



Nutritional Properties of Native Plants and Traditional Foods from the Central United States

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Abstract Traditional foods of indigenous people are a potential untapped source for providing nutritious dietary in the modern world. The rising popularity of indigenous foods such as amaranth in recent years suggests that they can become a popular part of a healthy diet in the United States. Traditional knowledge of indigenous people can be a basis for using wild food resources. This research provides data on 50 plant species common to the central United States that are abundant sources of dietary protein and fiber, and used traditionally by Native American tribes. Many species promise with high amounts of protein and fiber being found in lamb's quarters, nettles, grass seeds, and buffalo seeds. These results honor traditional knowledge. In addition, many of these species could be cultivated using techniques similar to those existing for commercial grains and vegetables. Seeds and/or greens of these wild plants could be incorporated into the diets of many more people, improving modern diets, and the nutritional quality of food products.

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Introduction

Many food sources utilized in the past by Native American people are no longer consumed, despite their potential to provide high amounts of many nutrients that could benefit human health. Archaeological evidence indicates seeds of native lambsquarters (*Chenopodium berlandieri*) and marsh elder (*Iva annua*) were once cultivated as a part of the Eastern Agricultural Complex and used extensively in the Midwest and Great Plains, but these are no longer used as food (Asch and Asch 1977; Black 1963; Gremillion 2004; Kindscher 1987). Other foods, such as “greens” from *Chenopodium*, *Amaranthus*, and even common milkweed (*Asclepias syriaca*) are not consumed as much as they were decades ago by

improve the nutritional quality of modern diets by recognizing the value of traditional knowledge and practices by encouraging use of these wild foods today.

By “traditionally” used foods, we mean those that were eaten for centuries prior to contact with European history and consisting mostly of native plant and some naturalized species, such as domesticated crops thought to have arrived in North America with European colonists (Sanchez 2007). Native Americans relied on wild plant foods for much of their diet prior to the development of the Eastern Agricultural Complex around 1800 BCE and cultivated domesticated crops, lambsquarters and marsh elder, as well as sunflowers, squash, little barley, and erect knotweed.