᑯᐦᒡ᙮ ᐧᑳᐧᔖᓐ ᒫᒃ ᐃᔑᓈᑯᓐ ᒐ ᒌ ᒋᐱᐦᒋᐦᑖᑭᓂᐧᐃᒡ ᐆ ᐋᓂᔅᒐ ᐋ ᐱᒥᐱᔨᒡ ᐋ ᐊᑎ ᐅᓈᑎᐦᒡ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ᙮ ᐋᔫᐧᐃᒄ ᒫᒃ ᒫᐧᑳᒡ ᐋ ᓂᑑᒋᔅᒐᔨᐦᑎᐦᒃ ᕖᑖ ᐋᐦᒉᑦ ᐊᓂᔮ ᒐᐧᑳᔮᐤ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡ ᐊᓂᑦ ᑳᒋᒐᐱᑯᐦᒡ ᐊᓂᔮ ᒐ ᒌ ᐄᔑ ᓂᑳᐦᐄᒐᐱᔨᔨᒡ ᐋ ᐊᑎ ᐅᓈᑎᐦᒡ ᐋ ᐅᐦᒋ ᓂᔅᑐᓯᓈᓂᐧᐃᒡ᙮

ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᐋ ᒌ ᓂᔅᑯᒧᒡ ᒋᔖᔮᔮᐅᒡᒡ ᑭᔮ ᑳ ᐧᐄᒋᐦᐋᒡ ᐊᐧᐋᔮᐤᐦ ᒐ ᒌ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᔮᒡᐦ

ᔖᔥ ᓀᐤ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ ᒌ ᐧᐋᐧᐋᐱᐦᑎᒧᒡ ᒋᔖᔮᔮᐅᒡ ᑭᔮ ᑳ ᐧᐄᒋᐦᐋᒡ ᐊᐧᐋᔮᐤᐦ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᔮᒡᐦ, ᑭᔮ ᐋᔫᐧᐃᒄ ᑳ ᓂᔅᑯᒧᒡ ᒐ ᒌ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᔮᒡᐦ ᐅᔮᐦ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ᙮ ᔖᔥ ᒫᐧᑳᒡ ᓂᑖᐱᑎᔑᔥᑖᓈᓐ ᒐ ᒌ ᒥᓯᓂᐦᒫᐦᒡ ᐊᓂᐦᐄ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ᙮ ᐋᐅᑯᓐᐦ ᐅᐦᐄ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐᐦ:

1. ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᑳ ᒥᓯᓂᐦᐊᐦᒡ ᐋᕐᓈᓯᓐ, ᐯᓂᑦ, ᑭᔮ ᑳ ᐧᐄᒑᐱᑎᓰᒪᒡ, ᒫᐅᔮ ᐋ ᐃᔑᓂᐦᑳᑖᔨᒡ “ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓐ ᐊᔨᑭᑖᔥ ᓂᑐᐦᑯᔨᓐ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᐋᑳ ᒐ ᒌ ᐅᓈᑎᐦᒡ ᐋ

LOOKING AT HOW LABRADOR TEA AFFECTS THE NERVES

The mice and rat studies have told us what specific messenger fats we should be looking at. Now we are guessing that changes to those messenger fats help cause the nerve damage seen in humans with diabetes. We think nerve damage happens as a kind of chain reaction, and the messengers are in the middle part of the chain. It might be possible to break the chain at that point, and prevent the nerve damage. Fida Ahmed is doing lab tests on some of the ingredients in Labrador tea to see if they might do this.

ᓂᑐᐦᑯᔨᓐ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᐁᑳ ᑫ ᒌ ᐅᓈᑕᐦᒡ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ ᐊᓂᑦ PC12 ᓭᓫᐢ ᐅᐦᒋ ᐊᓐ ᓲᑳᐤ ᐁ ᐃᐢᐸᔨᐦᐄᐧᐁᒡ᙮”

ᐁᔫᒄ ᐅᔫ ᑳ ᒪᓯᓇᐦᐊᐧᑳᐤ ᐋᕐᓈᓴᓐ ᑲᔦ ᐯᓂᑦ ᓛᑊᐢ᙮ ᐁᑯᑌ ᑳ ᐃᑎᓴᐦᐋᒨᒋᐦᐧᑖᐤ ᐊᓂᒌ ᑳ ᒫᒨᐱᐧᑖᐤ ᐁ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓅᔨᒡ ᑫᐧᑳᔫ ᐱᓀᐢᒌᐅᐲᓯᒻ 2008 ᑳ ᐃᐢᐸᔨᐦᒡ, ᐁᒄ ᒫᐠ ᐧᐋᐧᐋᒪᑲᓂᐲᓯᒻ 2009 ᑳ ᐃᐢᐸᔨᐦᒡ ᐁᑯᑦ ᑳ ᓂᐢᑯᒧᓈᓅᐦᒡ᙮ ᒣᐧᑳᒡ ᐋᐸᑎᓰᐦᑲᐦᑕᒻ ᐧᑳᓅ ᐦᐋᓇᐢ ᑫ ᒪᓯᓇᐦᐋᑲᓅᔨᒡ ᐅᔫ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓂᔫ᙮ ᐊᓐ ᒫᐠ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐ, ᐁᐅᒄ ᐊᓐ “ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᐃᐦᑎᑯᐦᐧᑳᐤᐦ ᐊᓂᑦ ᐊᔨᑲᑖᔑᐦᒡ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᐁᑳ ᑫ ᒌ ᐅᓈᑕᐦᒡ ᐁ ᐅᐦᒋ ᓂᓯᑐᓯᓈᓅᐦᒡ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

2. ᐊᓐ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐ ᑳ ᒪᓯᓇᐦᐊᐦᐧᑳᐤ ᐦᐋᓇᐢ ᑲᔦ ᐅᐧᐄᓖᐸᑎᓰᒪᑲᓐᐦ, ᐁᔫᒄ ᐊᓂᔫ “ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐁᑳ ᑫ ᒌ ᐅᓈᑕᐦᒡ ᐅᑎᐦᑊ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

   ᐆ ᒫᐠ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐ, ᐁᑯᑌ ᐅᔮ ᑳ ᒪᓯᓇᐦᐋᑲᓅᐦᒡ ᐊᓂᑌ ᐯᓂᑦ ᓛᑊ᙮ ᐱᓇᐢᒌᐅᐲᓯᒻ ᑳ ᐃᐢᐸᔨᐦᒡ ᒌ ᐃᑎᓴᐦᐋᑲᓅ ᐊᓂᑌ ᑳ ᒫᒨᐱᐧᑖᐤ ᐁ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓅᔨᒡ ᑫᐧᑳᔫ ᑫ ᐧᐋᐧᐋᐸᐦᑕᐦᐧᑳᐤ, ᐁᒄ ᒫᐠ ᐧᐋᐧᐋᒪᑲᓂᐲᓯᒻ ᑳ ᐃᐢᐸᔨᐦᒡ ᒌ ᓂᐢᑯᒧᓈᓅ ᑫ ᒌ ᒪᓯᓇᐦᐋᑲᓅᐦᒡ᙮ ᒣᐧᑳᒡ ᒫᐠ ᐋᐸᑎᓰᐦᑲᐦᑕᒻ ᐢᑌᕓᓂ ᐯᓂᑦ ᑫ ᒪᓯᓇᐦᐋᑲᓅᔨᒡ ᐅᔫ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓂᔫ, ᑲᔦ ᑯᑕᒋᔫ ᑫᐧᑳᔫ ᒌ ᒪᓯᓇᐦᐋᑲᓅᔫ ᐊᓂᔫ ᑳ ᐄᔑ ᒥᐢᑯᐧᐋᐦᑖᑦ ᑫᐃᑏ ᐧᒫᓇᐣ᙮ ᐊᓐ ᒫᐠ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐ, ᐁᐅᒄ ᐊᓐ “ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓐᐦ ᑲᔦ ᐁ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᒡ ᐁᑳ ᑫ ᒌ ᐅᓈᑕᐦᒡ ᐅᑎᐦᑊ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐᐦ ᐊᓂᑌ ᑳ ᐃᑎᓴᐦᐋᑲᓅᐦᐧᑳᐤᐦ ᑯᑕᐠᐦ ᑎᐹᒋᒨᓯᓇᐦᐋᓐᐦ ᒥᓯᐦᑌᐢᑲᒥᒡ ᑫ ᐅᐦᒋ ᒪᓯᓇᐦᐋᑲᓅᐦᐧᑳᐤᐦ

ᓃᓲ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐ ᐃᐦᑎᑯᓐᐦ ᐁ ᒌ ᐃᑎᓴᐦᐋᒫᐦᒡ ᐊᓂᑌ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐᐦ ᑳ ᒪᓯᓇᐦᐋᑲᓅᐦᐧᑳᐤᐦ ᒥᓯᐦᑌᐢᑲᒥᒡ, ᒥᒄ ᒫᐠ ᐁᔥᑯ ᑲᓄᐧᐋᐸᐦᑕᒧᒡ ᐊᓂᔫᐦ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐᐦ᙮ ᐁᐅᑯᓐᐦ ᐅᔫᐦ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐᐦ:

ᐅᐦᒋ ᓂᐢᑐᓯᓈᓂᐧᐃᒡ ᐊᓂᑦ PC12 ᓭᓫᐢ ᐅᐦᒋ ᐊᓐ ᓲᑳᐤ ᐋ ᐃᐢᐱᓯᐦᐄᐧᐋᒡ᙮”

ᐋᔫᐧᐃᒄ ᐅᔮ ᑳ ᒥᓯᓂᐦᐊᐦᒡ ᐋᕐᓈᓴᓐ ᑮᔮ ᐯᓂᑦ ᓛᑊᐢ᙮ ᐋᑯᑖ ᑳ ᐃᑎᔑᐦᐋᒨᒋᐦᒡ ᐊᓂᒌ ᑳ ᒫᒨᐱᐠ ᐋ ᓂᑑᒋᐢᒐᓯᐦᑖᑭᓂᐧᐃᓯᒡ ᒐᐧᑳᓯᐤ ᒥᔑᑳᒫᐦᔮᐅᐲᓯᒻ 2008 ᑳ ᐃᐢᐱᓯᐦᒡ, ᐋᒄ ᒫᐠ ᑭᓵᔮᐢᑯᓂᐲᓯᒻ 2009 ᑳ ᐃᐢᐱᓯᐦᒡ ᐋᑯᑦ ᑳ ᓂᐢᑯᒧᓈᓂᐧᐃᒡ᙮ ᒫᐧᑳᒡ ᐋᐱᑎᔒᐦᑎᒧ ᐧᑳᓅ ᐦᐋᓇᐢ ᒐ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᓯᒡ ᐅᔮ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓂᓯᐤ᙮ ᐊᓐ ᒫᐠ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ, ᐋᐅᒄ ᐊᓐ “ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᐃᐦᑎᑯᒡᐦ ᐊᓂᑦ ᐊᔨᑭᑖᔑᐦᒡ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᓯᒡ ᐋᑳ ᒐ ᒌ ᐅᓈᑎᐦᒡ ᐋ ᐅᐦᒋ ᓂᐢᑐᓯᓈᓂᐧᐃᒡ” ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮

2. ᐊᓐ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ ᑳ ᒥᓯᓂᐦᐊᐦᒡ ᐦᐋᓇᐢ ᑮᔮ ᐅᐧᐄᓚᐱᑎᓰᒪᑭᓐᐦ, ᐋᔫᐧᐃᒄ ᐊᓂᔮ “ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᓯᒡᐦ ᐋᑳ ᒐ ᒌ ᐅᓈᑎᐦᒡ ᒥᑎᐦᑊ” ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮

   ᐆ ᒫᐠ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ, ᐋᑯᑖ ᐅᔮ ᑳ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡ ᐊᓂᑖ ᐯᓂᑦ ᓛᑊ᙮ ᒥᔑᑳᒫᐦᔮᐅᐲᓯᒻ ᑳ ᐃᐢᐱᓯᐦᒡ ᒌ ᐃᑎᔑᐦᐄᑭᓂᐤ ᐊᓂᑖ ᑳ ᒫᒨᐱᐠ ᐋ ᓂᑑᒋᐢᒐᓯᐦᑖᑭᓂᐧᐃᓯᒡ ᒐᐧᑳᓯᐤ ᒐ ᐧᐋᐧᐋᐱᐦᑎᐦᒡ, ᐋᒄ ᒫᐠ ᑭᓵᔮᐢᑯᓂᐲᓯᒻ ᑳ ᐃᐢᐱᓯᐦᒡ ᒌ ᓂᐢᑯᒧᓈᓂᐤ ᒐ ᒌ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡ᙮ ᒫᐧᑳᒡ ᒫᐠ ᐋᐱᑎᔒᐦᑎᒧ ᐢᑖᕓᓂ ᐯᓂᑦ ᒐ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᓯᐣ ᐅᔮ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓂᓯᐤ, ᑮᔮ ᑯᑎᒋᓯᐤ ᒐᐧᑳᓯᐤ ᒌ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᓯᐤ ᐊᓂᔮ ᑳ ᐄᔑ ᒥᐢᑯᐧᐋᐦᑖᑦ ᑫᐃᑏ ᐧᒫᓇᐣ᙮ ᐊᓐ ᒫᐠ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ, ᐋᐅᒄ ᐊᓐ “ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓐᐦ ᑮᔮ ᐋ ᐧᐄᒋᐦᐄᐧᐋᐱᓯᒡ ᐋᑳ ᒐ ᒌ ᐅᓈᑎᐦᒡ ᒥᑎᐦᑊ” ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮

ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐᐦ ᐊᓂᑖ ᑳ ᐃᑎᔑᐦᐄᑭᓂᐧᐃᒡᐦ ᑯᑎᐠᐦ ᑎᐹᒋᒧᓯᓂᐦᐄᓐᐦ ᒥᓯᐦᒑᐢᑭᒥᒡ ᒐ ᐅᐦᒋ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡᐦ

ᓃᓲ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ ᐃᐦᑎᑯᓐᐦ ᐋ ᒌ ᐃᑎᔑᐦᐋᒫᐦᒡ ᐊᓂᑖ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐᐦ ᑳ ᒥᓯᓂᐦᐄᑭᓂᐧᐃᒡᐦ ᒥᓯᐦᒑᐢᑭᒥᒡ, ᒥᒄ ᒫᐠ ᐋᔥᑯ ᐧᐋᐧᐋᐱᐦᑎᒧᒡ ᐊᓂᔮᐦ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐᐦ᙮ ᐋᐅᑯᓐᐦ ᐅᐦᐄ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐᐦ:

PAPERS THAT THE ELDERS AND HEALERS HAVE AGREED CAN BE PUBLISHED

The elders and healers have reviewed four articles and said they are OK. We can now get ready to publish them. The articles are:

1. A paper by Arnason, Bennett, and others titled "Bioassay guided isolation of neuroprotective constituents of sarracenia purpurea, a Cree medicinal plant that inhibits glucotoxicity in PC12 cells."

   This paper was done by the Arnason and Bennett labs. We sent it to the Research Committee in September 2008, and it was approved in January 2009. Cory Harris is now getting ready to publish it. The plain-language summary is called "Ingredients in pitcher plant that protect against nerve damage."

2. A paper by Harris and others titled "Flavonoids as novel inhibitors of platelet activating factor-mediated neuronal death."

   This paper was mostly done in the Bennett lab. It was sent to the Research Committee in September, and approved in January. Steffany Bennett is now getting it ready for publication, and adding some new information provided by Katy Morin. The plain-language summary is called "Plant ingredients and protection of brain cells."

1. ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓐ ᑳ ᒪᓯᓇᐦᐊᐦᐧᑳᐤ ᓗᐧᐄ-ᕕᓕᑉ ᐧᐹᐅᓕᔫ, ᐧᑳᕇ ᐦᐋᕆᔅ, ᑲᔦ ᐅᐧᐄᒑᐸᑎᓰᒪᑲᓂᐧᐋᐤᐦ, ᐁᔫᒄ ᐊᓂᔫ “ᐁ ᓇᑳᐦᐄᒉᐸᔨᐦᒡ ᐄᓅ ᓂᑐᐦᑯᔨᓐ ᐊᓐ ᐧᐄᔅᒋᒥᓈᓐ ᐅᐦᒋ ᐊᓐ ᐁᑳ ᒉ ᒌ ᐅᔕᐦᐆᒪᑲᐦᒡ ᐁ ᐅᓈᒋᐸᔨᐦᐄᐧᐁᒡ ᔖᑳᐤ ᐊᓂᑌ ᒥᐦᑰᔮᐲᐦᒡ: ᐁ ᐧᐄᐦ ᒋᔅᒉᔮᐦᑖᑲᓅᐦᒡ ᐁ ᐄᔑ ᓂᑐᐦᑯᔮᓅᐦᒡ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

   ᐆ ᒫᒃ ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓐ, ᐁᑯᑌ ᑳ ᐃᑎᔕᐦᐄᑲᓅᐦᒡ ᐊᓂᑌ *Phytotherapy Research* ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓐ ᓂᔅᒋᐲᓯᒻ 2009 ᑳ ᐃᔅᐸᔨᐦᒡ᙮ ᐊᓂᒌ ᒫᒃ ᑳ ᓈᓈᑲᒋᐦᑖᐧᑖᐤ ᐅᔫ ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓂᔫ, ᒌ ᓂᑐᐧᐁᔨᐦᑕᒧᒡ ᐊᐱᔒᔥ ᒉ ᐧᐁᔑᑖᑲᓅᔨᒡ ᐊᓂᔫ ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓂᔫ᙮ ᐁᐅᒄ ᒫᒃ ᐆ ᔖᔥ ᑳ ᐃᐦᑏᓈᓅᐦᒡ, ᐁᒄ ᒫᒃ ᒦᓐ ᒉ ᐃᑎᔕᐦᐊᒫᐦᒡ ᐊᓐ ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓐ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓐ, ᐁᐅᒄ ᐊᓐ “ᐧᐄᔅᒋᒥᓈᓐᐦ ᑲᔦ ᐁ ᐅᔑᐦᐆᒪᑲᐦᒡ ᔖᑳᐤ ᐁ ᐅᓈᒋᐸᔨᐦᐄᐧᐁᒡ ᒥᐦᑰᔮᐲᐦᒡ: ᐁ ᓇᑳᐦᐄᑲᓅᐦᒡ ᐁ ᐅᔅᑖᐸᔨᓈᓅᐦᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᐦᒡ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

2. ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓐ ᑳ ᒪᓯᓇᐦᐊᐦᐧᑳᐤ ᐦᐋᕆᔅ, ᐧᐹᐅᓕᔫ, ᕝᕈᐃᓯᕐ, ᒫᑭᓐᑖᔨᕐ, ᒫᕐᑏᓅ, ᑯᕆᔦᐃ, ᐧᒑᓐᔅ, ᐦᐋᑖᑦ, ᐯᓂᑦ, ᑲᔦ ᐋᕐᓈᓯᓐ, ᐁᔫᒄ ᐊᓂᔫ “ᐁ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐦᐧᑳᐤᐦ ᐄᓅ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᓂᑐᐦᑯᔨᓐ ᐁᑳ ᒉ ᒌ ᐅᔕᐦᐆᒪᑲᐦᒡ ᐁ ᐅᓈᒋᐸᔨᐦᐄᐧᐁᒡ ᔖᑳᐤ ᒥᐦᑰᔮᐲᐦᒡ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

   ᐆ ᒫᒃ ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓐ, ᐁᑯᑌ ᑳ ᐃᑎᔕᐦᐄᑲᓅᐦᒡ ᐊᓂᑌ ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓐ *Journal of Agricultural and Food Chemistry* ᑳ ᐃᔑᓂᐦᑳᑌᒡ ᐧᐋᐱᑯᓂᐲᓯᒻ 2009 ᑳ ᐃᔅᐸᔨᐦᒡ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓐ, ᐁᐅᒄ ᐊᓐ “ᐁ ᓇᑳᐦᐄᑲᓅᐦᒡ ᐁ ᐅᔅᑖᐸᔨᐦᐄᐧᐁᒡ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑳᓅᐦᒡ: ᐁ ᓂᑐᐦᑯᐦᐄᐧᐁᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᑲᔦ ᐁ ᐅᔑᐦᐆᒪᑲᐦᒡ ᑳ ᐅᓈᒋᐸᔨᐦᐄᐧᐁᒡ ᔖᑳᐤ ᐊᓂᑌ ᒥᐦᑰᔮᐲᐦᒡ” ᑳ ᐃᔑᓂᐦᑳᑌᒡ᙮

ᐁᐅᒄ ᐆ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᐅᐦᒋ ᐊᓐ ᐁᑎᑑ ᒥᔅᑕᐦᐄ ᐁ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒧᓯᓇᐦᐄᑲᓐ ᐊᓂᑌ ᑳ ᐅᐦᒋᐸᔨᐦᒡ ᐯᓂᑦ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔮᐦᑖᑲᓅᐦᐧᑳᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮

1. ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ ᑳ ᒥᓯᓂᐦᐊᐦᒡ ᓗᐧᐄ-ᕕᓕᑉ ᐧᐹᐅᓕᔫ, ᐧᑳᕇ ᐦᐋᕆᔅ, ᑭᔮ ᐅᐧᐄᒑᐱᑎᓰᒫᑭᓂᐧᐋᐤᐦ, ᐋᔫᐧᐃᒄ ᐊᓂᔮ “ᐋ ᓂᑳᐦᐄᒑᐱᔨᐦᒡ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐ ᐊᓐ ᐧᐄᓯᒋᒥᓐ ᐅᐦᒋ ᐊᓐ ᐋᑳ ᒑ ᒌ ᐅᔑᐦᐆᒥᑭᐦᒡ ᐋ ᐅᓈᒋᐱᔨᐦᐄᐧᐋᒡ ᔖᑳᐤ ᐊᓂᑖ ᒥᐦᐧᑳᔮᐲᐦᒡ: ᐋ ᐧᐄᐦ ᒋᔅᒑᔮᐦᑖᑭᓂᐧᐃᒡ ᐋ ᐄᔑ ᓂᑐᐦᑯᔮᓂᐧᐃᒡ” ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮

   ᐆ ᒫᒃ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ, ᐋᑯᑖ ᑳ ᐃᑎᔑᐦᐄᑭᓂᐧᐃᒡ ᐊᓂᑖ *Phytotherapy Research* ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ ᓂᔅᒋᐲᓯᒻ 2009 ᑳ ᐃᔅᐱᔨᒡ᙮ ᐊᓂᒌ ᒫᒃ ᑳ ᓈᓈᑭᒋᐦᑖᒡ ᐅᔮ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓂᔨᐤ, ᒌ ᓂᑐᐧᐋᔨᐦᑎᒧᒡ ᐊᐱᔒᔥ ᒑ ᑯᔨᔅᑯᔨᓂᐦᐄᑭᓂᐧᐃᔨᒡ ᐊᓂᔮ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓂᔨᐤ᙮ ᐋᐅᒄ ᒫᒃ ᐆ ᔖᔥ ᑳ ᐃᐦᑏᓈᓂᐧᐃᒡ, ᐋᒄ ᒫᒃ ᒦᓐ ᒑ ᐃᑎᔑᐦᐊᒫᐦᒡ ᐊᓐ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ, ᐋᐅᒄ ᐊᓐ “ᐧᐄᓯᒋᒥᓐᐦ ᑭᔮ ᐋ ᐅᔑᐦᐆᒥᑭᐦᒡ ᔖᑳᐤ ᐋ ᐅᓈᒋᐱᔨᐦᐄᐧᐋᒡ ᒥᐦᐧᑳᔮᐲᐦᒡ: ᐋ ᓂᑳᐦᐄᑭᓂᐧᐃᒡ ᐋ ᐅᔅᑖᐱᔨᓈᓂᐧᐃᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ” ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮

2. ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ ᑳ ᒥᓯᓂᐦᐊᐦᒡ ᐦᐋᕆᔅ, ᐧᐹᐅᓕᔫ, ᕝᕈᐃᓯᕐ, ᒫᑭᓐᑖᔨᕐ, ᒫᕐᑏᓅ, ᑯᕆᔦᐃ, ᐧᒑᓐᔅ, ᐦᐋᑖᑦ, ᐯᓂᑦ, ᑭᔮ ᐋᕐᓈᓯᓐ, ᐋᔫᐧᐃᒄ ᐊᓂᔮ “ᐋ ᐄᔑ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡᐦ ᐄᔨᔨᐤ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᓂᑐᐦᑯᔨᓐ ᐋᑳ ᒑ ᒌ ᐅᔑᐦᐆᒥᑭᐦᒡ ᐋ ᐅᓈᒋᐱᔨᐦᐄᐧᐋᒡ ᔖᑳᐤ ᒥᐦᐧᑳᔮᐲᐦᒡ” ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮

   ᐆ ᒫᒃ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ, ᐋᑯᑖ ᑳ ᐃᑎᔑᐦᐄᑭᓂᐧᐃᒡ ᐊᓂᑖ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ *Journal of Agricultural and Food Chemistry* ᑳ ᐃᔑᓂᐦᑳᑖᒡ ᒧᓵᐧᐋᐦᔮᐅᐲᓯᒼ 2009 ᑳ ᐃᔅᐱᔨᒡ᙮ ᐊᓐ ᒫᒃ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ, ᐋᐅᒄ ᐊᓐ “ᐋ ᓂᑳᐦᐄᑭᓂᐧᐃᒡ ᐋ ᐅᔅᑖᐱᔨᐦᐄᐧᐋᒡ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᓂᐧᐃᒡ: ᐋ ᓂᑐᐦᑯᐦᐄᐧᐋᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᑭᔮ ᐋ ᐅᔑᐦᐆᒥᑭᐦᒡ ᑳ ᐅᓈᒋᐱᔨᐦᐄᐧᐋᒡ ᔖᑳᐤ ᐊᓂᑖ ᒥᐦᐧᑳᔮᐲᐦᒡ” ᑳ ᐃᔑᓂᐦᑳᑖᒡ᙮

ᐋᐅᒄ ᐆ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᑖᒡ ᐅᐦᒋ ᐊᓐ ᐊᑎᑑ ᒥᔅᑏ ᐋ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒧᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᑳ ᐅᐦᒋᐱᔨᒡ ᐯᓂᑦ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔮᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮

PAPERS THAT HAVE BEEN SENT TO JOURNALS

We have two papers that have been sent to journals, but the journals are still reviewing them. The papers are:

1. A paper by Louis-Phillippe Beaulieu, Cory Harris, and others, titled “Inhibitory effect of the Cree traditional medicine wiishichimanaanh (*Vaccinium vitis-idaea*) on advanced glycation endproduct formation: Identification of active principles.”

   The paper was sent to a journal called *Phytotherapy Research* in April 2009. The editors asked for small revisions. These have been made, and we are getting ready to send the paper back to them. The plain-language summary of this paper is called “Lowbush cranberries and AGEs: Preventing some of the problems that go with diabetes.”

2. A paper by Harris, Beaulieu, Fraser, McIntyre, Martineau, Cuerrier, Johns, Haddad, Bennett, and Arnason, titled “Characterizing the inhibitory effects of Cree medicinal plant extracts on in vitro formation of advanced glycation endproducts.”

   This paper was sent to the *Journal of Agricultural and Food Chemistry* in June 2009. The plain-language summary of this paper is called “Reducing bad effects from diabetes: the healing plants and AGEs.”

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

ᒪᓯᓇᐦᐄᑫᐧᐃᐣᐦ | ᒥᓯᓂᐦᐄᒑᐧᐃᐣᐦ Notes

E. ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐊᓂᑌ ᑯᓇᔦᕽ ᒑᑉ ᐁ ᐅᐦᒋᐸᔨᐦᒡ ᐊᓂᑦ ᒨᓀᔮᐤ ᐳᑖᓂᑲᓪ ᑳᕽᑎᓈᓐ

(ᐧᐄᐧᐄᒪᑲᓂᐲᓯᒼ – ᐧᒫᑯᐲᓯᒼ 2009)

ᐅᑎᐦ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓈᐦᒀᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᐅᒄ ᓂᔅᑐᔨᒡ ᒉᐧᑳᔫᐦ ᐁ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓈᐦᒀᐤᐦ᙮ ᐊᓂᔫᐦ ᓃᔓ ᒉᐧᑳᔫᐦ ᐁ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓈᐦᒀᐤᐦ, ᐁᐅᒄ ᐁ ᐧᐄᒑᐸᑎᓰᒫᑲᓈᐧᑖᐤ ᐊᓂᒌ ᑯᑕᑲᒡ ᐊᐧᐁᓂᒌ ᐁ ᐊᑕ ᓂᑑᒋᐢᒉᔨᐦᑕᐦᒀᐤ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐊᓐ ᒦᓐ ᑯᑕᒡ ᒉᐧᑳᓐ ᐁ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓇᐧᐃᐦᒡ, ᐁᑯᑦ ᐅᑎᐦ ᐁ ᐅᐦᒋ ᐱᒥᐸᔨᐦᑖᑲᓇᐧᐃᐦᒡ ᑯᓇᔦᕽ ᒑᑉ᙮ ᐁᐅᑯᓐᐦ ᐅᔫᐦ ᓂᔅᑐ ᒉᐧᑳᔫᐦ ᐁ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓈᐦᒀᐤᐦ:

1. ᐁ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓇᐧᐃᐦᒡ ᒪᐢᑯᒥᓈᓈᐦᑎᒄ ᐋᐦᒌᐤᐦ ᒉ ᒌ ᐃᑌᔨᐦᑖᑯᐦᒡ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓇᐧᐃᐦᒡ ᐅᐦᒋ ᐊᓐ ᐋᐦᒌᐤᐦ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓇᐧᐃᐦᒡ, ᐁᐅᒄ ᐁ ᐧᐄᒋᐦᐋᑲᓈᐧᑖᐤ ᐊᓂᒌ ᑯᑕᑲᒡ ᐊᐧᐁᓂᒌ ᐅᔫ ᐁ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑕᐦᒀᐤ᙮ ᐁᐅᒄ ᐊᓐ ᒉ ᐧᐋᐱᐦᑕᒉᒄ ᐧᒑᓐᐢ ᒑᑉ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓈᐦᒀᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᐧᐋᐤ ᐁᑎᑑ ᐧᐄᐦ ᐧᐋᐱᐦᑕᒉᐧᑫ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓇᐧᐃᐦᒡ᙮
2. ᐁ ᓂᑑᒋᐢᒉᔨᒫᑲᓇᐧᐃᑦ ᐄᓈᐦᑎᒄ᙮ ᐁᐅᒄ ᐁ ᐧᐄᒋᐦᐋᑲᓈᐧᑖᐤ ᐯᓂᑦ ᒑᑉ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓈᐦᒀᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐁᔫᒄ ᐁ ᓂᑑᒋᐢᒉᔨᐦᑕᐦᒃ ᐋᔅᒑ ᐊᓂᔫ ᐋᐦᒌᐤᐦ ᒉ ᒌ ᐃᑌᔨᐦᑖᑯᓯᔨᒡᐦ ᐄᓈᐦᑎᒄᐦ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓈᔨᒡᐦ ᐅᐦᒋ ᐊᓂᑦ ᐋᐦᒌᐤᐦ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᔨᒡᐦ᙮ ᐁᔫᒄ ᑲᔦ ᐁ ᓂᑑᒋᐢᒉᔨᐦᑕᐦᒃ ᑖᐱᔅᑯᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᒉᐸᔨᓂᔨᐦᐧᑳᐤᐦ ᐊᓂᔫ ᐧᐄᔫᒌ, ᐅᔅᐧᑫᒎᔅ, ᑲᔦ ᐊᔅᑖᐦᑯᓂᒡ᙮ ᐁᐅᒄ ᐊᓐ ᒉ ᐧᐋᐱᐦᑕᒉᒄ ᐯᓂᑦ ᒑᑉ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓈᐦᒀᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᑎᐹᒋᒨᓯᓇᐦᐄᑲᓂᐧᐋᐤ ᐁᑎᑑ ᐧᐄᐦ ᐧᐋᐱᐦᑕᒉᐧᑫ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᐢᒉᔨᐦᑖᑲᓇᐧᐃᐦᒡ᙮

E. ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᑯᓇᔦᕽ ᒑᑉ ᐋ ᐅᐦᒋᐱᔨᒡ ᐊᓂᑦ ᐧᒨᓀᔮᐤ ᐳᑖᓂᑭᓪ ᑳᕽᑎᓈᓐ

(ᒌᐢᔮᐢᑯᓂᐲᓯᒻ – ᐋᔑᐧᒫᑯᐲᓯᒼ 2009)

ᐅᑎᐦ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᐅᒄ ᓂᔅᑐᔨᒡ ᒑᐧᑳᓂᐦᐄ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ᙮ ᐊᓂᐦᐄ ᓃᔓ ᒑᐧᑳᓂᐦᐄ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ, ᐋᐅᒄ ᐋ ᐧᐄᒑᐱᑎᓰᒫᑭᓂᐧᐃᒡ ᐊᓂᒌ ᑯᑎᑭᒡ ᐊᐧᐋᓂᒌ ᐋ ᐊᑎ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐊᓐ ᒦᓐ ᑯᑎᒡ ᒑᐧᑳᓐ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡ, ᐋᑯᑦ ᐅᑎᐦ ᐋ ᐅᐦᒋ ᐱᒥᐱᔨᐦᑖᑭᓂᐧᐃᒡ ᑯᓇᔦᕽ ᒑᑉ᙮ ᐋᐅᑯᓐᐦ ᐅᐦᐄ ᓂᔅᑐ ᒑᐧᑳᓂᐦᐄ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ:

1. ᐋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᒥᔅᑯᒥᔒ ᐊᔨᐦᒡ ᒑ ᒌ ᐃᑖᔨᐦᑖᑯᐦᒡ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐅᐦᒋ ᐊᓐ ᐊᔨᐦᒡ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡ, ᐋᐅᒄ ᐋ ᐧᐄᒋᐦᐋᑭᓂᐧᐃᒡ ᐊᓂᒌ ᑯᑎᑭᒡ ᐊᐧᐋᓂᒌ ᐅᔮ ᐋ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᒡ᙮ ᐋᐅᒄ ᐊᓐ ᒑ ᐧᐋᐱᐦᑎᒫᒄ ᐧᒑᓐᐢ ᒑᑉ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᐧᐋᐤ ᐊᑎᑑ ᐧᐄᐦ ᐧᐋᐱᐦᑎᒫᐧᑲ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡ᙮
2. ᐋ ᓂᑑᒋᐢᒑᔨᒫᑭᓂᐧᐃᑦ ᐄᔮᐦᑎᒄ᙮ ᐋᐅᒄ ᐋ ᐧᐄᒋᐦᐋᑭᓂᐧᐃᒡ ᐯᓂᑦ ᒑᑉ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐋᔦᐧᐃᒄ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᒃ ᐋᔅᒑ ᐊᓂᔮ ᐊᔨᐦᒡ ᒑ ᒌ ᐃᑖᔨᐦᑖᑯᓯᔨᒡᐦ ᐄᔮᐦᑎᒄᐦ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᔨᒡᐦ ᐅᐦᒋ ᐊᓂᑦ ᐊᔨᐦᒡ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᔨᒡᐦ᙮ ᐋᔦᐧᐃᒄ ᑭᔮ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᒃ ᑖᐱᔅᑯᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᔨᒡᐦ ᐊᓂᔮ ᐧᐃᔨᔦᒌ, ᐅᔅᐧᑲᒎᔅ, ᑭᔮ ᐊᔅᑖᐦᑯᓈᐹᐦᑎᒄᐦ᙮ ᐋᐅᒄ ᐊᓐ ᒑ ᐧᐋᐱᐦᑎᒫᒄ ᐯᓂᑦ ᒑᑉ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᐧᐋᐤ ᐊᑎᑑ ᐧᐄᐦ ᐧᐋᐱᐦᑎᒫᐧᑲ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐧᐃᒡ᙮

E. Report from the Cuerrier lab at the Montreal Botanical Gardens

(January – May 2009)

This lab is involved with three different studies. Two of these are being done in close collaboration with the other labs. The third is being led from this lab. The three studies are:

1. A study of whether mountain ash has different effects depending on where it grows. This study is being done together with other labs. Please see the report from the Johns lab for more details.
2. A study of black spruce. This is being done in collaboration with the Bennett lab. Ashleigh is testing whether black spruce has different effects depending on where it grows. She is also looking at whether the bark, cones, and needles all have the same effects. Please see the report from the Bennett lab for more details.

3. A study of what impact our collecting activities are having on the plants. In this study, we have been

3. ᐁ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓄᐎᐦᒡ ᑖᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᐁ ᒫᐅᐦᑐᓂᑲᓅᐦᑿᐤᐦ ᐅᔫᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐁ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓅᐦᑿᐤᐦ᙮ ᐆ ᐁ ᐄᔑ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓄᐎᐦᒡ, ᐁᐅᒄ ᐁ ᐑᐦ ᐚᐱᐦᑕᒫᐦᒡ ᑖᓐ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᐊᓐ ᐁ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐊᔨᑲᑖᔥ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐁᐅᒄ ᐁ ᐑᐦ ᒋᐢᑫᔨᐦᑕᒫᐦᒡ ᑖᓐ ᑫ ᒌ ᐃᔥᐱᔑ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐁᐢᒄ ᐁᑳ ᐚᓈᒋᐦᑖᑲᓄᐎᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᐆ ᒫᒃ ᑫ ᒌ ᐄᔑ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᒡ, ᐁᐅᒄ ᐊᓐ ᒦᓐ ᑫ ᓂᑐᐚᐦᑖᔮᐦᒡ ᐊᓂᑦ ᐁ ᒌ ᐅᐦᒋ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐊᓐ ᐊᔨᑲᑖᔥ ᐊᓂᑌ ᐄᔑ ᐯᒋ ᐅᑖᐦᒡ᙮ ᐁᐅᒄ ᒫᒃ ᑳ ᐄᔑ ᒥᐢᑲᐚᐦᑖᔮᐦᒡ ᐊᓐ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᐊᓐ ᐯᔭᒄ ᐁ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐊᔨᑲᑖᔥ ᐊᓂᑦ ᓂᔮᔨᓐ ᐁ ᓂᐦᑖᐅᒋᐦᑿᐤᐦ, ᐁᑯᑦ ᑫ ᒌ ᐚᓈᒋᐦᑖᔮᐦᒡ ᐊᓂᑦ ᐅᔫᐦ ᑯᑕᒃᐦ ᐁ ᓂᐦᑖᐅᒋᐦᒡ ᐊᔨᑲᑖᔥ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᐊᓐ ᒦᓐ ᑯᑕᒡ ᑫᑿᓐ ᐁ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᒡ, ᐁᐅᒄ ᐊᓐ ᐁ ᐑᐦ ᐚᐱᐦᑕᒫᐦᒡ ᐁ ᐄᔑ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᐁ ᒫᐅᐦᑐᓂᒫᐦᒡ ᑳᒋᑫᐸᒄᐦ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᓂᐦᑖᐅᒋᐦᑿᐤᐦ᙮ ᐁᐅᒄ ᐁ ᐚᐚᐱᐦᑕᒫᐦᒡ ᐁ ᐅᐦᒋ ᐅᔑᐦᐆᒪᑲᐦᒡ ᑲᔦ ᐁ ᐄᔑ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᐁᐅᒄ ᑲᔦ ᐁ ᐑᐦ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᒡ ᐁᑎᑑ ᑫ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ ᐅᐦᒋ ᐊᓐ ᐁ ᐑᐦ ᐑᒋᐦᐄᓱᒪᑲᐦᒡ ᐁ ᒫᐅᐦᑐᓂᑲᓅᐦᒡ᙮ ᐁᐢᒄ ᐱᒥᐸᔨᐦᑌᐤ ᐅᔫ ᐁ ᐄᔑ ᓂᑑᒋᐢᑫᔨᐦᑕᐦᒃ ᐊᓐ ᑳ ᐅᐢᒋᔩᑦ ᒋᐢᑯᑕᒧᐚᑲᓐ ᐁ ᐑᐦ ᐸᑯᐦᑖᑦ ᐊᓂᔫ ᒫᐢᑎᕐᐢ ᐁ ᐄᔑ ᒋᐢᑯᑕᒫᓱᑦ, ᐁᐅᒄ ᐊᓐ ᔫᕆ ᑌᓐᑦᓛᓐᑦ ᑳ ᐃᓯᓂᐦᑳᓱᑦ᙮

4. ᐅᑌ ᒫᒃ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᑫᔨᐦᑕᒫᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᐅᒄ ᐅᔮ ᐁ ᐃᑖᐸᑎᓯᔮᐦᒡ ᐁ ᒫᐅᐦᑐᓂᒫᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᐅᐦᒋ ᐊᓐ ᑫ ᒌ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓅᐦᑿᐤᐦ ᐊᓂᑌ ᐊᐦᒌᐤᐦ ᐁ ᐅᐦᒋ ᓂᑑᒋᐢᑫᔨᐦᑖᑲᓅᐦᑿᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ᙮ ᓈᔥᑖᐻ ᐃᔮᑿ ᓂᒌᐦᑎᓈᓐ ᐁ ᒫᐅᐦᑐᓂᒫᐦᒡ

looking at how our harvesting activities affect pitcher plants. We want to find out how many plants we can take from an area before we do damage. To do this, we have been re-checking the areas where we collected plants in past years. So far, we have found that if we collect more than one pitcher plant in five from the same spot, we endanger the whole group. Also, part of this study is to investigate whether harvesting Labrador tea leaves has an impact on this plant. Our lab is looking at reproductive impact as well as survival impact.

3. ᐋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐎᒡ ᑖᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐋ ᒫᐅᐦᑐᓂᑭᓂᐎᒡᐦ ᐅᐦᐄ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐎᒡᐦ᙮ ᐆ ᐋ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐎᒡ, ᐋᐅᒄ ᐋ ᐑᐦ ᐚᐱᐦᑎᒫᐦᒡ ᑖᓐ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐊᓐ ᐋ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐊᔨᑭᑖᔥ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐋᐅᒄ ᐋ ᐑᐦ ᒋᐢᒑᔨᐦᑎᒫᐦᒡ ᑖᓐ ᒑ ᒌ ᐃᔥᐱᔑ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐋᐦᒹᔮ ᐎᓈᒋᐦᑖᑭᓂᐎᒡ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᐆ ᒫᒃ ᒑ ᒌ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᐊᓐ ᒦᓐ ᒑ ᓂᑐᐚᐦᑖᔮᐦᒡ ᐊᓂᑦ ᐋ ᒌ ᐅᐦᒋ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐊᓐ ᐊᔨᑭᑖᔥ ᐊᓂᑖ ᐄᔑ ᐹᒋ ᐅᑖᐦᒡ᙮ ᐋᐅᒄ ᒫᒃ ᑳ ᐄᔑ ᒥᐢᑭᐚᐦᑖᔮᐦᒡ ᐊᓐ ᐊᑎᑑ ᒥᔥᑏ ᐊᓐ ᐹᔨᒄ ᐋ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐊᔨᑭᑖᔥ ᐊᓂᑦ ᓂᔮᔦ ᐋ ᓂᐦᑖᐅᒋᒡᐦ, ᐋᑯᑦ ᒑ ᒌ ᐎᓈᒋᐦᑖᔮᐦᒡ ᐊᓂᑦ ᐅᐦᐄ ᑯᑎᒃᐦ ᐋ ᓂᐦᑖᐅᒋᐦᒡ ᐊᔨᑭᑖᔥ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᐊᓐ ᒦᓐ ᑯᑎᒡ ᒑᑿᓐ ᐋ ᓂᑑᒋᐢᒑᔨᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᐊᓐ ᐋ ᐑᐦ ᐚᐱᐦᑎᒫᐦᒡ ᐋ ᐄᔑ ᑖᐦᑭᐦᐄᒑᐱᔨᒡ ᐋ ᒫᐅᐦᑐᓂᒫᐦᒡ ᑳᒋᒑᐱᒄᐦ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᐋᐅᒄ ᐋ ᐚᐚᐱᐦᑎᒫᐦᒡ ᐋ ᐅᐦᒋ ᐅᔑᐦᐆᒥᑭᐦᒡ ᑭᔮ ᐋ ᐄᔑ ᓂᐦᑖᐅᒋᐦᒡ᙮ ᐋᐅᒄ ᑭᔮ ᐋ ᐑᐦ ᓂᑑᒋᐢᒑᔨᐦᑎᒫᐦᒡ ᐊᑎᑑ ᒑ ᓂᑐᐦᑯᔨᓂᐎᒡ ᐆ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ ᐅᐦᒋ ᐊᓐ ᐋ ᐑᐦ ᐑᒋᐦᐄᓱᒥᑭᐦᒡ ᐋ ᒫᐅᐦᑐᓂᑭᓂᐎᒡ᙮ ᐋᔥᒄ ᐱᒥᐱᔨᐦᑖᐤ ᐅᔮ ᐋ ᐄᔑ ᓂᑑᒋᐢᒑᔨᐦᑎᐦᒃ ᐊᓐ ᑳ ᐅᐢᑎᔩᑦ ᒋᐢᑯᑎᒧᐚᑭᓐ ᐋ ᐑᐦ ᐱᑯᐦᑖᑦ ᐊᓂᔮ ᒫᐢᑎᕐᐢ ᐋ ᐄᔑ ᒋᐢᑯᑎᒫᓱᑦ, ᐋᐅᒄ ᐊᓐ ᔫᕆ ᑌᓐᑦᓛᓐᑦ ᑳ ᐃᓯᓂᐦᑳᓱᑦ᙮

4. ᐅᑖ ᒫᒃ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑎᒫᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᐅᒄ ᐅᔮ ᐋ ᐃᑖᐱᑎᓯᔮᐦᒡ ᐋ ᒫᐅᐦᑐᓂᒫᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᐅᐦᒋ ᐊᓐ ᒑ ᒌ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐎᒡᐦ ᐊᓂᑖ ᐊᔨᐦᒡ ᐋ ᐅᐦᒋ ᓂᑑᒋᐢᒑᔨᐦᑖᑭᓂᐎᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ᙮ ᓈᔥᑖᐛ ᐃᔮᑿ ᓂᒌᐦᑎᓈᓐ ᐋ ᒫᐅᐦᑐᓂᒫᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ: ᒥᒄ ᐊᓐ ᐋ ᐃᔥᐱᔑ

Finally, we want to know whether or not the plant will react to harvesting by producing more ingredients in order to protect itself. A new master's student, Youri Tendland, is continuing this work.

4. Our lab is also involved in collecting bulk samples for the other labs. We harvest plants with great respect: taking only the amount needed, not disturbing the natural settings, praying while collecting, giving tobacco to the spirit of the plant as an acknowledgement of the medicinal offering of the plant. New plants will be collected in 2009:

ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ: ᒥᒄ ᐊᓐ ᐁ ᐃᔥᐱᔑ ᓂᑐᐧᐁᔨᐦᑕᒫᐦᒡ ᐁ ᐅᑎᓂᒫᐦᒡ, ᐁᑳ ᒉ ᒫᔦᔨᐦᑕᒫᐦᒡ ᐊᓂᑦ ᐁ ᐅᐦᑎᓂᒫᐦᒡ, ᐁ ᐊᔨᒥᐦᒋᑳᔮᐦᒡ ᒣᐧᑳᒡ ᐁ ᒫᐅᐦᑐᓂᒫᐦᒡ, ᐁ ᐸᒋᔅᑎᓂᒉᔮᐦᒡ ᒋᔥᑖᒣᐤ ᐊᓐ ᒉ ᐅᐦᒋ ᓇᓈᔅᑯᒧᔮᐦᒡ ᐁ ᒦᔨᑰᔮᐦᒡ ᐆ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ᙮ ᐧᒫᐅᔫᐦ ᐁ ᐅᔥᑳᐧᑳᐤᐦ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᒉ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐆ 2009 ᒉ ᐃᔅᐸᔨᐦᒡ: ᒫᔅᒌᔅᒃ, ᐅᒋᔥᐧᑳᔫᔥᑯᓈᐦ ᑲᔦ ᐧᐄᐦᐹᔥᒄ᙮ ᐁᐅᒄ ᒉ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑖᑲᓅᐦᒡ ᒣᐧᑳᓐ ᐁ ᐃᐦᑎᑯᐦᒡ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᑲᔦ ᑖᓐ ᒉ ᒌ ᐄᔑ ᓂᑐᐦᑯᐦᐄᐧᐁᐦᐧᑳᐤᐦ᙮ ᐁᐅᒄ ᑲᔦ ᐁ ᐧᐄᐦ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐅᔥᑯᐃ᙮

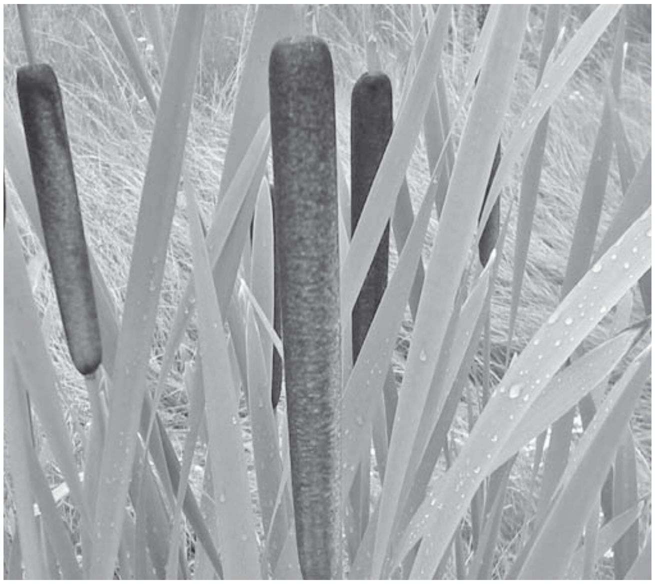
5. ᐅᑌ ᒫᒃ ᓂᔮᓐ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᒣᐧᑳᒡ ᓂᒥᔪᐸᔨᐦᑖᓈᓐ ᐁ ᒪᓯᓇᐦᐊᒫᐦᒡ ᒪᔑᓇᐦᐄᑲᓂᔥ ᐅᐦᒋ ᐊᓂᔫᐦ 19 ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ ᓃᔥ ᑳ ᐋᔨᒧᑕᐦᐧᑳᐤ ᐄᓅᒡ᙮ ᐆ ᒫᒃ ᒪᔑᓇᐦᐄᑲᓂᔥ, ᐁᔫᒄ ᒋᐹᐦ ᐋᐸᒋᐦᑌᐅᒡ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᐧᑳᐤ ᒉᐧᑳᔫ ᑲᔦ ᐄᓅᒡ᙮

ᐁᐅᒄ ᐆ ᐊᐱᔒᔥ ᐁ ᐧᐄᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓐ ᐁᑎᑑ ᒥᔥᑏᐦ ᑳ ᒥᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐊᓂᑌ ᑯᓇᔦᑫ ᓛᑉ ᑳ ᐅᐦᒋᐸᔨᐦᒡ᙮

ᓂᑐᐧᐋᔨᐦᑎᒫᐦᒡ ᐋ ᐅᑎᓂᒫᐦᒡ, ᐋᑳ ᒑ ᒫᔮᔨᐦᑎᒫᐦᒡ ᐊᓂᑦ ᐋ ᐅᐦᑎᓂᒫᐦᒡ, ᐋ ᐊᔨᒥᐦᐋᔮᐦᒡ ᒫᐧᑳᒡ ᐋ ᒫᐅᐦᑐᓂᒫᐦᒡ, ᐋ ᐱᒋᔅᑎᓂᒑᔮᐦᒡ ᒋᔥᑖᒫᐤ ᐊᓐ ᒑ ᐅᐦᒋ ᓂᓈᔅᑯᒧᔮᐦᒡ ᐋ ᒦᔨᑰᔮᐦᒡ ᐆ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ᙮ ᒫᐅᐦᐄ ᐋ ᐅᔥᑳᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᒑ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐆ 2009 ᒑ ᐃᔅᐱᔨᒡ: ᒫᔅᒌᔅᒃ, ᐧᐃᒋᔥᐧᑳᔫᔥᑯᔑᐤᐦ ᑭᔮ ᐧᐄᐦᐹᔅᒄ᙮ ᐋᐅᒄ ᒑ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑖᑭᓂᐧᐃᒡ ᒫᐧᑳᓐ ᐋ ᐃᐦᑎᑯᐦᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᑭᔮ ᑖᓐ ᒑ ᒌ ᐄᔑ ᓂᑐᐦᑯᐦᐄᐧᐋᒡᐦ᙮ ᐋᐅᒄ ᑭᔮ ᐋ ᐧᐄᐦ ᒫᐅᐦᑐᓂᒫᐦᒡ ᐧᐃᔥᑯᐃ᙮

5. ᐅᑖ ᒫᒃ ᓂᔮᓐ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᒫᐧᑳᒡ ᓂᒥᔪᐱᔨᐦᑖᓈᓐ ᐋ ᒥᓯᓂᐦᐊᒫᐦᒡ ᒥᔑᓂᐦᐄᑭᓂᔥ ᐅᐦᒋ ᐊᓂᐦᐄ 19 ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ ᓃᔥ ᑳ ᐋᔨᒧᑎᐦᒡ ᐄᔨᔨᐅᒡ᙮ ᐆ ᒫᒃ ᒥᔑᓂᐦᐄᑭᓂᔥ, ᐋᔫᐧᐃᒄ ᒋᐱᐦ ᐋᐱᒋᐦᑖᐅᒡ ᐊᓂᒌ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒡ ᒑᐧᑳᔨᐤ ᑭᔮ ᐄᔨᔨᐅᒡ᙮

ᐋᐅᒄ ᐆ ᐊᐱᔒᔥ ᐋ ᐧᐄᓯᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓐ ᐊᑎᑑ ᒥᔥᑏᐦ ᑳ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᑯᓇᔦᑫ ᓛᑉ ᑳ ᐅᐦᒋᐱᔨᒡ᙮



white cedar, cattail and cow parsnip. These will be looked at from the standpoint of their ingredients and potential activities. Paper birch is another plant that our lab is seeking to collect.

5. Our lab is finalising the booklet on the 19 plants so far mentioned by the Cree. This booklet is intended for the researchers and the Cree people.

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

ᒪᓯᓇᐦᐄᑫᐧᐃᐣᐦ | ᒥᓯᓂᐦᐄᓛᐧᐃᐣᐦ Notes

F. ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓐ ᐊᓂᑌ ᐧᓛᓐᔅ ᓅᑉ ᑳ ᐅᐦᒋᐸᔨᐦᐠ

(ᐧᐄᐧᐃᒪᑲᓂᐲᓯᒼ – ᐧᒫᑯᐲᓯᒼ 2009)

ᑖᓐ ᐁ ᐃᑌᔨᐦᑕᒥᐦᐄᐧᐁᐠ ᐄᓂᒦᒋᒼ ᑲᔦ ᓂᑐᐦᑯᔨᓐᐦ

ᐁᔫᒄ ᐁ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ ᑲᓇᔅᑏᓐ ᑖᐱᑦ ᐊᓂᔫ ᐁ ᐃᑌᔨᐦᑕᒥᐦᐄᑯᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐄᓂᒦᒋᒥᔫ ᑲᔦ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐁᑯᑦ ᒫᒃ ᒉ ᒋᔅᒉᔨᐦᑕᒫᐦᐠ ᑖᓂᑌ ᒫᐅᐠ ᒉ ᒥᔦᐸᔨᐦᐠ ᒉ ᒌ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐊᐧᐁᓂᒌ ᐄᓅ ᓂᑐᐦᑯᔨᓐᐦ ᐁ ᐧᐄᒋᐦᐄᓯᐧᑖᐤ ᐅᐦᒋ ᐊᓂᔫ ᐁ ᔒᐧᐋᑲᒥᐦᐧᑫᐧᑖᐤ᙮ ᐊᓂᑌ ᒫᒃ ᐧᐋᔅᑳᐦᐄᑲᓂᔑᐦᐠ, ᐁᔫᒄ ᔖᔥ ᑳ ᓂᔅᑯᒧᐧᑖᐤ ᐅᔫ ᒉ ᒌ ᐱᒥᐸᔨᐦᑖᑦ ᐁ ᐄᔑ ᓂᑑᒋᔅᒉᔨᐦᑕᐦᒃ, ᑲᔦ ᔖᔥ ᒌ ᒋᐦᒋᐸᔨᐦᑖᐤ ᐁ ᐋᐸᑎᓰᑦ ᐊᓂᑌ᙮ ᐁᔥᒄ ᒫᒃ ᒉᐧᑳᐠ ᐯᐦᑖᐤ ᒉ ᓂᔅᑯᒧᓈᓅᔨᐠ ᐊᓂᑌ ᓀᒥᔅᑳᐦᐠ᙮

ᐁᔫᒄ ᒉ ᓂᔅᑑᓈᑦ ᑲᓇᔅᑏᓐ ᐊᓂᔫᐦ ᐄᓅᐦ ᐊᓂᑌ ᐃᐦᑖᐧᐃᓂᐦᐠ, ᐁᒄ ᒫᒃ ᒉ ᓂᑑᒋᔅᒉᔨᒫᑦ ᑖᓐ ᐁ ᐃᑌᔨᐦᑕᒥᐦᐄᑯᔨᐠᐦ ᐅᔫ:

- ᐄᓂᒦᒋᒼ ᑲᔦ ᓂᑐᐦᑯᔨᓐᐦ, ᑲᔦ ᑖᓂᑌ ᐁ ᐃᐦᑎᓈᓅᐦᐠ ᐁ ᐱᒥᓄᐧᐋᓅᐦᐠ
- ᑖᓂᑌ ᒉ ᒌ ᐃᐦᑎᓈᓅᐦᐠ ᐁ ᒌᑰᓇᑲᓅᐦᐠ ᐄᓅ ᓂᑐᐦᑯᔨᓐ ᒉᐧᑳᐠ ᐁ ᐋᐸᒋᐦᑖᑲᓅᐦᐧᑳᐤᐦ ᐧᐁᒥᔥᑎᑯᔒᐤ ᔒᐧᐋᑲᒥᐦᐧᑫᐤ ᓂᑐᐦᑯᔨᓐᐦ

ᓈᔥᑖᐧᐯ ᒥᔥᑕᐦᐄ ᐧᐄᒑᐸᑎᓰᒉᐤ ᑲᓇᔅᑏᓐ ᐊᓂᔫ ᐄᓅᐦ ᐊᓂᑌ ᐃᐦᑖᐧᐃᓂᐦᐠ᙮ ᐁᑯᑦ ᒫᒃ ᑳ ᐅᔑᐦᑖᐧᑖᐤ ᑲᐧᑫᒋᔅᒉᒧᐧᐃᓐᐦ ᒉ ᐋᐸᑎᓂᔨᐦᐧᑳᐤᐦ ᐊᓂᔫ ᐁ ᓂᑑᒋᔅᒉᔨᒫᑲᓅᐧᑖᐤ ᐊᐧᐁᓂᒌ᙮ ᐊᓂᔫ ᒫᒃ ᒉᐧᑳᔫ ᒉ ᒥᔅᑯᐧᐋᐦᑖᑦ ᑲᓇᔅᑏᓐ, ᐁᔫᒄ ᒦᓐ ᒉ ᐯᑖᑦ ᐊᓂᑌ ᐃᐦᑖᐧᐃᓂᐦᐠ ᒉ ᑲᓄᐧᐋᐸᐦᑖᑲᓅᔨᐠ, ᐁᒄ ᒫᒃ ᒉ ᒪᓯᓇᐦᐊᐦᒃ ᑎᐹᒋᒨᓯᓇᐦᐋᑲᓂᔫ ᐊᓂᔫ ᑳ ᐄᔑ ᒥᔅᑯᐧᐋᐦᑖᑦ᙮

ᓇᓈᐦᑰ ᐁ ᐄᔑ ᓂᑕᐦᑯᐧᐄᓄᒥᑲᐦᐧᑳᐤ ᒪᔅᑯᒥᓈᓈᐦᑎᒄ ᑲᔦ ᒪᔅᑯᒥᔒ

ᐅᑌ ᒫᒃ ᐁ ᐅᐦᒋ ᓂᑑᒋᔅᒉᔨᐦᑕᒫᐦᐠ ᓂᐦᑖᐅᒋᐦᒋᑲᓐᐦ, ᐁᐅᒄ ᑳ ᐋᔨᒧᑕᒫᐦᐠ ᐊᓐ ᐋᐦᒌᐤᐦ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓅᐦᐧᑳᐤᐦ ᐊᓂᔫ ᒪᔅᑯᒥᓈᓈᐦᑎᒄ ᑲᔦ ᒪᔅᑯᒥᔒ ᐅᐦᒋ ᐊᓐ ᐋᐦᒌᐤᐦ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᐧᑖᐤ᙮ ᐊᓐ ᐁᑎᑑ ᐁ ᓂᑐᐦᑯᔨᓅᑦ

F. ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᐧᓛᓐᔅ ᓅᑉ ᑳ ᐅᐦᒋᐱᔨᐠ

(ᒋᓵᔮᔅᑯᓂᐲᓯᒻ – ᐋᔑᐧᒫᑯᐲᓯᒼ 2009)

ᑖᓐ ᐋ ᐃᑖᔨᐦᑎᒥᐦᐄᐧᐋᐠ ᐄᔨᒦᒋᒼ ᑭᔮ ᓂᑐᐦᑯᔨᓐᐦ

ᐋᔦᐧᐃᒄ ᐋ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ ᑭᓇᔅᑏᓐ ᑖᐱᑦ ᐊᓂᔮ ᐋ ᐃᑖᔨᐦᑎᒥᐦᐄᑯᐠ ᐊᐧᐋᓂᒌ ᐄᔨᒦᒋᒥᔨᐤ ᑭᔮ ᓂᑐᐦᑯᔨᓐᐦ᙮ ᐋᑯᑦ ᒫᒃ ᒑ ᒋᔅᒑᔨᐦᑎᒫᐦᐠ ᑖᓂᑖ ᒫᐅᐠ ᒑ ᒥᔦᐱᔨᐠ ᒑ ᒌ ᐋᐱᒋᐦᑖᐠ ᐊᐧᐋᓂᒌ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐᐦ ᐋ ᐧᐄᒋᐦᐄᓯᐠ ᐅᐦᒋ ᐊᓂᔮ ᐋ ᔒᐧᐋᑭᒥᐦᐧᑳᐠ᙮ ᐊᓂᑖ ᒫᒃ ᐧᐋᔅᑳᐦᐄᑭᓂᔑᔑᐦᐠ, ᐋᔦᐧᐃᒄ ᔖᔥ ᑳ ᓂᔅᑯᒧᐠ ᐅᔮ ᒑ ᒌ ᐱᒥᐱᔨᐦᑖᑦ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᐦᒃ, ᑭᔮ ᔖᔥ ᒌ ᒋᐦᒋᐱᔨᐦᑖᐤ ᐋ ᐋᐱᑎᓰᑦ ᐊᓂᑖ᙮ ᐋᔥᒄ ᒫᒃ ᒫᐧᑳᐠ ᔑᓂᐧᐋᐦᑖᐤ ᒑ ᓂᔅᑯᒧᓈᓂᐧᐃᔨᐠ ᐊᓂᑖ ᓀᒥᔅᑳᐦᐠ᙮

ᐋᔦᐧᐃᒄ ᒑ ᐧᐋᐧᐋᐱᒫᑦ ᑭᓇᔅᑏᓐ ᐊᓂᐦᐄ ᐄᔨᔨᐤᐦ ᐊᓂᑖ ᐃᐦᑖᐧᐃᓂᐦᐠ, ᐋᒄ ᒫᒃ ᒑ ᓂᑑᒋᔅᒑᔨᒫᑦ ᑖᓐ ᐋ ᐃᑖᔨᐦᑎᒥᐦᐄᑯᔨᐠᐦ ᐅᔮ:

- ᐄᔨᒦᒋᒼ ᑭᔮ ᓂᑐᐦᑯᔨᓐᐦ, ᑭᔮ ᑖᓂᑖ ᐋ ᐃᐦᑎᓈᓂᐧᐃᐠ ᐋ ᐱᒥᓄᐧᐋᓂᐧᐃᐠ
- ᑖᓂᑖ ᒑ ᒌ ᐃᐦᑎᓈᓂᐧᐃᐠ ᐋ ᒌᑰᓂᑭᓂᐧᐃᐠ ᐄᔨᔨᐤ ᓂᑐᐦᑯᔨᓐ ᒫᐧᑳᐠ ᐋ ᐋᐱᒋᐦᑖᑭᓂᐧᐃᐠᐦ ᐧᐋᒥᔥᑎᑯᔒᐤ ᔒᐧᐋᑭᒥᐦᐧᑳᐤ ᓂᑐᐦᑯᔨᓐᐦ

ᓈᔥᑖᐧᐸ ᒥᔥᑏ ᐧᐄᒑᐱᑎᓰᒫᐤ ᑭᓇᔅᑏᓐ ᐊᓂᔮᐦ ᐄᔨᔨᐤᐦ ᐊᓂᑖ ᐃᐦᑖᐧᐃᓂᐦᐠ᙮ ᐋᑯᑦ ᒫᒃ ᑳ ᐅᔑᐦᑖᐠ ᑯᐧᑳᒋᔅᒑᒧᐧᐃᓐᐦ ᒑ ᐋᐱᑎᓂᔨᐠᐦ ᐊᓂᔮ ᐋ ᓂᑑᒋᔅᒑᔨᒫᑭᓂᐧᐃᐠ ᐊᐧᐋᓂᒌ᙮ ᐊᓂᔮ ᒫᒃ ᒑᐧᑳᔨᐤ ᒑ ᒥᔅᑯᐧᐋᐦᑖᑦ ᑭᓇᔅᑏᓐ, ᐋᔦᐧᐃᒄ ᒦᓐ ᒑ ᔑᓂᐧᐋᐦᑖᑦ ᐊᓂᑖ ᐃᐦᑖᐧᐃᓂᐦᐠ ᒑ ᐧᐋᐧᐋᐱᐦᑖᑭᓂᐧᐃᔨᐠ, ᐋᒄ ᒫᒃ ᒑ ᒥᓯᓂᐦᐊᐦᒃ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓂᔨᐤ ᐊᓂᔮ ᑳ ᐄᔑ ᒥᔅᑯᐧᐋᐦᑖᑦ᙮

ᓂᓈᐦᑰ ᐋ ᐄᔑ ᓂᑐᐦᑯᔩᐠ ᒥᔅᑯᒥᓈᓈᐦᑎᒄ ᑭᔮ ᒥᔅᑯᒥᔒ

ᐅᑖ ᒫᒃ ᐋ ᐅᐦᒋ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᐠ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ, ᐋᐅᒄ ᑳ ᐋᔨᒧᑎᒫᐦᐠ ᐊᓐ ᐊᔨᐦᐠ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᐠᐦ ᐊᓐ ᒥᔅᑯᒥᓈᓈᐦᑎᒄ ᑭᔮ ᒥᔅᑯᒥᔒ ᐅᐦᒋ ᐊᓐ ᐊᔨᐦᐠ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᐠ᙮ ᐊᓐ ᐊᑎᑑ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᑦ ᒥᔥᑎᒄ,

F. Report for the Johns lab

(January – May 2009)

Views on traditional foods and medicines

Christine Tabib wants to study how people feel about traditional foods and medicines. This will help us find the best way to offer traditional medicines as part of the standard diabetes care. The Cree Nation of Waskaganish approved her project, and she has started her work there. She is still waiting for approval from Nemaska.

Christine will be meeting with community members to get their views on:

- Traditional foods and medicines, and how the food is prepared
- How traditional medicine could be integrated with western diabetes care

She has been working closely with people in the community. Together, they have developed the questions to be used in interviews and focus groups. Christine will bring the results back to the communities for review, and then write a final report and her thesis.

ᒥᔅᑎᒄ, ᐁᐅᒄ ᐁ ᐃᑌᔨᐦᑕᒫᐦᒡ ᐁᑎᑑ ᐁ ᐧᐄᒋᐦᐄᓯᒪᑲᐦᒡ ᒉ ᒌ ᒥᔪᓂᐦᑖᐅᒋᐦᒡ ᐊᓂᑌ ᐁᑎᑑ ᐁ ᑕᐦᑳᔮᐦᒡ ᓀᔅᑦ ᒫᒃ ᐁᑳ ᒉ ᒌ ᒪᓂᒍᔖᒡ᙮ ᐁᐅᒄ ᒫᒃ ᑳ ᒥᔥᑯᐧᐋᐦᑖᔮᐦᒡ ᐊᓂᒌ ᒥᔅᑎᑯᒡ ᐁ ᓂᐦᑖᐅᒋᐧᑖᐤ ᐁᑎᑑ ᐊᓂᑌ ᒌᐧᐁᑎᓂᐦᒡ ᑲᔦ ᔮᔦᐤ ᐊᓂᑌ ᐧᐄᓂᐯᑯᐦᒡ, ᐁᐅᑯᓂᒡ ᐁᑎᑑ ᐁ ᓂᑐᐦᑯᔨᓅᐧᑖᐤ᙮ ᐁᐅᒄ ᑲᔦ ᑳ ᒥᔥᑯᐧᐋᐦᑖᔭᐦᒡ ᐊᓐ ᒪᔥᑯᒥᓈᓈᐦᑎᒄ ᐁᑎᑑ ᐁ ᓂᑐᐦᑯᔨᓅᑦ ᐃᔅᐱᔑ ᐊᓐ ᒪᔥᑯᒥᔒ᙮

ᐁᐅᒄ ᒦᓐ ᑳ ᐧᐄᐦ ᓂᑑᒋᔥᑫᔨᐦᑕᒫᐦᒡ ᑫᐧᑳᓐ ᐊᓐ ᐋᐦᒌᐤᐦ ᐧᐁᐦᒋ ᓂᑐᐦᑯᔨᓅᐧᑖᐤ ᐅᒌ ᒥᔅᑎᑯᒡ, ᐁᐅᒄ ᑳᑲᔦ:

- ᐋᐦᒌᐤᐦ ᐁ ᐃᔑᓈᑯᐦᐧᑳᐤᐦ ᐊᓂᔫ ᒌᓐᔥ ᐊᓂᑦ ᐁ ᐅᐦᒋ ᐧᐄᔕᑕᒦᓯᒪᑲᐦᒡ ᑫᐧᑳᓐ ᒉ ᐄᔑ ᓂᐦᑖᐅᒋᐦᒡ, ᐁᐅᑯᓂᒡ ᐊᓂᒌ ᐁᑎᑑ ᒌᐧᐁᑎᓂᐦᒡ ᑳ ᓂᐦᑖᐅᒋᐧᑖᐤ ᒥᔅᑎᑯᒡ
- ᓀᔅᑦ ᒫᒃ ᔮᐸᒡ ᐁ ᐃᔑᓈᑯᐦᒡ ᐊᓐ ᐁ ᐅᐦᒋ ᐧᐄᔕᑕᒦᓯᒪᑲᐦᒡ ᑫᐧᑳᓐ ᒉ ᐄᔑ ᓂᐦᑖᐅᒋᐦᒡ, ᒥᒄ ᐋᐦᒌᐤᐦ ᐁ ᐃᔅᐸᔨᐦᒡ ᐁᑎᑑ ᐁ ᐧᐄᐦ ᐧᐄᒋᐦᐄᓯᒪᑲᐦᒡ ᒉ ᒌ ᐄᔑ ᓂᐦᑖᐅᒋᐦᒡ᙮

ᐊᓂᒌ ᒥᔅᑎᑯᒡ ᐋᐦᒌᐤᐦ ᐁ ᐃᑌᔨᐦᑖᑯᓯᐧᑖᐤ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓅᐧᑖᐤ, ᐁᐅᒄ ᑳᑲᔦ ᐊᓐ ᐋᐦᒌᐤᐦ ᐁ ᐃᓯᓈᑯᓯᐧᑖᐤ ᐊᓂᑌ ᐁ ᐅᐦᒋ ᐧᐄᔕᑕᒦᓯᐧᑖᐤ ᒉ ᐄᔑ ᓂᐦᑖᐅᒋᐧᑖᐤ, ᐁᒄ ᒫᒃ ᒋᐦᒋᐧᐁ ᐋᐦᒌᐤᐦ ᐁ ᐃᓯᓈᑯᓯᐧᑖᐤ ᐊᓂᒌ ᒥᔅᑎᑯᒡ, ᒫᒃ ᒥᒄ ᐊᓐ ᐊᔥᒌ ᐁᑌᔨᑖᑯᒡ ᐊᓐᑦ ᐁᓂᐦᑖᐅᒋᒡ ᐊᓐ ᒥᔥᑎᑯ ᐧᐁᐦᒡ ᐋᐦᒌᔫᐦ ᐃᑌᔨᑖᑯᓃᒡ ᐊᓐᑦ ᐁᓂᑕᐦᐧᑮᓅᑦ ᐊᓂᑌ ᒌᐧᐁᑎᓂᐦᒡ? ᐊᓐ ᒫᒃ ᓂᔅᐧᑫᐅᔑᐦᐄᐧᐁᐧᐃᓐ, ᒨᐧᐁᐦᒡ ᑖᐱᔅᑯᓐ ᒥᓯᐧᐁ ᐁᐅᒋᐸᐃᔨᒡ ᐁ ᐃᔑᓈᑯᐦᒡ᙮ ᐁᐅᒄ ᒫᒃ ᐊᓐ ᑳ ᐧᐋᐧᐋᐸᐦᑕᒫᐦᒡ ᐊᓐ ᒌᓐᔥ ᐁᔨᔑᓇᑳᑌᒡ ᐊᓐ ᐊᓐᑦ ᐁ ᐅᐦᒋ ᐧᐄᔕᑕᒦᓯᒪᑲᐦᒡ ᑫᐧᑳᓐ ᒉ ᐄᔑ ᓂᐦᑖᐅᑎᐦᒡ ᐊᓐᑌ ᓇᓈᑯ ᐅᑦ ᐄᓅ ᐊᔥᒌᐦᒡ ᓂᒌ ᓂᑑᒋᔥᑫᐃᑌᓈᓐ ᒫᒨ ᓃᔅᑎᓅ ᒌ ᐃᑎᐦᑎᓐ ᐊᓐᑦ ᑳ ᓂᑑᒋᔥᑫᐃᑎᒫᐦᒡ ᐊᔥᒌ ᐁᔨᔑᓈᑯᓃᒡ ᐊᓐᑦ ᐁᓂᐦᑖᐅᒋᐧᑖᐤ ᒥᔥᑎᑯᒡ ᐊᓂᑌ ᐄᓅ ᐊᔥᒌᐦᒡ᙮ ᐊᓐ ᒪᔥᑯᒥᔒ, ᐊᐱᔒᔅ ᐋᐦᒌᐤᐦ ᐃᔑᓈᑯᓐᐦ ᐊᓂᔫᐦ ᒌᓐᔥ ᐅᐦᒋ ᐊᓂᒌ ᓅᐦᒋᒦᐦᒡ ᐁ ᓂᐦᑖᐅᒋᐧᑖᐤ ᐃᔅᐱᔑ ᐊᓂᒌ ᔮᔦᐤ ᐧᐄᓂᐯᑯᐦᒡ ᐁ ᓂᐦᑖᐅᒋᐧᑖᐤ᙮ ᐊᓐ ᒫᒃ ᐧᐄ ᒪᔥᑯᒥᓈᓈᐦᑎᒄ, ᒥᓯᐧᐁ ᑖᐱᔅᑯᓐ ᐃᔑᓈᑯᓐᐦ ᐊᓂᔫ ᒌᓐᔥ ᐊᓂᑌ ᓇᓈᐦᑰ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᑦ—ᒥᒄ ᒫᒃ

ᐋᐅᒄ ᐋ ᐃᑖᔨᐦᑎᒫᐦᒡ ᐊᑎᑑ ᐋ ᐧᐄᒋᐦᐄᓯᒥᑭᐦᒡ ᒑ ᒌ ᒥᔪᐦᑖᐅᒋᐦᒡ ᐊᓂᑖ ᐊᑎᑑ ᐋ ᑎᐦᑳᔮᒡ ᑮᔮ ᒫᒃ ᐋᑳ ᒑ ᒌ ᒥᓂᑑᔖᒡ᙮ ᐋᐅᒄ ᒫᒃ ᑳ ᒥᔥᑯᐧᐋᐦᑖᔮᐦᒡ ᐊᓂᒌ ᒥᔅᑎᑯᒡ ᐋ ᓂᐦᑖᐅᒋᒡ ᐊᑎᑑ ᐊᓂᑖ ᒌᐧᐋᑎᓂᐦᒡ ᑮᔮ ᐊᓂᑖ ᔑᔐᒋᐹᑯᐦᒡ, ᐋᐅᑯᓂᒡ ᐊᑎᑑ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ᙮ ᐋᐅᒄ ᑮᔮ ᑳ ᒥᔥᑯᐧᐋᐦᑖᔮᐦᒡ ᐊᓐ ᒥᔥᑯᒥᓈᓈᐦᑎᒄ ᐊᑎᑑ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᑦ ᐃᔅᐱᔑ ᐧᐄ ᐊᓐ ᒥᔥᑯᒥᔒ᙮

ᐋᐅᒄ ᐧᑳᔅᒡ ᑳ ᐧᐄᐦ ᓂᑑᒋᔥᒑᔨᐦᑎᒫᐦᒡ ᒑᐧᑳᓐ ᐊᓐ ᐊᔨᐦᒡ ᐧᐋᐦᒋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐅᒌ ᒥᔅᑎᑯᒡ, ᐋᐅᒄ ᑳᑮᔮ:

- ᐊᔨᐦᒡ ᐋ ᐃᔑᓈᑯᒡᐦ ᐊᓂᐦᐄ ᒌᓐᔥ ᐊᓂᑦ ᐋ ᐅᐦᒋ ᐧᐄᔕᑎᒦᓯᒥᑭᐦᒡ ᒑᐧᑳᓐ ᒑ ᐄᔑ ᓂᐦᑖᐅᒋᐦᒡ, ᐋᐅᑯᓂᒡ ᐊᓂᒌ ᐊᑎᑑ ᒌᐧᐋᑎᓂᐦᒡ ᑳ ᓂᐦᑖᐅᒋᒡ ᒥᔅᑎᑯᒡ
- ᑮᔮ ᒫᒃ ᐋᔮᐱᒡ ᐋ ᐃᔑᓈᑯᐦᒡ ᐊᓐ ᐋ ᐅᐦᒋ ᐧᐄᔕᑎᒦᓯᒥᑭᐦᒡ ᒑᐧᑳᓐ ᒑ ᐄᔑ ᓂᐦᑖᐅᒋᐦᒡ, ᒥᒄ ᐊᔨᐦᒡ ᐋ ᐃᔅᐱᔨᒡ ᐊᑎᑑ ᐋ ᐧᐄᐦ ᐧᐄᒋᐦᐄᓯᒥᑭᐦᒡ ᒑ ᒌ ᐄᔑ ᓂᐦᑖᐅᒋᐦᒡ᙮

ᐊᓂᒌ ᒥᔅᑎᑯᒡ ᐊᔨᐦᒡ ᐋ ᐃᑖᔨᐦᑖᑯᓯᒡ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ, ᐋᐅᒄ ᑳᑮᔮ ᐊᓐ ᐊᔨᐦᒡ ᐋ ᐃᔑᓈᑯᒡ ᐊᓂᑖ ᐅᐦᒋ ᐧᐄᔕᑎᒦᓯᒡ ᒑ ᐄᔑ ᓂᐦᑖᐅᒋᒡ, ᐋᒄ ᒫᒃ ᒋᐦᒋᐧᐋ ᐊᔨᐦᒡ ᐋ ᐃᓯᓈᑯᓯᒡ ᐊᓂᒌ ᒥᔅᑎᑯᒡ, ᑮᔮ ᒫᒃ ᒥᒄ ᐊᓐ ᐊᔥᒌ ᐋ ᑖᐦᑫᐦᐄᒑᐱᔨᒡ ᐊᓂᔮ ᐊᑎᑑ ᒑ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᒥᔅᑎᑯᒡ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᒡ ᐊᓂᑖ ᒌᐧᐋᑎᓂᐦᒡ? ᐊᓐ ᒫᒃ ᓂᔅᐧᑳᐅᔑᐦᐄᐧᐋᐧᐃᓐ, ᐋᐅᒄ ᐆ ᑖᐱᔅᑯᓐ ᐋ ᐃᔑᓈᑯᐦᒡ᙮ ᐋᐅᒄ ᒫᒃ ᐊᓐ ᑳ ᐧᐋᐧᐋᐱᐦᑎᒫᐦᒡ ᐊᓂᐦᐄ ᒌᓐᔥ ᐊᓐ ᐋ ᐅᐦᒋ ᐧᐄᔕᑎᒦᓯᒥᑭᐦᒡ ᒑᐧᑳᓐ ᒑ ᐄᔑ ᓂᐦᑖᐅᒋᐦᒡ ᐅᐦᒋ ᐊᓂᒌ ᓃᔅᑎᓂᐤ ᒥᔅᑎᑯᒡ ᓂᓈᐦᑰ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᒡ ᐊᓂᑖ ᐄᔨᔨᐤ ᐊᔥᒌᐦᒡ᙮ ᐊᓐ ᒥᔥᑯᒥᔒ, ᐊᐱᔒᔅ ᐊᔨᐦᒡ ᐃᔑᓈᑯᓐᐦ ᐊᓂᐦᐄ ᒌᓐᔥ ᐅᐦᒋ ᐊᓂᒌ ᓅᐦᒋᒦᐦᒡ ᐋ ᓂᐦᑖᐅᒋᒡ ᐃᔅᐱᔑ ᐧᐄ ᐊᓂᒌ ᔑᔐᒋᐹᑯᐦᒡ ᐋ ᓂᐦᑖᐅᒋᒡ᙮ ᐊᓐ ᒫᒃ ᐧᐄ ᒥᔥᑯᒥᓈᓈᐦᑎᒄ, ᒥᓯᐧᐊ ᑖᐱᔅᑯᓐ ᐃᔑᓈᑯᓐᐦ ᐊᓂᐦᐄ ᒌᓐᔥ ᐊᓂᑖ ᓂᓈᐦᑰ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᑦ—ᒥᒄ ᒫᒃ ᐋᔮᐱᒡ ᐊᔨᐦᒡ ᒌ ᐃᔑᓈᑯᓐ ᐋ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᑦ, ᐋᐅᒄ ᒫᒃ ᐊᓐ ᐊᔥᒌ ᐋ ᑖᐦᑫᐦᐄᒑᐱᔨᒡ ᐊᓂᑦ ᐋ ᓂᐦᑖᐅᒋᑦ ᐆ ᒥᔅᑎᒄ ᐊᓂᔮ ᑖᓐ ᒑ ᐄᔑ ᓂᑐᐦᑯᔨᓂᐧᐃᑦ᙮

VARIATION IN HEALING PROPERTIES OF SHOWY MOUNTAIN ASH AND AMERICAN MOUNTAIN ASH

In our last lab report, we talked about how the healing properties of showy mountain ash and American mountain ash vary with where the trees grow. We think that a lot of the healing ingredients are ones that the tree uses to protect itself against stressors in its environment, like insects or animals. If this is so, then plants that grow in higher-stress environments might make more of the healing ingredients than usual. And in fact, our tests found that the trees from northern and coastal areas made more of the healing ingredients. Also, showy mountain ash seemed to have more of these ingredients than American mountain ash.

Next, we wanted to test whether these differences are because:

- the more northern trees actually have different genes
- the northern trees have the same genes, but respond to stress by drawing more on certain "recipes" from those genes.

In other words, are the differences because the trees are "made" differently, or because their environment brings out different things in them? The answer

ᔮᐸᒡ ᐋᐦᒌᐤᐦ ᒌ ᐃᔑᓈᑯᓐ ᐁ ᐄᔑ ᓂᑐᐦᑯᔨᓅᒡ, ᐁᐅᒄ ᒫᒃ ᐊᓐ ᐊᔅᒌ ᐁ ᑖᐦᑲᐦᐄᑫᐸᔨᐦᒡ ᐊᓂᑦ ᐁ ᓂᐦᑖᐅᒋᑦ ᐆ ᒥᔥᑎᒄ ᐊᓂᔫ ᑖᓐ ᑫ ᐄᔑ ᓂᑐᐦᑯᔨᓅᑦ᙮

ᐁᐅᒄ ᑲᔦ ᑳ ᐧᐄᐦ ᐧᐋᐸᐦᑕᒫᐦᒡ ᐊᓐ ᐋᐦᒌᐤᐦ ᐁ ᐄᔑ ᐃᐦᑎᑯᐦᒡ ᑫᐧᑳᓐ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑲᓂᐦᒡ ᐋᐦᒌᐤᐦ ᑫ ᒌ ᐃᔅᐸᔨᐦᒡ ᐁ ᐃᔑ ᓂᑐᐦᑯᐦᐄᐧᐁᒡ᙮ ᐁᐅᒄ ᒫᒃ ᑳ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ ᐊᓐ ᐧᐄᔫᒌ ᓇᓈᐦᑰ ᐁ ᐊᑕ ᓂᐦᑖᐅᒋᐧᑖᐤ ᒥᔥᑎᑯᒡ ᐊᓂᔫ ᑖᓐ ᑫ ᐄᔑ ᒫᓯᑫᐸᔨᐦᒡ ᐊᓐᑦ ᐊᓐ ᑫᐧᑳᓐ ᐁ ᐃᐦᑎᑯᐦᒡ ᐲᐦᒋᔫ ᐁ ᐅᓈᒋᐸᔨᐦᐄᐧᐁᒡ, ᐁᐅᒄ ᐊᓂᔫ ᕕᕇ ᕌᑎᑲᓪᔅ free radicals ᑳ ᐃᔑᓂᐦᑳᑌᐦᐧᑳᐤᐦ᙮ (ᐊᓂᔫ ᕕᕇ ᕌᑎᑲᓪᔅ ᑳ ᐃᔑᓂᐦᑳᑌᐦᐧᑳᐤᐦ, ᐁᐅᒄ ᐊᓐ ᐁ ᐅᓈᒋᔅᑖᑫᒪᑲᒃ ᐊᓂᑦ ᒥᐦᑰᔮᐲᐦᒡ ᑲᔦ ᐁ ᐊᑕ ᒋᐧᐹᐸᐦᑫᐸᔨᐦᐧᑳᐤᐦ ᐊᓂᔫ ᒥᐦᑰᔮᐲᐦ᙮) ᐁᐅᒄ ᒫᒃ ᒦᓐ ᑳ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᒡ ᐊᓂᒌ ᒥᔥᑎᑯᒡ ᐁ ᓂᐦᑖᐅᒋᐧᑖᐤ ᒌᐧᐁᑎᓂᐦᒡ ᑲᔦ ᔮᔦᐤ ᐧᐄᓂᐯᑯᐦᒡ, ᐁᐅᑯᓂᒡ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᑳ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᐧᑖᐤ ᐁ ᓂᑐᐦᑯᔨᓅᐧᑖᐤ᙮ ᐁᐅᒄ ᑲᔦ ᐁᑎᑑ ᑳ ᐧᐄᒋᐦᐄᐧᐁᐸᔨᑦ ᒪᔅᑯᒥᓈᓈᐦᑎᒄ ᐃᔥᐱᔑ ᐊᓐ ᒪᔅᑯᒥᔒ᙮

ᐊᓐ ᒫᒃ ᒥᓯᐧᐁ ᐁ ᐄᔑ ᓂᑑᒋᔅᑫᔨᐦᑕᒫᐦᒡ, ᐁᑯᑦ ᐁᐦᒡ ᐧᐄᒋᐦᐄᑯᔮᐦᒡ ᑫ ᒌ ᓂᓯᑐᐦᑕᒫᐦᒡ ᑫᐧᑳᓐ ᐧᐁᐦᒋ ᓂᑐᐦᑯᔨᓅᐦᒡ ᓂᐦᑖᐅᒋᐦᒋᑲᓐ᙮ ᐁᒄ ᒫᒃ ᐁ ᐧᐋᐸᐦᑕᒫᐦᒡ ᑫᐧᑳᔫ ᐁᑎᑑ ᐧᐁᐦᒋ ᐋᐸᒋᐦᐋᐧᑖᐤ ᐄᓅᒡ ᐊᓂᔫ ᒪᔅᑯᒥᓈᓈᐦᑎᒄ ᐃᔥᐱᔑ ᐊᓂᔫ ᒪᔅᑯᒥᔒ, ᑲᔦ ᐊᓂᔫ ᑫᐧᑳᔫ ᐧᐁᐦᒋ ᐋᐸᒋᐦᑖᐧᑖᐤ ᐧᐄᔫᒌᔫ ᐃᔥᐱᔑ ᐊᓂᔫᐦ ᓃᐲᔒᐦ᙮ ᐁᑯᑦ ᐁᒃ ᐊᑕ ᓂᓯᑐᐦᑕᒫᐦᒡ ᑫᐧᑳᓐ ᐊᓐ ᐁ ᐃᐦᑎᑯᐦᒡ ᐁ ᓂᑐᐦᑯᔨᓅᐦᒡ ᐊᓂᑦ ᒥᔥᑎᑯᐦᒡ ᐁ ᐧᐄᒋᐦᐄᑯᐧᑖᐤ ᐊᐧᐁᓂᒌ᙮

ᐋᐅᒄ ᑭᔮ ᑳ ᐧᐄᐦ ᐧᐋᐱᐦᑎᒫᐦᒡ ᐊᓐ ᐊᔨᐦᒡ ᐋ ᐄᔑ ᐃᐦᑎᑯᐦᒡ ᒑᐧᑳᓐ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐊᓂᑦ ᓂᐦᑖᐅᒋᐦᒋᑭᓂᐦᒡ ᐊᓐ ᐊᔨᐦᒡ ᒑ ᐃᔅᐱᔨᒡ ᐋ ᓂᑐᐦᑯᐦᐄᐧᐋᒡ᙮ ᐋᐅᒄ ᒫᒃ ᑳ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ ᐊᓐ ᐧᐄᔫᒌ ᐅᐦᒋ ᐊᓂᒌ ᓂᓈᐦᑰ ᐋ ᐊᑎ ᓂᐦᑖᐅᒋᒡ ᒥᔥᑎᑯᒡ ᐊᓂᔮ ᑖᓐ ᒑ ᐄᔑ ᒫᓯᒑᐱᔨᒡ ᐊᓐ ᒑᐧᑳᓐ ᐋ ᐃᐦᑎᑯᐦᒡ ᒑᐧᑳᓐ ᐲᐦᒋᔨᐤ ᐋ ᐅᓈᒋᐱᔨᐦᐄᐧᐋᒡ, ᐋᐅᒄ ᐊᓂᔮ ᕕᕇ ᕌᑎᑭᓪᔅ free radicals ᑳ ᐃᔑᓂᐦᑳᑖᒡᐦ᙮ (ᐊᓂᐦᐄ ᕕᕇ ᕌᑎᑭᓪᔅ ᑳ ᐃᔑᓂᐦᑳᑖᒡᐦ, ᐋᐅᒄ ᐊᓐ ᐋ ᐅᓈᒋᐱᔨᐦᐄᐧᐋᒡ ᐊᓂᑦ ᒥᐦᑰᔮᐲᐦᒡ ᑭᔮ ᐋ ᐊᑎ ᒋᐧᐹᐱᐦᒑᐱᔨᒡᐦ ᐊᓂᐦᐄ ᒥᐦᑰᔮᐲᐦ᙮) ᐋᐅᒄ ᒫᒃ ᒦᓐ ᑳ ᒥᔅᑯᐧᐋᐦᑖᔮᐦᒡ ᐊᓂᒌ ᒥᔥᑎᑯᒡ ᐋ ᓂᐦᑖᐅᒋᒡ ᒌᐧᐊᑎᓂᐦᒡ ᑭᔮ ᔑᔐᒋᐹᑯᐦᒡ, ᐋᐅᑯᓂᒡ ᐊᑎᑑ ᒥᔥᑏ ᑳ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ᙮ ᐋᐅᒄ ᑭᔮ ᐊᑎᑑ ᑳ ᐧᐄᒋᐦᐄᐧᐋᐱᔨᒡ ᒥᔅᑯᒥᓈᓈᐦᑎᒄ ᐃᔥᐱᔑ ᐧᐄ ᐊᓐ ᒥᔅᑯᒥᔒ᙮

ᐊᓐ ᒫᒃ ᒥᓯᐧᐋ ᐋ ᐄᔑ ᓂᑑᒋᔅᒑᔨᐦᑎᒫᐦᒡ, ᐋᐅᒄ ᐋ ᐧᐄᒋᐦᐄᑯᔮᐦᒡ ᒑ ᒌ ᓂᔥᑐᐦᑎᒫᐦᒡ ᒑᐧᑳᓐ ᐧᐋᐦᒋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᓂᐦᑖᐅᒋᐦᒋᑭᓐ᙮ ᐋᐅᒄ ᒫᔥ ᔖᔥ ᐋ ᐧᐋᐱᐦᑎᒫᐦᒡ ᒑᐧᑳᔨᐤ ᐊᑎᑑ ᐧᐋᐦᒋ ᐋᐱᒋᐦᐋᒡ ᐄᔨᔨᐅᒡ ᐊᓐ ᒥᔅᑯᒥᓈᓈᐦᑎᒄ ᐃᔥᐱᔑ ᐧᐄ ᐊᓐ ᒥᔅᑯᒥᔒ, ᑭᔮ ᐊᓂᔮ ᒑᐧᑳᔨᐤ ᐧᐋᐦᒋ ᐋᐱᒋᐦᑖᒡ ᐧᐄᔮᒌᔨᐤ ᐃᔥᐱᔑ ᐧᐄ ᐊᓂᔮ ᓃᐲᐦ᙮ ᐋᐅᒄ ᔖᔥ ᐋ ᐊᑎ ᓂᔥᑐᐦᑎᒫᐦᒡ ᒑᐧᑳᓐ ᐊᓐ ᐋ ᐃᐦᑎᑯᐦᒡ ᐋ ᓂᑐᐦᑯᔨᓂᐧᐃᒡ ᐊᓂᑦ ᒥᔥᑎᑯᐦᒡ ᐋ ᐧᐄᒋᐦᐄᑯᒡ ᐊᐧᐋᓂᒌ᙮

seems to be "a bit of both." We looked at the actual genes from trees growing in twenty different parts of Iiyiyiu Aschii. For American mountain ash, the coastal trees actually had slightly different genes than the ones growing inland. But showy mountain ash seemed to have the same genes no matter where it grew—and yet its ingredients varied. So now we think that both genes and the environment play a part in which ingredients a tree makes.

We also wanted to see if these differences in ingredients translate into actual differences in healing action. We tested bark from trees growing in different areas to see if there were differences in how well the bark fights "free radicals." (Free radicals are particles that damage our veins and make them clog up.) Again, we found that northern and coastal trees did this more than others. And showy mountain ash did this better than American mountain ash.

All these tests are helping us to understand what makes a plant medicinal. Now we see why Iiyiyiuch use showy mountain ash more than American mountain ash, and why they use the bark more than the leaves. And we are starting to understand which ingredients give these trees their healing properties.

ᐁ ᓰᐦᑳᔮᐸᒫᑲᓅᑦ ᐋᓈ ᐯᐃᓖ

ᐊᓅᐦᓰᑳᓐ ᓰ ᒥᔮᑲᓅ ᐋᓈ ᐯᐃᓖ ᐁ ᓰᐦᑳᔮᐸᒫᑲᓅᑦ ᐊᓂᔩ ᐁᑦᒪᓐᑦ H. ᕗᓖᓐ ᐋᐧᐊᕐᑦ ᑳ ᐃᔑᓂᐦᑳᑌᒡ ᐊᓂᑌ ᑳ ᓂᔥᑐᐧᐋᓈᓅᓯᒡ ᑳ ᒫᒨᐱᔥᑕᐦᐧᑳᐤ ᐁ ᓂᑑᒋᔅᑫᓯᐦᑖᑲᓅᓯᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑳᓐᐦ Society for Economic Botany ᐊᓂᑌ ᐹᔥᑐᓀᐅᔅᓰᐦᒡ ᐊᓂᑌ ᓵᐅᕝ ᑫᕈᓖᐃᓈ᙮ ᐊᓂᔩ ᒫᒃ ᑳ ᒥᔮᑲᓅᑦ ᐁ ᓰᐦᑳᔮᐸᒫᑲᓅᑦ, ᐁᔩᒄ ᐊᓂᔩ ᐧᐄᓯ ᒫᐅᒡ ᐁ ᓰ ᑲᔅᒋᐦᐅᑦ ᐁ ᓰ ᐊᓯᒥᑦ ᑳ ᐧᐋᐸᐦᐎᐧᐁᑦ ᑫᐧᑳᔩ ᑲᔦ ᐊᓂᔩ ᐧᐄᓯ ᐁ ᐅᔅᑎᓲᑦ ᐁ ᐃᑖᐸᑎᓲᑦ (ᐁᔩᒄ ᐊᓂᔩ ᓂᔮᓯᓐ ᐱᐳᓐᐦ ᓀᔥᑦ ᒫᒃ ᐁᑎᑑ ᐧᐁᐃᐱᔥᓰᔥ ᐁ ᓰ ᐃᔮᑦ ᐊᓂᔩ ᐅᒪᓯᓇᐦᐄᑲᓐ ᐁ ᓰ ᐸᑯᐦᑖᑦ ᑳ ᐄᔑ ᒋᔅᑯᑕᒫᓱᑦ)᙮

ᐁᐅᒄ ᐆ ᐊᐱᔒᔥ ᐁ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐅᐦᒋ ᐊᓐ ᐁᑎᑑ ᒥᔥᑕᐦᐄ ᑳ ᒪᓯᓈᑌᒡ ᑎᐹᒋᒨᓯᓇᐦᐄᑲᓐ ᐊᓂᑌ ᐧᓛᓐᔅ ᓖᐸ ᑳ ᐅᐦᒋᐸᔨᐦᒡ᙮

AN AWARD FOR ANNA BAILIE

Anna Bailie recently won the Edmund H. Fulling Award at a meeting of the Society for Economic Botany in South Carolina. This award is for the best oral presentation by someone who is newly qualified (i.e. has had a degree for five years or less).

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

ᐋ ᓰᐦᑳᔮᐱᒫᑭᓂᐧᐃᑦ ᐋᓈ ᐯᐃᓖ

ᐊᓅᐦᓰᐦᓛ ᓰ ᒥᔮᑭᓂᐤ ᐋᓈ ᐯᐃᓖ ᐋ ᓰᐦᑳᔮᐱᒫᑭᓂᐧᐃᑦ ᐊᓂᔮ ᐁᑦᒪᓐᑦ H. ᕗᓖᓐ ᐋᐧᐊᕐᑦ ᑳ ᐃᔑᓂᐦᑳᑖᒡ ᐊᓂᑖ ᑳ ᓂᔥᑐᓯᓈᓂᐧᐃᓯᒡ ᑳ ᒫᒨᐱᔥᑎᐦᒡ ᐋ ᓂᑑᒋᔅᓚᓯᐦᑖᑭᓂᐧᐃᓯᒡᐦ ᓂᐦᑖᐅᒋᐦᒋᑭᓐᐦ Society for Economic Botany ᐊᓂᑖ ᒥᔑᒨᐦᑯᒫᓂᔅᓰᐦᒡ ᐊᓂᑖ ᓵᐅᕝ ᑫᕈᓖᐃᓈ᙮ ᐊᓂᔮ ᒫᒃ ᑳ ᒥᔮᑭᓂᐧᐃᑦ ᐋ ᓰᐦᑳᔮᐱᒫᑭᓂᐧᐃᑦ, ᐋᔦᐧᐃᒄ ᐊᓂᔮ ᐧᐄᓯ ᒫᐅᒡ ᐋ ᓰ ᑭᔅᒋᐦᐅᑦ ᐋ ᓰ ᐊᓯᒥᑦ ᑳ ᐧᐋᐱᐦᐎᐧᐋᑦ ᓚᐧᑳᓯᐤ ᑭᔮ ᐊᓂᔮ ᐧᐄᓯ ᐋ ᐅᔅᑎᓲᑦ ᐋ ᐃᑖᐱᑎᓲᑦ (ᐋᔦᐧᐃᒄ ᐊᓂᔮ ᓂᔮᔦ ᐱᐳᓐᐦ ᑭᔮ ᒫᒃ ᐊᑎᑑ ᐧᐋᐃᐱᔥᓰᔥ ᐋ ᓰ ᐃᔮᑦ ᐊᓂᔮ ᐅᒥᓯᓂᐦᐄᑭᓐ ᐋ ᓰ ᐱᑯᐦᑖᑦ ᑳ ᐄᔑ ᒋᔅᑯᑎᒫᓱᑦ)᙮

ᐋᐅᒄ ᐆ ᐊᐱᔒᔥ ᐋ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐅᐦᒋ ᐊᓐ ᐊᑎᑑ ᒥᔥᑏ ᑳ ᒥᓯᓈᑖᒡ ᑎᐹᒋᒨᓯᓂᐦᐄᑭᓐ ᐊᓂᑖ ᐧᓛᓐᔅ ᓖᐸ ᑳ ᐅᐦᒋᐱᔨᐦᒡ᙮

ᒪᓯᓇᐦᐄᑫᐧᐃᐣᐦ | ᒥᓯᓂᐦᐄᓛᐧᐃᐣᐦ Notes

Species	English Name	Cree Name	Southern Dialect	Northern Dialect
Abies balsamea	Balsam fir	Inaasht	ᐄᓈᔥᑦ înâsht	ᐄᔮᔑᐦᑦ îyâshiht
Alnus incana subsp. rugosa	Gray alder	Atushpi	ᐅᑑᔅᐲ utûspî	ᐅᑐᔅᐲ utuspî
Andromeda polifolia L.	Bog rosemary	Uschischibuk	ᐅᔅᒋᔅᒋᐸᒄ uschischipakw	ᐅᔅᒋᔅᒋᐱᒄ uschischipikw
Betula papyrifera	Paper birch	Ushkui	ᐅᔥᑯᐃ ushkui	ᐧᐃᔥᑯᐃ wishkui
Cladonia rangiferina	Gray reindeer lichen	Wapskamkw	ᐧᐋᐱᔅᑲᒥᒄ wâpiskamikw	ᐧᐋᐱᔅᑭᒥᒄ wâpiskimikw
Empetrum nigrum	Crowberry	Eshjeemenan	ᐊᔅᒌᒥᓈᓐᐦ aschîminânh	ᐊᔅᒌᒥᓐᐦ aschîminh
Gaultheria hispidula	Creeping snowberry	Pieuminaan	ᐱᔦᐅᒥᓈᓐᐦ piyeuminânh	ᐱᔮᐅᒥᓐᐦ piyâuminh
Heracleum maximum	Cow parsnip	Wiipashtk	ᐧᐄᐦᐹᔥᒄ wîhpâshkw	ᐧᐄᐦᐹᔅᒄ wîhpâskw
Juniperus communis	Ground juniper	Kakachiiminatuk	ᑳᐦᑳᒌᒥᓈᐦᑎᒄ kâhkâchîminâhtikw	ᑳᐦᑳᒌᒥᓈᐦᑎᒄ kâhkâchîminâhtikw
Kalmia angustifolia	Sheep laurel	Uishichipukw	ᐅᔅᒋᔅᒋᐸᒄ uschischipakw	ᐅᔅᒋᔅᒋᐱᒄ uschischipikw
Larix laricina	Tamarack larch	Watnagan	ᐧᐋᒋᓈᑲᓐ wâchinâkan	ᐧᐋᒋᓈᑭᓐ wâchinâkin
*Leymus mollis**	American dune grass	Weenibekushkushuh	ᐧᐄᓂᐯᑯᔥᑯᔔᐦ wiinipekushkushuuh	ᐧᐄᓂᐹᑯᔥᑯᔑᐤᐦ wiinipaakushkushiuh
Lycopodium clavatum	Stag's horn club moss or ground pine	Pashtnahoagin	ᐹᔅᒋᓈᐦᐧᑳᑲᓐ pâschinâhkwâkan	ᐹᓯᓈᐦᐧᑳᑭᓐ pâsinâhkwâhkin
Picea glauca	White spruce	Minhikw	ᒥᓇᐦᐄᒄ minahîkw	ᒥᓂᐦᐄᒄ minihîkw
Picea mariana	Black spruce	Inaahtikw	ᐄᓈᐦᑎᒄ înâhtikw	ᐄᔮᐦᑎᒄ îyâhtikw
Picea mariana	Black spruce (bog)	Maschegotuk	ᒪᔅᒉᐧᑳᐦᑎᒄ mashekwâhtikw	ᒥᔅᒑᐧᑳᐦᑎᒄ mischekwâhtikw
Pinus banksiana	Jack pine	Ushchishk	ᐅᔅᒋᔅᒃ uschisk	ᐅᔅᒋᔅᒃ uschisk
Populus balsamifera	Balsam poplar	Miitus	ᒦᑐᔅ mîtus	ᒦᑐᔅ mîtus
Rhododendron groenlandicum	Labrador tea	Kachichepukw	ᑳᒋᒉᐸᒄ kâchichepakw	ᑳᒋᒑᐱᒄ kâchichâpikw
Rhododendron tomentosum	Northern Labrador tea	Weeshichbuksh	ᐧᐄᔕᔑᐸᑯᔥᐦ wîshashipakush-h	ᐧᐄᔑᒋᐱᑯᔥᐦ wîshichipikush-h
Salix planifolia	Willow	Pieuatikw	ᐱᔦᐅᐧᐋᐦᑎᒄ piyeuwâhtikw	ᐱᔮᐅᐧᐋᐦᑎᒄ piyâuwâhtikw
Sarracenia purpurea	Pitcher plant	Ayigadash	ᐊᔨᑲᑖᔥ ayikatâsh	ᐊᔨᑭᑖᔥ ayikitâsh
Sorbus decora	Showy mountain ash	Mushkuminanatikw	ᒪᔅᑯᒥᓈᓈᐦᑎᒄ maskuminânâhtikw	ᒥᔅᑯᒥᔒ miskumishî
Sphagnum fuscum	Common brown peat moss	Awashischee	ᐊᐧᐋᔑᔅᒌ awâshischî	ᐊᐧᐋᔑᔥᒌᔥ awâshishchîsh
Stereocaulon paschale	Common coral lichen	Wabuwakunapwkw	ᐧᐋᐱᐧᐋᐦᑯᓈᐱᒄ wâpiwâhkunâpiskw	ᐧᐋᐱᐧᐋᐦᑯᓐᐦ wâpiwâhkunh
Thuya occidentalis	Cedar	Maastchiisk	ᒫᔅᒌᔅᒃ mâschîsk	ᒫᔅᒌᔅᒃ mâschîsk
*Typha latifolia**	Cattail	Uchshkoyushkushu	ᐅᒋᔥᐧᑳᔫᔥᑯᔔ uchishkwâyûshkushû	ᐅᒋᔥᐧᑳᔫᔥᑯᔑᐤ uchishkwâyûshkushiu
*Vaccinium angustifolium**	Low-bush blueberry	Minshe	ᐄᓂᒥᓈᓐᐦ îniminânh	ᐄᔨᒥᓐᐦ îyiminh
Vaccinium uliginosum	Alpine bilberry	N'chiminatuk	ᓂᒋᑯᒥᓈᐦᑎᒄ nichikuminâhtikw	ᓂᒋᑯᒥᓈᐦᑎᒄ nichikuminâhtikw
Vaccinium vitis-idaea	Mountain cranberry or lingonberry	Wishichimna	ᐧᐄᓴᒋᒥᓈᓐᐦ wîsachiminânh	ᐧᐄᓯᒋᒥᓐᐦ wîsichiminh

* ᓇᒧᐃ ᒨᔥ ᐚᔨᒧᑌᐤ᙮ * ᓂᒧᔨ ᒨᔥ ᐚᔨᒧᑖᐤ᙮ * *not often mentioned during interviews*

ᒪᓯᓇᐦᐄᑫᐏᐣᐦ | ᒥᓯᓂᐦᐄᒑᐏᐣᐦ Notes