

# Farm to School Month – Week Three: Indigenous Food Focus

## Fiddlehead Fern Day!!



Many thanks go out to Melissa Chlupach, Regional Healthcare Dietitian with NANA Management Services, for all her help with all the information she has provided me for each Wednesday this month celebrating Indigenous Foods We Eat! All information I have listed below is based on the materials she has passed along. Thank you, Melissa!!



### FIDDLEHEADS

Let's learn about fiddlehead ferns today!!

Why take a whole day to look at fiddlehead ferns? Well, fiddlehead ferns can be found from the Brooks Range southward toward the Aleutian Islands, and on the Alaska Panhandle and something THAT important needs to be shared.

### The Roots of Fiddlehead History

- Fiddlehead ferns have been harvested by Yup'ik, Dena'ina and Koyukon Athabascan, and Tlingit peoples.
- The fiddlehead fern, (or the young croziers – shoots of the ferns), is not a species, rather it represents the point of maturity of the plant.
- Fiddlehead is the name given to the coiled frond of the fern that has been harvested at its youthful stage of growth.
- Considered an important food of the Alaska Native people as a spring harvest rich in vitamins A and C.

### Let's Move into the Science of Fiddleheads

**Pronunciation:** 'fi-d<sup>h</sup>l-, hed 'fərn

**Yup'ik name:** cetuguar (aq), nengqaaq, ciilavik

**Dena'ina name:** elnen tselts 'egha, uh ts 'egha

**Koyukon name:** tlaa edenaalkkede

**Tlingit name:** K'wálx

**Family:** Onocleaceae (Ostrich fern)  
Athyriaceae (Lady fern)

**Genus:** *Matteuccia* (Ostrich fern)  
*Athyrium* (Lady fern)

**Species:** *M. struthiopteris* (Ostrich fern)  
*A. filix-femina* (Lady fern)



The name "fiddlehead" or "fiddlehead fern" can apply to several species of edible ferns that have just emerged in the spring. The young tightly coiled frond (crozier) resembles the scroll at the top of a violin's peghead.

The two most common types of ferns harvested as fiddleheads in Alaska are the Ostrich and Lady ferns. For the Ostrich fern, a few weeks after the sterile green fronds appear, the brown spore-bearing fronds emerge from the center of the clump, and are about half the size of the sterile fronds. The spore bearing

pinnae point upward and are clustered below the tip. These fertile fronds often persist into the winter. Ostrich Fern fiddleheads exhibit a



Young Lady Fern fronds Photo by D. Ross

deep U-shaped groove running down the inside of the stem. The Lady fern fiddleheads also show a U-shaped groove down the inside of the stem, and for the inexperienced gatherer are hard to distinguish from the fiddleheads of Ostrich Fern. Upon emergence, both species of fiddleheads have brown papery scales which should be rubbed off before cooking. If the fiddleheads have fuzz instead of scales, it is not Ostrich Fern or Lady Fern.



Ostrich Fern fiddleheads Courtesy of D. Barrington, Univ. of Vermont

Two other ferns are sometimes harvested for food in Alaska: Shield Fern / Spreading Wood Fern (*Dryopteris expansa*); and in the Alaska panhandle, Bracken Fern (*Pteridium aquilinum*).

### Where Do Fiddleheads Live?

The range of the Ostrich fern in northern North America is widespread, from British Columbia to the northeastern provinces and states; however, its range within Alaska is limited: It is most common in the Susitna Valley and some locations in the Matanuska Valley, Municipality of Anchorage, and the Kenai Peninsula. It has also been noted around hot springs in interior Alaska.

The range of the Northwestern Lady Fern is primarily a western fern ranging from California to Alaska with some separated populations in Ontario and Quebec. Within Alaska it is found from the SE panhandle through southcentral to the Bering Sea coast south of Norton Sound.

Shield Fern is found throughout much of the southern half of Alaska, while Bracken Fern is restricted to SE Alaska.

Ostrich Fern prefers moist shady bottomlands, woods, and streambanks. It is often a good indicator of fertile fine-grained soils deposited by moving water on river bottoms or flood plains. Lady Fern is found in similar habitats, but may also be common in open meadows to above timberline.

### Reasons to Eat Fiddleheads

1 cup of raw fiddleheads provides:

- An excellent source of fiber.
- An excellent source of vitamin A and a good source of vitamin C.
- A heart friendly food low in fat and very low in sodium.

### Some Great Fiddlehead Facts

- **CAUTION: Pick fiddleheads only when they are young and tightly coiled, as the mature ferns are toxic.**
- “In the early spring one year, the people ran out of food. They divided into two groups, one moving into the higher country to dig ferns, and the other to the sat water to dig clams. Those people who lived on ferns received back their strength and gained weight, while those that lived on clams barely survived.” – Tanaina Plantlore

NUTRITION INFORMATION	
Per serving - 1 cup: raw	
Calories	51
Protein	7 g
Carbohydrate	8 g
Fat	1 g
Calories from fat	11 %
Saturated fat	NT*
Dietary Fiber	6 g
Cholesterol	0
Sodium	2 mg
Vitamin A	5426 IU
Vitamin C	40 mg
Iron	2 mg

- Fiddleheads present several concerns for harvesters: Ostrich fern is generally considered to be the safest fiddlehead for consumption. Even so, in the Lower 48 and Canada there have been reports of food poisoning from raw or undercooked fiddleheads assumed to be Ostrich fern. There is speculation that these suspect fiddleheads may have actually been from Cinnamon fern or Interrupted fern (*Osmunda* species). Neither of these ferns occurs in Alaska.
- In recent years, there has been increased collecting pressure on certain state lands. Collecting more than half of the fiddleheads from a single rhizome, year after year, will result in lower yields, and if the picking pressure continues, eventually kill the fern.
- Never collect more than half of the fiddleheads arising from an individual root.

## Let's eat . . .

### Sautéed Fiddlehead Ferns

Serves 4

Ingredients	Amount
Fiddlehead ferns, cleaned	2 cups
Vegetable oil	1 ½ Tablespoons
Garlic, minced	1 ½ teaspoon
Roasted red pepper, canned, chopped	1/3 cup
Salt	To taste
Pepper	To taste

1. Heat large sauté pan on the stove over medium-high heat. Add oil to pan, and, once hot, add in fiddleheads. Cook for 2 to 3 minutes without stirring or flipping. Add in garlic and stir to flip them over. Cook for an additional 2 to 3 minutes then add in chopped roasted red peppers and season with salt and pepper. Cook for another 3 to 5 minutes, or until fiddleheads are tender.
2. Serve warm as a side dish.

### Yummy Goodness and Tasty Tips!!

- Spring is the time to harvest. Depending on location and elevation, this can vary from early May through June in Alaska.
- Harvesting should be suspended once the fiddleheads begin to uncurl and spread out.
- The tighter the head the tastier it will be.
- The fiddleheads can be prepared by steaming, boiling, or baking.
- Before cooking fiddleheads, rub off the bitter brown chaff on the stalks and rinse them with water.
- Snapping off the fiddleheads with the fingers is the most common and efficient method. Be sure to collect as much of the young stem as possible, as their taste and edibility is as good as the coiled crozier.
- While collecting in the field, fiddleheads may be stored in buckets or plastic bags and should be kept cool.
- Keep refrigerated until ready to process. They can be stored in the refrigerator for up to two weeks.
- To preserve fiddleheads, blanch for two minutes, then freeze in plastic bags.
- **While some harvesters preserve fiddleheads in oil, this is not recommended. Unless acidified with vinegar or lemon juice first, toxic bacteria including the botulinum toxin can form.**