

A new way to look at the plants that Iiyiyiuch traditionally used for diabetes *

In the past ten years, diabetes rates have more than doubled among adults in Iiyiyiu Aschii. The clinics have tried the usual treatment programs, but without much success. Some people think that Iiyiyiuch might do better using traditional remedies. This article describes how a team of Elders and plant scientists worked together to develop a list of plants that might help diabetes. They also tried to find out which ones are likely to be the *most* useful. Later studies will look at these plants in the lab, to find out more about how they work inside the body.

First, the scientists developed a list of 15 problems that often go along with diabetes—like being thirsty all the time, or having lots of headaches. They asked a group of experts to say which of these problems were strongly related to diabetes, and which were only sometimes related to it.

Then they talked with 34 Elders in Mistissini about what kinds of plants they would use to treat these 15 problems. Among them, the Elders identified 18 different plants that they might use for these kinds of problems.

Next, the team wanted to narrow the list down, so they would know which plants to look at first in the lab. They ranked the plants based on a combination of

- how many different Elders mentioned the plant
- how many different problems the plant was used to treat
- whether the plant was used to treat the kinds of problems that were most strongly related to diabetes

The final list looked a lot like one that researchers working with Cree communities in western Canada came up with. This suggests that Cree people across Canada used many of the same remedies for the same problems.

One plant might be used to treat many different problems. Or, a single problem might be treated with many different plants. But are there problems for which most Elders recommend one particular plant and no others? Are there plants that are only used to deal

with one type of health problem? The scientists used statistics (math) to see if the Elders tend to recommend just one plant for a particular problem. This wasn't always the case. However, there were three cases where there was a lot of agreement that a specific plant was good for a specific problem.

Like humans, plants that are part of the same family tend to be a bit alike. Because of this, the scientists wondered if the different plants that Elders use to treat a particular problem might all be from the same family. But when they used statistics to check, this was not true. It turns out that Elders use plants from several different families to treat the same problem.

The team members felt that this combination of interviews and statistical methods worked well. It allowed them to come up with a list of plants that were traditionally used to treat diabetes, and to identify which plants should be looked at first. In the longer term, they hope that some of these traditional remedies can be routinely offered to people in Iiyiyiu Aschii. They would like Iiyiyiuch to have a choice between traditional and western medicine.

* This is a plain-language summary of a technical article by C. Leduc, J. Coonishish, P. Haddad and A. Cuerrier called "Plants used by the Cree Nation of Eeyou Istchee (Quebec, Canada) for the treatment of diabetes: a novel approach in quantitative ethnobotany." It was published in the *Journal of Ethnopharmacology* in 2006.