

# How do traditional plant foods increase food diversity?

# traditional food diversity

Many traditional indigenous plant foods can be compared to the foods you might find in an average market today. These include root vegetables, green vegetables, fleshy fruits, seeds, nuts, grains and mushrooms.

Plant foods that may not be found in markets but still form a part of Indigenous traditional diets include algae, lichens, flowers and the bark or inner bark of trees.



## The land and food systems

The vast and diverse landscape in Canada traditionally shaped and formed Indigenous land and food systems. The land, air, water, soil, and animal and fungi species sustained Indigenous Peoples for millennia. Traditional food sources varied from region to region and included game, seafood, birds, plants and berries. From the whale meat and cloudberries of the Far North to the halibut and salmon of the West Coast and the wild rice native to wetlands from modern-day Manitoba all the way to the Atlantic, the nutritional diversity available to Indigenous communities was as expansive as the land itself.

What does the quotation suggest about the diversity of plants used for food?



Destination Indigenous. Revitilizing Indigenous Culture, One Meal at a Time. Online. https://indigenouscuisine.ca/food-culture/

Traditional foods consist of a variety of animal and plant species that are hunted, fished, gathered and harvested from natural environments, including wild meat, fish, birds, plants and berries. Although some First Nations peoples cultivated varieties of maize, beans and squash, all other plant foods were harvested from the wild.

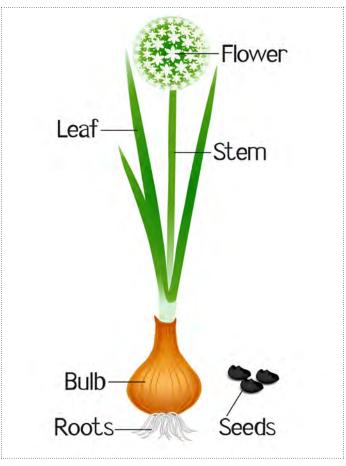
#### **FOCUS ON ROOT VEGETABLES**

Root vegetables include such root foods as wild onions, blue camas, yellow avalanche lily, bitterroot, balsamroot, silverweed, springbank clover, roseroot, cattails and knotweed.

Root vegetables are storage organs. A storage organ is a part of a plant that stores energy or water. Storage organs often grow underground and provide a source of carbohydrates.

Wild onion is one example of a root vegetable that was used as both a food and a medicine. The plant grows to between 7 and 30 cm tall with narrow, slender stems and narrow, tube-like leaves or stalks. These stalks are also used as a food. The flowers are white or pale pink in colour.

Cattails are found in wetland areas. Several parts of the plant are edible, including the roots and head, or flower. Cattails are rhizomatous. This means they PARTS AND STRUCTURES OF AN ONION PLANT have **rhizomes**, which are actually stems, not roots.









**CATTAIL PLANT** 



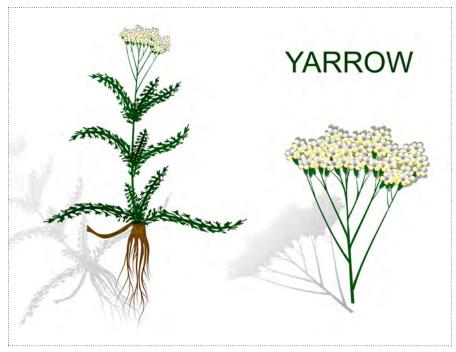
### **FOCUS ON GREEN VEGETABLES**

Green vegetables include the plants in which the stems, leaves, shoots and buds were used as food or medicines. For example, traditional stem and shoot vegetables include thimbleberry and salmonberry, fireweed, cow-parsnip, Indian celery, and fiddleheads. Leaf vegetables include plants such as watercress, mustard greens, common yarrow and nettles.

Common yarrow is a non-woody plant, or herb, that grows about 30 to 70 cm tall. It has several stems that grow from a branched stalk.

The leaves of the yarrow are 4 to 15 cm long and a blue-green colour. They are feathery and hairy. The plant blooms in a cluster of small white flowers in a round cluster. The seed is small and flat.

Yarrow is used to treat headaches, stings, cuts, sores, burns and nosebleeds.



PARTS AND STRUCTURES OF A YARROW PLANT



YARROW PLANT

What more can you find out about the structures and functions of other green plants that are used for food or medicine?

## **FOCUS ON FRUIT PLANTS**

A wide diversity of berries are found across Canada and are favourite foods of many people as well as important traditional plant foods. These berries include Saskatoon berries, blackberries, blueberries, cranberries, currents, gooseberries, salal berries, soapberries, strawberries and thimbleberries.

The Saskatoon berry grows as a small to large shrub, or small tree. It is closely related to the apple, hawthorn and mountain ash. It grows about one to six metres tall. It has smooth grey or brown branches. The leaves alternate and are oval in shape with serrated edges.

Flowers are white with five petals. The flowers appear in a cluster, each cluster having 5 to 11 flowers. The fruit that develops is actually not a berry, but is called a **pome**, like apples and pears. The fruit is round in shape with nine seeds.



LEAVES AND FRUIT OF A SASKATOON BERRY PLANT

Saskatoon berry bushes have a fibrous root system with shallow surface roots. Some varieties are rhizomatous. Rhizomes function as a stem, although they grow underground. New branches and roots of the plant grow out of these underground stems, and they store food for the leaves and the roots.

What more can you find out about the structures and functions of other berry plants?



#### <sup>'</sup>Misaskatomina

The Canadian name for the Saskatoon comes from the Cree name for these berries, "misaskatomina." In the United States, they are known as service berries. These sweet fruits are still very important to the diet of many Indigenous Peoples across Canada. Indigenous groups in the prairies used saskatoons as an important trade item with early explorers and fur traders. The sweeter types of fruits such as Saskatoon berries were the primary sources of sweetness in the diet, and were sometimes used to enhance the flavor of other foods.



**SASKATOON BERRY PLANT** 

National Indigenous Diabetes Association. (2020). Gifts from our Relations: Indigenous Original Foods Guide: Online. http://nada.ca/wp-content/uploads/2020/06/NIDA\_TRADITIONAL\_FOODS\_GUIDE.pdf

#### OTHER PLANT FOODS

Seeds, nuts and grains include maize, wild-rice, oak acorns, beechnuts, hazelnuts, black walnuts, balsamroot seeds and whitebark pine seeds.

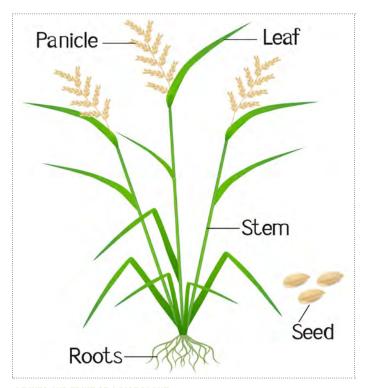
The inner bark tissues of many types of trees have been an unusual source of plant foods. Conifers like western hemlock, Sitka spruce and lodge pole pine, but also cottonwood and other deciduous species, have inner bark tissues that were scraped off from the trees in spring.

Rice plants have a fibrous root system that anchors it in soil. The roots are made of a clump of hair-like roots that absorb water and nutrients. The roots sprout from nodes along the stem. The nodes are found along the stem both below and above the ground.

The stem is hollow, like a straw, and can grow to between 50 cm and 1.8 metres. The leaves of the rice plant sprout from the stem nodes. Leaves are long and thin, which is typical of grasses.

The flowers on the rice plant sprout in clusters called **panicles**, which are flower stalks with multiple branches. The panicles are about 10 to 25 cm long. Each branch can have about 75 to 150 smaller branches called spikelets, which each contain one flower. The flowers are pollinated by the wind.

The seeds of the rice plant are the grain that is used as a food source. Wild rice is an important traditional food of some Indigenous people, and is found in northwestern Ontario, southwestern Manitoba, northern Minnesota, and in the cold lakes of Saskatchewan.



**LEAVES AND FRUIT OF A RICE PLANT** 



WILD RICE PLANTS IN SASKATCHEWAN



Wild rice is an important part of the history and tradition of the Anishinaabe (Ojibwe) people in the prairies. In the Ojibwe language, the word "man-o-min" derives from Manitou (the Great Spirit) and meenun (delicacy). Wild rice is not a part of the rice family at all. It is a grass that grows in shallow, slow moving water near the shores of lakes, rivers and streams.



The traditional method of harvesting rice was to paddle a canoe through the wild rice stands, and with sticks or paddles sweep the tall grass-like stalks inside the canoe so that the grain would separate and drop to the bottom. Then the green rice was brought to shore and roasted to a shiny brownish black over an open fire. (This step is called parching). The rice would be placed in blankets or baskets where someone would "dance" or "jig" on it to separate the rice from the husk. Finally, the rice would be tossed in the air so the wind could blow away the husk. This step is called winnowing.

National Indigenous Diabetes Association. (2020). Gifts from our Relations: Indigenous Original Foods Guide: Online: http://nada.ca/wp-content/uploads/2020/06/NIDA\_TRADITIONAL\_FOODS\_GUIDE.pdf

## traditional food stories

Eva Stang is a member of the Métis Nation of Alberta. She is of Cree and French heritage. Eva grew up in her Cree culture. She speaks the Cree language and her Indigenous knowledge was taught to her by her grandparents, parents and a number of Cree Elders who have mentored her over the years.

Eva has worked with the Indigenous community for more then 41 years in the areas of health care, social services, education, community programing and justice. She strives to share Indigenous cultural knowledge via her experiences and the teachings she has received from Elders.





## Traditional foods - Eva Stang, Knowledge Keeper

As a child, I have fond memories forging for berries (menisa - Cree word for berries) with my grandparents and parents during summer break and early fall. Growing up in the country, we had no grocery stores near by so my family had to hunt, fish and gather berries as food sources in preparation for the fall and winter.

We would pick a variety of berries such as; gooseberries, strawberries, blueberries, chokecherries, raspberries, cranberries and Saskatoons. The harvesting of wild berries begins in mid July until late August. I remember using ice cream pails to gather; blue berries, saskatoons and cranberries.

Before harvesting, we were taught to offer tobacco to the Creator (Nohtawinan – Cree word for Creator) and Mother Earth and thank them for the food they provide for us. We were also taught not to take more than what we need as we share this earth with all of the Creator's land, air and water animals. They too depend on the same food source we harvest. Once berry harvesting was completed, my family would make jams and preserve the fruit in jars for later use.

One berry that is special to me is the Saskatoon berry. Typically, the Saskatoon berry (misaskwatomina) is a fruit that is served at traditional Cree feasts and ceremonies. A traditional feast is a ceremony where community members gather to honor loved ones who have passed. Saskatoons are also served after a Sweat

Lodge and Sun Dance ceremonies. These ceremonial practices are for spiritual healing, purification or asking the creator to heal family members, friends or the community.

I still harvest Saskatoons annually for ceremonial purposes and for consumption...I only take what I need. I freeze the berries and later use them in baking but most importantly I harvest for ceremonial feasts.

You can find natural food sources if you open your eyes. It's free but it takes a bit of labour to gather, clean and preserve... remember take only what you need.



HIEROCHLOE PLANT, KNOWN AS SWEETGRASS

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How does an understanding of traditional plants used by many Indigenous peoples contribute to food diversity?