

Sustenance and Health among the Five Tribes in Indian Territory, Postremoval to Statehood

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Abstract. In response to white settlers' demands for tribal lands in the southeast, Congress passed the Indian Removal Act in 1830. The "Five Tribes"—Cherokees, Choctaws, Chickasaws, Muscogees (Creeks), and Seminoles—were then forced to Indian Territory (now Oklahoma). Natives had access to a vast array of fruits, vegetables, and game meats, and until the Civil War, their health problems appeared to be maladies such as wounds, parasites, contagious diseases, and illnesses associated with unsanitary conditions. Around the mid-1860s, natives' diets began changing in two ways: either they included an overabundance of wheat flour, sugar, salt, and lard that resulted in diet-related ailments such as diabetes, obesity, and tooth decay; or the amount of food was inadequate, and natives suffered from malnutrition. Using testimonies of early explorers and elderly residents of 1930s Oklahoma who recalled their days in the Territory, this essay explores the sustenance of the Five Tribes and considers how changing from a diet of fresh flora and fauna to calorie-dense, fatty, and carbohydrate-laden meals may have contributed to their declining health.

Keywords. Indian Territory, indigenous health, indigenous foodways, Five Tribes, diabetes, indigenous health decline, traditional foods

In the 1770s, Bernard Romans, the intrepid explorer, navigator, and naturalist, described tribes of the Southeast as "well made, of a good stature, and neatly limbed," and their "teeth are very good." Anyone who appeared "crooked, lame or otherwise deformed" was "accidental." He assessed the native men as generally "strong and active" and the women as "handsome, well-made . . . their strength is great, and they labour hard."¹ Eighteenth-century English trader James Adair expressed admiration for natives' endurance and ability to chase game or an enemy for hundreds of miles.² In

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1846, Indian agent William Armstrong commented that the Choctaws prior to removal were “the most hearty, robust looking people I have ever seen.”³ From descriptions such as these, along with early paintings and sketches of vigorous-looking indigenous men and women, one might believe that historical tribespeople did indeed enjoy pristine health. Reviews of medicinal plants used by the Five Tribes, however, reveal that natives were felled by a variety of diseases, parasites, and wounds. Consumption of alcohol, acquired through the fur trade, also began to take a toll in the seventeenth century.⁴ Romans noticed that people suffered from fevers in summer because of “violent heat” and rain. They also fell ill during rainy seasons in areas that were converted to swamps for indigo cultivation, “when the air is most prodigiously loaden [*sic*] with corrupt moist effluvia.” Natives also were ravaged by yellow fever in the mid-1760s.⁵ Smallpox in particular took a heavy population toll, and when weakened tribal groups also faced loss of resources from drought and floods, they became vulnerable to even more illnesses.⁶

The removal ordeal in the 1830s weakened even the physically strongest. Thousands died both en route to Indian Territory and after arrival from illness, exhaustion, and inadequate food, clothing, and shelter. After the physical and emotional devastation of removal, the Five Tribes struggled to reestablish their governments, farms, and homes, and they managed to do so in varying degrees of complexity and comfort. Affluent mixed-blood natives had brought livestock with them across the removal trail and could afford to build large homes and to cultivate commercial corn, wheat, and cotton crops.⁷ Many increased their stock raising to sell to Fort Gibson and to tribespeople arriving from the east as well as to those desiring to buy cattle to drive to California.⁸ In 1837, the agent stated that it was difficult to estimate the number of cattle, horses, sheep, and hogs some of the Choctaws owned.⁹

At the same time that many among the Five Tribes prospered, others succumbed to diseases such as cholera, malaria, and consumption.¹⁰ Five to six hundred Chickasaws and four to five hundred Choctaws died from small pox in 1838. Others perished after drinking stagnant water when shallow waterways dried up in late summer.¹¹ In 1844, a large number of Chickasaws were unprepared for the cold winter and perished.¹² And in spring, the Verdigris River flooded, then left behind “noxious effluvia” that caused “bilious and intermittent fevers” among the Creeks.¹³

From the time of their removals in the 1830s through the Civil War, terms such as “obesity,” “lactose intolerance,” and “high blood pressure” are not seen in Territory newspapers or on early ethnobotanical medicinal plant lists.¹⁴ Preremoval travelers through the Southeast did not mention over-

fat natives. After the Civil War, however, consequences of residents' intake of lard, sugar, salt, white flour, milk, and processed foods (candy, canned fruits, pies, cakes, etc.) emerged. Curative ads for "obesity" appeared after 1864 in Indian Territory and Arkansas papers such as the *Indian Citizen*, *Cherokee Advocate*, *Indian Chieftain*, *Eagle-Gazette*, *Fort Smith Elevator*, *Hugo Husonian*, *Indian Champion*, and *Indian Territory*, and between 1830 and 1907, there are at least 10,173 newspaper stories and ads about stomach ailments and 6,976 about kidney problems. Dentists are mentioned more than 3,000 times in newspapers between 1864 and 1907, revealing the rise of dental caries. Few ads addressed the common issues such as smallpox, wounds, or snakebites; rather, it appears that residents suffered from maladies that are often related to poor diet and lack of exercise—specifically, piles (hemorrhoids), "bowel problems," weak and fretful children, "liver complaint," appendicitis, sour stomach, nervous prostration, indigestion, "wind on the stomach," bloating, colic, stomachaches, diarrhea, and biliousness of the blood.

It is unclear if some Natives suffered from diabetes prior to removal. Choctaws, for example, have a word for diabetes in *Chahta anumpa* (Choctaw language): *hoshunwa shali*, which is similar to *hoshunwa* (noun: urine; verb: to urinate). Cyrus Byington's *Choctaw Language Dictionary* was completed in 1868, but was the word for diabetes created around the time of publication, or was it used pre-removal or even precontact? There are two plants Choctaws used to treat "sugar diabetes," and that information comes from a Cherokee informant interviewed by botany student William H. Banks in 1952; there is no mention of these plants being used for "sugar diabetes" before that time. One plant, Adam's needle (*Yucca filamentosa*), has numerous uses, one being that it is the key ingredient in Cherokee green corn medicine, a ceremonial drink and antidote to intestinal worms that some believed stemmed from swallowing corn silk. The other, pink lady's slipper (*Cypripedium acaule*), also was used for stomach and menstrual cramps, menopause, and "nerves."¹⁵

The symptoms of diabetes are acknowledged in a 1550 BC Egyptian papyrus as "too great emptying of the urine," and in the first century AD, the Greek physician Aretæus described a condition with the symptoms of constant thirst and excessive and sweet urine.¹⁶ There are three plants Choctaws used for "suppression of urine" (*Ipomoea pandurata*, "man of the earth"; *Mentha piperita*, water mint; and *Mentha spicata*, spearmint). Thirteen plants are used to treat "milky urine."¹⁷ While milky urine (as well as excessive urination) sometimes is a symptom of diabetes, it also can signal a urinary tract or bladder infection, among other things. *Vitis palmate*, also called "big grape," was reportedly used by Seminoles and Creeks to treat

diabetes, but this is documented in a 1980 work by James Howard in conjunction with a modern native physician, not in earlier ethnographic studies of Creek and Seminole medicines such as those compiled by John R. Swanton.¹⁸ Granted, some of the medicinal plants listed in ethnobotanical works after 1900 are not mentioned in earlier lists, possibly because of mistranslations or misidentifications on the part of the twentieth-century ethnobotanists. More likely, though, it may be because of the increased appearances of more “modern” ailments that needed treatment but that the tribes had not dealt with historically. For example, as early as the 1820s, Choctaw students at the Choctaw Academy in Kentucky were served high-fat, sugary, and carbohydrate-high foods, including bacon, beef, and mutton along with coffee, pies, apple dumplings, molasses, milk, butter, and rice but also plenty of garden fare. One might assume they suffered from diet-related issues, but health reports from the school are positive, albeit scanty, and indicate only communicable diseases. Research has indicated that those of nonmixed ancestry might be more predisposed to lactose intolerance than non-Indians and mixed-bloods, but many of these milk-drinking students at the Choctaw Academy were identified as “fullbloods.”¹⁹ It could be that the children’s activity levels and regular consumption of fresh or dried produce precluded weight gain.

Research suggests that prior to removal, tribespeople suffered from a plethora of non-diet-related issues—with the exception of ailments associated with food spoilage, parasites, and mono-diets (such as eating only maize)—but not from obesity (and associated problems) until a few decades postremoval when their health took a turn for the worse. Once in Indian Territory, natives reportedly consumed a vast array of flora and fauna, and many of those foods remained available for years after the Civil War. Why did residents develop such profound problems associated with diet?

The New Lands

Much of the Indian Territory environment was similar to parts of the Five Tribes’ homelands in Georgia, North Carolina, Mississippi, Louisiana, Alabama, and Florida.²⁰ The Cherokees settled in northeastern Indian Territory in the grassy valleys and prairies between the Illinois, Grand, and Verdigris Rivers and farmed in the deep black soil between Vinita and Sapulpa.²¹ Creek lands to the west of the Cherokees were “rich and productive,” but not as lush as their neighbors’ lands.²² Choctaws were moved south of the Cherokees and north of Texas to the watersheds of the Arkansas, Canadian, Kiamichi, and Red Rivers.²³ The rich sandy hills area around Skullyville allowed for the “finest fruits and vegetables for a radius of twenty miles.”²⁴

The vicinity of Nvniĥ Chufvk (Sugar Loaf Mountain) was deemed a haven of springs, wild fruits, and game.²⁵ George Catlin, an American painter and writer, commented after traveling through the Cherokee and Choctaw territories in the 1840s that their beautiful land “affords one of the richest and most desirable countries in the world for agricultural pursuits.”²⁶ Seminoles established themselves north of the Creeks, between the Arkansas and the Deep Fork of the Canadian River. Chickasaws settled on Boggy and Blue Creeks within the Choctaw Nation, lands deemed “at least as fertile as the ones they left.”²⁷ Indeed, many residents of the tribal nations lauded their lands as affording them a “superabundance” of productive soil, crossed by streams with clear water and dotted with edible plants—a veritable Eden of food possibilities.²⁸

Timber, including blackjack oak, post oak, red oak, chinquapin, hickory, hackberry, walnut, persimmon, crabapple, sweet gum, cottonwood, elm, pecan, and sycamore covered much of the eastern part of the Territory and supplied nuts, fruits, and wood for shelter and tools. Soup, broth, mush, and “acorn pudding” could be made from shellbark hickory nuts (*Carya laciniosa*), and acorn flour served as a soup thickener. A Choctaw dish, *okshash*, is water oak acorns boiled and pounded into mush.²⁹ More than the other tribes, Choctaw families raised hogs (introduced by the Spanish in the 1500s) and allowed the animals to forage most of the year on calorie-dense acorns, hickory nuts, and walnuts. Tribespeople brought apple, peach, and pear tree seeds over the removal trail and in a few years shared seeds with neighbors. As the Territory population grew, representatives of tree nurseries distributed illustrated tree catalogues that served as orchard care advice and reading entertainment.³⁰ After the Civil War, many members of the Five Tribes developed substantial orchards, and one Cherokee maintained a grove of more than two thousand fruit trees.³¹

The natural environment also supplied a variety of familiar vine and bush fruits, herbs, and vegetables. In early spring, tribes gathered poke sallet, sheep shank, sour dock, lamb’s quarters, and wild onions. By February, turnips had sprouted “little tender greens.” Sunflowers, blackberries, dewberries, raspberries, grapes, huckleberries, plums, strawberries, and persimmons grew in abundance. Yellow apples that had escaped gardens grew in thickets.³² Catlin commented in 1844 about his trek through Choctaw and Creek lands: “Scarcely a day has passed, in which we have not crossed oak ridges . . . with a sandy soil . . . where the ground was almost literally covered with vines, producing the greatest profusion of delicious grapes, of five-eighths of an inch in diameter, and hanging in such endless clusters.”³³

Some families created that “veritable Eden” on their property by growing corn, potatoes, pumpkins, beans, peanuts, sweet potatoes, and

Old World black-eyed peas and cotton, along with groves of apple, peach, plum, pear, and cherry trees as well as berry bushes and grape vines. Seminoles cultivated beans to a greater extent than other tribes. Molasses was made from homegrown sugar cane. White residents commented that Choctaws were “crazy about” cornbread, turkey, coffee, and venison and added beans and peas to almost every dish. The Creeks produced enough beans, pumpkins, melons, potatoes, squash, and corn to sell to Fort Gibson. Many raised small herds of cattle, hogs, horses, chickens, and turkeys. Some families had favorite “bee trees” and a few kept apiaries.³⁴

Indian agents in the 1840s stated in their annual reports that game had decreased steadily since the tribes’ arrivals. One agent even wrote that there was no game within 150 to 200 miles of the Cherokee Nation boundaries, so the natives had turned to increasing their agriculture.³⁵ Those who lived in Indian Territory, or those who in 1937 recalled stories from their parents and grandparents, however, said the opposite. In fact, hunting seemed to be a way of life for hundreds of residents at least until the end of the nineteenth century. This discrepancy between the agents’ reports and the residents’ stories might mean that the former were unaware of how the residents were living or were attempting to appease the federal government that remained intent on making all natives “civilized” farmers, or perhaps the agent was referring to enough wild game for the skin trade, and the residents were referring to subsistence level.

One resident stated that there was no pressure when one went out to kill an animal, because it was a given that you could do so. Wolves, foxes, coyotes, bobcats, beavers, and minks were used for fur trade. Deer and turkeys congregated “in droves” in spring, and one could see them other times in herds and flocks of hundreds.³⁶ John Benson relayed that all the Indians had to do was “kill what they wanted. . . . An Indian just had to get his gun on his shoulder and go out and he could kill a deer or a turkey in a little while.”³⁷ Deer lay down in front yards and turkeys roosted in shade trees by the houses. Some residents stockpiled wild turkeys, geese, and ducks in the home larder.³⁸ Prairie chickens were so prolific that one man put his family in their wagon and was able to kill an entire “raft” of the birds without disembarking.³⁹ Hunters crisscrossed tribal lands leaving on trees and rocks emblems signifying the availability of game, and signs were left warning of snakes and bears.⁴⁰

Bears lived in the forests of eastern Indian Territory, and they were hard to locate, especially in winter when they retreated to their dens. Cubs were born in February, but some Choctaw hunters used “poodle dogs” to coerce bears out of their dens before spring. They also had one technique wherein two women stood apart, alternately yelling to the get the bear’s

attention. The bear would ramble from voice to voice until the hunter killed it. While many residents ate bear meat, others reported that they thought it too fatty. There also were plenty of small game animals, including muskrats, opossums, rabbits, and raccoons.⁴¹ One traveler who regularly went through Doaksville and Eagletown into Arkansas in the late 1800s did not have to carry much, since he killed fat squirrels three times a day: “fried for breakfast, stewed with dumplings for dinner and supper.” One resident was partial to polecat (skunk) meat, which she prepared like squirrel and claimed you could not tell the difference.⁴² Choctaw hunters used dogs to find turtles. Some roasted the hapless turtle alive or dropped it on its back to kill it first. The terrapins could be rolled in wet clay, then roasted alive on hot coals. Meat was accessed by removing the shell and scooping out the contents.⁴³

Catfish, scalefish, bass, perch, crappie, buffalo, carp, and suckerfish filled streams and rivers.⁴⁴ Natives poisoned them by beating the long, slender roots of white snakeroot (*Ageratina altissima*), also known as the devil’s shoestring, in the water or by dragging a bag of the mashed plant through the water. The dazed larger fish could be easily shot with arrows, but the poison often killed smaller ones.⁴⁵

Families stored dried fruit and meats for the cold months. Some residents grew acres of watermelon and saved them through winter by melting paraffin over the fruits, then storing them inside a straw stack.⁴⁶ Sassafras helped keep bugs and worms out of the dried fruit bags. Potatoes were thinly sliced and dried over a hickory fire. Roots or mud potatoes, known among Choctaws as *lokohok* (or *lokchok*) *ahi*, were considered by some to be better than Irish potatoes.⁴⁷

String beans were strung up and stored in a dark place. When cured, the beans appeared black and musty, but after being immersed in warm water with a “preparation known only to housewives,” the beans returned to their natural color, and supposedly no one could tell the difference.⁴⁸ Most farmers prepared garden vegetables for winter use by either sun-drying or, for corn, shelling and then storing it in flour sacks to keep it dry.⁴⁹ Residents jerked meat by cutting it into strips, then drying it on top of the house. The result was a hard, difficult-to-chew, saltless product.⁵⁰

Few residents grew corn for their animals because of abundant grass.⁵¹ Almost all families gardened, and corn was a prominent crop. Most gardens were small, grown around the house, and were referred to as “patches” or “roasting ear patches,”⁵² although some tribespeople started growing corn on a large scale for profit by the 1840s.⁵³ There is no evidence that they grew corn, squash, and beans together in the “three sisters” fashion of the Northeast; that is, pole beans grow up around the cornstalks, and the large

squash leaves provide shade that helps retain soil moisture.⁵⁴ Native gardeners grew five types of corn: dent corn for shuck bread (although some made shuck bread with burnt bean or pea hulls; the latter accounts for the greenish color); flint for sour bread; softer “Indian” or flour corn for most uses, including bread; sweet corn for early-season use; and popcorn.

All the tribes made dishes from corn—what Cherokees call *kanahena*; Choctaws and Chickasaws, *taⁿchi*; and Creeks and Seminoles, *uche*. They processed corn in basically the same lengthy process that some explain as simply “beating into meal in a block of wood which had a bowl on the end of it” or “pounding it to make a cereal and mixed with water.”⁵⁵ A log is cut off at around two or three feet, then hollowed out, leaving a thick floor as the bottom. The chips are fired, then the insides of the hollowed log smoothed with glass. Corn is placed in the hole and pounded repeatedly with a pestle made from a smaller tree, about six inches in diameter. Hickory and beech gum are the woods mentioned most for the grinding process, although some argue that the block lasts longer if made from pecan or walnut.⁵⁶ Grinding corn is indeed an arduous process without machinery (see figs. 1 and 2). One woman described beating the corn until “our arms felt like they would break.”⁵⁷ The corn was then placed in a big sieve and thrown up into the wind, which carried off small particles. Meanwhile, green wood ashes were placed in a pan with small holes, and hot water was poured over the ashes; that water dripped into another pan underneath. Depending on the cook, varying amounts of the lye ash water was poured in with the corn, or the corn could be soaked overnight. Corn contains a variety of nutrients but is high in carbohydrates and deficient in vitamin B₃. Because natives added wood lye ash to their preparation, they did not suffer from pellagra as did many nonnatives in Europe who used plain corn as a staple. Natives mixed corn with a variety of ingredients, including hickory nut kernels, pork, squirrel, pinto beans, sweet potato, red peppers, fruit, hickory oil, pecans, and so on, thus rendering the dishes nutritious and satisfying. Choctaws and Chickasaws refer to a bowl of corn mush with added ingredients as *tamfula*. *Pashofa* is the Chickasaw version containing hog meat.⁵⁸

Corn dishes also include dumplings, corn roasted on the cob, dried corn as a traveling food to be reconstituted with water or milk, or crushed into mush to mix with fruits and meats.⁵⁹ Choctaw and Chickasaw *banaha*, Cherokee *ticanoolee*, and Creek *puyafekcuahke* are similar to tamales, generally made by mixing boiling water and cornmeal along with other ingredients such as beans, pork, and hickory or chestnut oil into dough that is shaped into rolls, then placed in corn shucks, tied with strips of shuck, and cooked under hot ashes or boiled. This “shuck bread” could be stored for months and recooked.⁶⁰ One woman claimed it kept indefinitely, “being

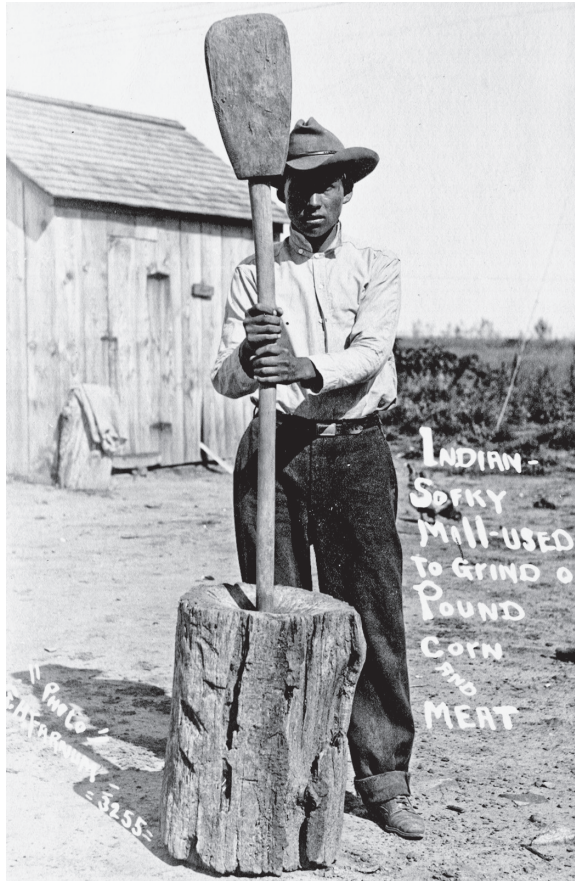


Figure 1. Creek man pounding corn to make sofky, 1890–1916. Frederick S. Barde Collection, Oklahoma Historical Society

as good a year after as the day it was cooked.”⁶¹ Another dish, Creek and Seminole *osafki*, or *sofky*, is a drink or soup made from flint corn ground like hominy and boiled with lye ash. *Osafki* still remains a social and ceremonial dish. Some versions are quite sour, and perhaps the distinctive taste is what caused W. P. Blake, who served as assistant engineer at the Seminole Emahaka Academy, to make this interesting claim: “I thought then [1894], and am sure now, that their early drinking of *osofke* as children created an appetite for whiskey.”⁶²

Cooks made persimmon bread, created by separating the seeds by



Figure 2. Betty McIntosh pounding corn in mortar to make “sofke” and Lydia Larney sifting pounded corn, April 17, 1923. Photo by Jennie Elrod. Oklahoma Historical Society

kneading, then placing the pulp in a large bread pan and cooking.⁶³ A few tribespeople brought peanut plants over the removal trail and cultivated them in their home gardens. Some made peanut bread by mixing parched corn and peanuts with sifted corn and a bit of salt. The peanuts held enough moisture to allow the mixture to be formed into long-lasting, uncooked “bread” balls.⁶⁴ Natives also made bread out of chestnuts, acorns, bamboo vine (*Smilax laurifolia*) also called “cane,” and the root of the southeastern Indian Territory thorny greenbrier vine (*Smilax bona-nox*), which is peeled, the insides crushed to make a paste, then fried in bear grease. Pounded acorns were placed in a cane sieve while water dripped over it to get rid of the bitterness, then formed into cakes and also fried in bear grease or molded around a stick to be roasted.⁶⁵ Seeds of the giant cane (*Arundinaria gigantea*) could also be ground into meal.⁶⁶ Much of the food was bland by modern standards, although some eaters liked the added seasonings of peppers, hickory oil, walnut oil, bear fat, oil from blackjack oak acorn,⁶⁷ and possibly red autumn sassafras leaves that were gathered,

dried, ground into powder and used as a soup flavoring. This ingredient, file gumbo, is used today in making gumbo.⁶⁸ In 1776, Romans stated that tribespeople did not normally use salt and only indulged after they had been without salt for a time. After removal, some residents continued to eschew salt except to preserve meats, but some began to sprinkle it liberally, as did white immigrants.⁶⁹

Changing Diets

As Indian Territory became crowded with nonnative intruders, a variety of complex environmental, social, economic, political, external, and intra-tribal factors accounted for disparities in access to sustenance. Affluent residents had access to store foods, while poorer families grew, gathered, and hunted their own. Residents with incomes traveled to Arkansas to purchase sundries, while others shopped in Sherman or McKinney, Texas.⁷⁰ In the 1840s, Ethan Allen Hitchcock traveled through the western Cherokee Nation and dined at the home of Cherokee High Sheriff George Lowry. The meal reflected the resources available to Lowry: bacon, butter, corn bread, chicken eggs, and venison, washed down with coffee mixed with sugar and milk.⁷¹

Drought in 1860 and subsequent years caused crops to fail.⁷² During the Civil War, soldiers passing through the Nations destroyed crops, homes, and barns, killed livestock, and stole clothing and tools. Game was depleted, as were family stores of dried foods. Natives recalled eating whatever they could find.⁷³ Confederate soldier Thomas F. Anderson wrote in 1863 that his men consumed soup made of snails, screwworms, and bullfrog legs.⁷⁴

After the Civil War wild, fresh foods were still available, but the less affluent residents often preferred to trade their homegrown produce for processed foods. The cattle industry grew rapidly among wealthy residents (usually mixed-heritage Indians and opportunistic white men who married native women), and their families ate beef, drank milk, and had money to purchase coffee, wheat flour, and sugared products. One gardener admitted that his preferred diet consisted of meats, bread, milk, and butter.⁷⁵

Some native families bemoaned their inability to afford store-bought goods, while others used them only occasionally. Many residents liked coffee, but if it was scarce, cooks often substituted parched okra, sweet potatoes, or corn.⁷⁶ A few 1880s residents stated that they did not like ground corn flour, and, conversely, some disliked wheat flour and only used it to bake biscuits on Sunday mornings.⁷⁷ One Choctaw man believed that white wheat flour was not healthy and did not buy any for his children.⁷⁸ A

woman stated that when she was a child in the 1880s, her family consumed wild game, berries, leaves, roots, and corn, and they never tasted wheat flour. Only after statehood did she taste beef.⁷⁹ Mrs. Greenwood LeFlore's popular boardinghouse in the Choctaw Nation reveals the changing diet of her tribe. Her dining hall offered fresh and canned fruit and vegetables. She also offered pork chops, beef steaks, and roasts in the hot summer months without ice by using a fifty-gallon oak barrel filled with meat and salt brine "strong enough to float an Irish potato."⁸⁰ Indicative of the increasing use of sugar is the experience of one white woman who attended camp meetings with her Indian neighbors and recalled that "one of their Negro cooks would spend the entire morning making custards or green apple pies."⁸¹ One family ate a few vegetables along with meat, but flour gravy and potatoes were their main foods. The mother commented that people used to call gravy "starch," and she often heard the remark, "I have eaten so much starch that I am stiff from it."⁸²

"Spirituous" liquor contributed to the growing health and sociopolitical issues. Whiskey flowed through the tribal nations, resulting in astonishing numbers of murders, assaults, and cases of spousal abuse.⁸³ Leaders had attempted to stem the liquor tide prerulemval by passing laws against drinking, selling, and making whiskey. Cherokees organized a temperance society in 1845, and every year, Indian Territory agents reported the abuse of alcohol and asked the federal government for assistance. Whiskey production never abated. For example, in 1889, 90 percent of the cases heard at Fort Smith had connections to the use of whiskey, and Agent Bennett estimated that at least one person died per day from the effects of liquor consumption.⁸⁴ Another favorite drink that could be easily made by natives and nonnatives was "choc beer," consisting of barley, hops, and a bit of alcohol as the base. Recipe variations included oats, corn, malt, sugar, yeast, and fishberries, a fruit indigenous to East India. An ingredient of fishberries—picrotoxin—is poisonous, and tribespeople used it to slightly stun fish to make them easy to catch, while another recipe eases nausea in humans. Miners liked choc beer, calling it a "tonic," rationalizing that the brew was preferable to the polluted water they drank around their work areas. Agent Windom called it "a fruitful source of evil, disorder and crime."⁸⁵

Boarding Schools

Students at schools such as Armstrong Academy, New Hope Academy, Presbyterian M.L.B. School, and the Choctaw Academy (and, indeed, at Indian boarding schools across the country) suffered contagious ailments associated with unsanitary conditions and close quarters, such as small-

pox, chills and fever, "scrofulous affections," pleurisy, whooping cough, consumption, dropsy, typhoid fever, scrofula, "La Grippe," and parasitic infections such as "the itch" (scabies).⁸⁶ Diets were not initially deleterious. For example, shortly after removal, students at Spencer Academy (ten miles north of Doaksville) were served various meats, sweet potatoes, molasses, peanuts, and hominy. Berries were harvested on school grounds as was honey. Boys were allowed to catch fish and to hunt squirrels and larger game. After the Civil War, however, meals were repetitious and mainly consisted of beef, corn bread, milk, coffee, biscuits, prunes, rice sugar, vegetables, pork, corn, and butter.⁸⁷ At the Koonsha Female Seminary, girls consumed "all kinds of vegetables," apples, peaches, pears, and plums; cherries, pork, and beef that students raised at the school; and "breadstuffs from the people around us."⁸⁸ School officials only reported contagious diseases and fevers; but, as diets changed to incorporate less vegetables and fruit, the health problems increased. More students enrolled in the schools, and often they came from families who normally consumed fruits, vegetables, and game meats. At school, full-blood and mixed-blood students felt the effects of the unfamiliar bread and pancakes; gravy made with white flour and lard; pies, syrup, and candy made with sugar; coffee with every meal; and butter, cheese, and cream.⁸⁹

The Cherokee Female and Male Seminaries provided small gardens for the students, and parents traded wild game and garden items for tuition, but those foods were only available after harvesting in September and, if the foods were dried, into the fall semester. Some mothers brought in pies and cakes. The vast array of Seminary food items also included meats, eggs, butter, oil, sugar, salt, buttermilk, and twice-a-day desserts, in addition to foods obtained on Tahlequah field trips, such as bread, candy, sugar cookies, salted nuts, suckers, chewing gum, and tamales.⁹⁰ Flour was a major ingredient in dishes three times a day; in 1893, the school ordered sixteen thousand pounds of white wheat flour and eight thousand pounds of beef.⁹¹ Numerous ailments among Indian children began to proliferate in the 1870s because of meals featuring calorie-dense, low-fiber, sugary, and fatty foods. The Seminary physician even became concerned about how overfat the girls were growing. After the war, students commonly faced the consequences of their rich fare: constipation, "bowel complaint," hemorrhoids, headaches, diarrhea, rheumatism, jaundice, ulcers, and "skin eruptions."⁹² The effects of such a diet were long term. Boarding school curricula also proved to be influential forces in the loss of tribal culture and language, including traditional indigenous knowledge about planting, harvesting, plant identification, medicinal plants, and blessings or ceremonies associated with food procurement, thereby severing students' connection

to the natural world. After these students left the Seminaries, as well as other boarding schools, they brought their institutionalized ideas about diet home with them.

Permanent Change?

In 1895, Special Agent John W. Lane commented on the dearth of old people in the Choctaw Nation. Indeed, by the end of the century, many older Choctaws, as well as members of the other tribes, died from ill health. Many were not well educated and had no access to physicians or to a variety of foods. Lane observed that many Choctaws grew an "abundance" of vegetables, although most decayed quickly. They also suffered the consequences of not understanding where to place their outhouses, improper sanitation, and no dental care.⁹³ Many natives had less active lives than their ancestors. Romans described preruleval Choctaw work as "their labor vastly hard, either in the field for cultivation of corn, or fetching nuts, fire wood and water, which they chiefly carry on their backs . . . generally two or three miles." As children grew up, they wrestled, ran, swam, heaved and lifted "great weights," and regularly played the rigorous and often dangerous game of stickball.⁹⁴ While many of the less affluent tribespeople continued to stay active by hunting, gardening or farming, hauling water, and chopping wood, the wealthier families often hired workers to tend to their commercial farms and stock raising and did little daily work around their homes.

Medicine men and women continued to treat the more traditional natives, but they were quickly losing respectability. Some acculturated, Christianized natives claimed that Indian doctors "were very foggy in their belief"⁹⁵ and that the practices were merely "mythical doctoring" or "faith doctoring."⁹⁶ Doubters preferred the dubious "tonics" and pills that were advertised in every newspaper and liberally dispensed by white physicians. Ailing residents were not advised to change their dietary habits. In addition, the Indian Territory environment changed. White intruders continued to flood onto tribal lands, taking every resource they could find. Tribes' National Council records show how much tribal land was impacted by human actions, such as fencing, dam building, timber harvesting, mining, railroad building, and the digging of lakes, in addition to drought, overgrazing, and large-scale planting of cotton, corn, and hay on the rich prairie lands. Serious ecosystem changes and resource depletion quickened through the mid- to late 1800s. By the mid-1860s, tribes became so alarmed at the fast rate their trees were being appropriated by nonnative intruders for exportation or for railroads that they passed laws against timber cutting.⁹⁷

In the years preceding Oklahoma statehood, the numbers of intermarried whites and natives who cattle ranched escalated. Comparing modern data on the flora and fauna of Nvnih Chufvk with reported observations from the same area between 1850 and 1880 suggests that despite its relative isolation, many plants and animals on and around the mountain vanished and the springs dried up, requiring the tribespeople to adjust and innovate.⁹⁸

Tribal citizens had different ideas about the accumulation of wealth, and that necessarily included environmental protection. Tribal house and senate records detail continual amendments to tribal laws from 1830 to 1907 that were designed to protect tribal resources and to avert environmental damage. Of course these laws also were designed to simultaneously protect the investments of wealthy tribespeople.⁹⁹ While some natives and whites killed an abundance of animals, many others were concerned about conservation. One Choctaw said in 1937 that he did not want the smaller animals to be “molested” like the deer, turkeys, and other large animals, so he only allowed his boys to hunt for rabbits or squirrels if someone needed soup.¹⁰⁰ Others also stated that they only killed one animal at a time.¹⁰¹ Wealthy Choctaw Progressives supported the construction of railroads and mining. Wilson N. Jones, chief from 1890 to 1894, had more fenced cattle land than any other native in all of Indian Territory, and by 1890 he had become one of the Territory’s wealthiest men—Indian or white.¹⁰²

By the time of statehood, many natives could not procure the varied and nutritious diet they had previously. Flora and fauna depletion disallowed many people from foraging, hunting, and fishing, thus forcing them to barter for canned, salted, sugared, and pickled foods. Some were wealthy and could afford to eat whatever they wanted. Others, however, became desperate. One white man who lived among natives commented, “If a cow got sick or died, all you had to do was notify some of the Indians and they would drag it off, even though it had been dead three days.”¹⁰³ Many natives were forced to fill the dietary void after the diminution of gathered fruits, vegetables, and herbs with corn, essentially developing a nutritionally deficient mono-diet. In 1901, for example, US Marshal Jasper P. Grady visited Daniel Bell, who represented a faction of full-blood Choctaws, and observed, “The Indians are literally starving . . . they used to have plenty of hogs, cattle and ponies and could kill game, but they now have nothing to live on and are absolutely destitute. . . . A little Tom Fuller, which is nothing but cracked corn, and corn pone, is all the majority of them have to eat.”¹⁰⁴ On the other hand, a man who lived with the Choctaws commented that the full-bloods did not care for milk or butter, and the mixed-bloods and whites used dairy products all the time.¹⁰⁵ It appears that many of the poorer families suffered from malnutrition while others with money faced physical

problems from too much food. Tribespeople around the country continued to diminish, especially the poorer individuals. For a variety of socioeconomic reasons, including for some the adoption of the mind-set that “white food” was best, natives suffered—and continue to suffer—physically and emotionally.

According to written documentation and oral testimonies, tribespeople historically did have health problems; but because they did not consume processed foods, they did not contend with many of the ills they face today. It appears that the 1937 sentiment expressed by Wilburn Hill, a nineteenth-century resident of Indian Territory, was correct in regard to health: “The greatest enemy to the Indians was in the use of salt, fat, flour, sugar or anything else sweet.”¹⁰⁶

Today, 33 percent of native people in the United States are obese, and at least 17 percent suffer from diabetes, more than any other group.¹⁰⁷ In response to this health crisis, the Five Nations in Oklahoma have organized health initiatives. Monthly tribal newspapers include traditional recipe sections and information about tribally commissioned community gardening and exercise programs. Many natives turn to their traditional doctors for holistic healing that includes eating unprocessed, non-GMO (genetically modified organism) foods. Indigenous activists and scholars are searching for traditional solutions to modern challenges. Foodways sustainability, environmental degradation, climate change, and inactivity have profoundly affected tribes. These dilemmas are not easily solved, nor are the plagues of diabetes, high blood pressure, and obesity. Physical activity, holistic medical care, and consumption of organic and unprocessed foods are obviously linked to good health. These are connections worth further investigation.

Notes

- 1 Bernard Romans, *A Concise Natural History of East and West-Florida* (New York, 1776), 42–43.
- 2 James Adair, *History of the American Indians* (London, 1775), 5.
- 3 US Office of Indian Affairs, *Annual Report of the Commissioner of Indian Affairs for the Year 1846* (Washington, DC, 1846), 269. Hereafter these reports are cited as ARCIA, with year and page.
- 4 Peter Mancall, *Deadly Medicine: Indians and Alcohol Abuse in Early America* (Ithaca, NY, 1997).
- 5 Romans, *Concise Natural History*, 230–32.
- 6 See Paul Kelton, *Epidemics and Enslavement: Biological Catastrophe in the Native Southeast* (Lincoln, NE, 2009).
- 7 For information on agricultural pursuits of the tribes, see Laura Baum Graebner, “Agriculture among the Five Civilized Tribes, 1840–1906,” *Red River Valley Historical Review* 3 (1978): 45–60.

- 8 Grant Foreman, *The Five Civilized Tribes* (Norman, OK, 1934), 81.
- 9 ARCIA 1837, 541.
- 10 Southern, Indian, and Pioneer Histories, vol. 68:2, Grant Foreman, ed., *Indian and Pioneer Histories*, Oklahoma Historical Society (OHS), Oklahoma City, Archives and Manuscripts Division, microfilm versions (hereafter *IPH*). Also used are the digital versions of the *IPH* collection from the Western History Collections (WHC) at the University of Oklahoma that have a different catalogue format (digital.libraries.ou.edu/whc/pioneer). Citations for *IPH* are from the OHS collection unless indicated as WHC. The 115 volumes of the *IPH* comprise a series of interviews of residents of Oklahoma conducted by Works Progress Administration workers in the 1930s. Citations include the interviewees' last names. See also Fox, *IPH* 25:28; Agnew, *IPH* 1:290 (WHC).
- 11 ARCIA 1838, 508; ARCIA 1841, 340.
- 12 ARCIA 1845, 470.
- 13 ARCIA 1845, 514.
- 14 This includes Mooney's *Myths of the Cherokee and Sacred Formulas of the Cherokees* (Nashville, 1982); T. N. Campbell, "Medicinal Plants Used by Choctaw, Chickasaw, and Creek Indians in the Early Nineteenth Century," *Journal of the Washington Academy of Sciences* 41 (1951): 285-90; Linda Averill Taylor, *Plants Used as Curatives by Certain Southeastern Tribes* (Cambridge, MA, 1940); David I. Bushnell Jr., *The Choctaw of Bayou Lacombe, St. Tammany Parish, Louisiana*, Bureau of American Ethnology (hereafter BAE) Bulletin 48 (Washington, DC, 1909). The popular book by Paul B. Hamel and Mary Chiltoskey, *Cherokee Plants and Their Uses* (Sylva, NC, 1975), is a secondary work and does not provide citations for the hundreds of traditional medicinal plants the authors include, thus requiring a critical assessment of their list.
- 15 William H. Banks, "Plants of the Cherokee," Master's thesis, Great Smokey Mountain Association, 2004, 31, 32, 131.
- 16 John Moffat, *Aretaeus: Consisting of Eight Books, on the Causes, Symptoms, and Cure of Acute and Chronic Diseases; Translated from the Original Greek* (London, 1937), 112-14; Garabed Eknayan, "A History of Diabetes Mellitus; or, How a Disease of the Kidneys Evolved into a Kidney Disease," *Advanced Chronic Kidney Disease Journal* 12, no. 2 (2005): 223-29.
- 17 Hamel and Chiltoskey, *Cherokee Plants*, 22, 25, 30, 46, 58, 60.
- 18 James Howard and Willie Lena, *The Oklahoma Seminoles* (Oklahoma, 1984); John R. Swanton, "Religious Beliefs and Medical Practices of the Creek Indians," *Forty-Second Annual Report of the BAE, 1924-1925* (Washington, DC, 1928), 473-672.
- 19 Carolyn Thomas Foreman, "The Choctaw Academy," *Chronicles of Oklahoma* 6 (1928): 463-64; Irma Duncan, E. M. Scott, "Lactose Intolerance in Alaskan Indians and Eskimos," *American Journal of Clinical Nutrition* 25 (1972): 867-68. It could be that "stomach troubles" or other "abdominal aches," diarrhea, and other symptoms could be attributed to lactose intolerance. Between 1830 and 1907, there are at least 10,173 Indian Territory and Arkansas newspaper stories and ads about stomach ailments and 6,976 about kidney problems. (These numbers do not include a few of the major newspapers.) The question is, what exactly is a stomach ailment? The living full-bloods in my immediate family (and the ones who have passed) drink cow's milk, eat ice cream, cheese, and yogurt, and other full-bloods I know do the same and do

- not have this problem. That is not to say that they might not be more predisposed to be lactose intolerant than whites, Asians, or blacks, but the suggestion that they all are lactose intolerant is shaky. It would require a larger study to make any definitive statement about what caused these stomach issues.
- 20 Romans, *Concise Natural History*; John R. Swanton, "Social and Religious Beliefs and Usages of the Chickasaw," in *Forty-Fourth Annual Report of the BAE* (Washington, DC, 1928), 240–42; John R. Swanton, "Social Organization and the Social Usages of the Indians of the Creek Confederacy," in *Forty-Second Annual Report of the BAE* (Washington, DC, 1924–25), 279–325; John R. Swanton, "Aboriginal Culture of the Southeast," in *Forty-Second Annual Report of the BAE* (Washington, DC, 1924–25), 673–726; John R. Swanton, "Early History of the Creek Indians and Their Neighbors," *BAE Bulletin* 73 (Washington, DC, 1922); Adair, *History of the American Indians*, 330–31, 387; Margaret Zehmer Searcy, "Choctaw Subsistence, 1540–1830: Hunting, Fishing, Farming, and Gathering," in *The Choctaw before Removal*, ed. Carolyn Keller Reeves (Jackson, MS, 1985), 32–54; T. N. Campbell, "Choctaw Subsistence: Ethnographic Notes from the Lincecum Manuscript," *Florida Anthropologist* 12, no. 1 (1959): 9–24. Gideon Lincecum (1793–1874), a nineteenth-century physician and "naturalist," wrote his observations and information gleaned from Choctaw informers from 1823 to 1825. The Lincecum Manuscript is housed at the Center for American History, University of Texas, Austin.
 - 21 *ARCIA* 1840, 313; Elapotubee, *IPH* 3:354.
 - 22 *ARCIA* 1840, 313. Commissioner of Indian Affairs, 25th Cong., 3d sess., S. Docs. 1, Serial 338; *ARCIA* 1838, 511.
 - 23 *ARCIA* 1842, 448.
 - 24 Burk, *IPH* 17:373 (WHC).
 - 25 Muriel H. Wright, "Notes and Documents: Sugar Loaf Mountain Resort," *Chronicles of Oklahoma* 38, no. 2 (1960), 202–3; *South McAlester Capital*, 12 July 1894; Conger, *IPH* 2:196–97 (WHC); Palmer, *IPH* 69:58 (WHC).
 - 26 George Catlin, Letter no. 39, "Letters and Notes on the Manners, Customs, and Conditions of the North American Indians," 1844, Library of Western Fur Trade Historical Source Documents, New York, user.xmission.com/~drudy/mtman/html/catlin/letter39.html (accessed 11 November 2014); *ARCIA* 1840, 311, 314.
 - 27 *ARCIA* 1840, 314; *ARCIA* 1842, 448.
 - 28 Elapotubee, *IPH* 3:354; Cole, *IPH* 8:200; *ARCIA* 1872, 364. Early Indian agents lauded the new tribal lands in glowing terms, perhaps attempts to justify or rationalize the tribes' removals. Agents around the time of the Civil War, however, had different assessments, reporting that a good portion of those lands were unfit for cultivation, maybe because they were more aware that some native families did not have access to the best lands but white intruders, or intermarried whites, did.
 - 29 On timber and shellbark hickory nuts, see John R. Swanton, *Source Material for the Social and Ceremonial Life of the Choctaw Indians* (Washington, DC, 1931; AL, 2001), 48; Bushnell, "Choctaw of Bayou Lacombe, 8; on the use of acorn flour, see Swanton, *Source Material*, 38, 48; on okshash, see Cyrus Byington, *Dictionary of the Choctaw Language*, *BAE Bulletin* 46 (Washington, DC, 1915), 301.
 - 30 *IPH* 108:24–25 (WHC).
 - 31 "Journal of the Fourth Annual Session of the General Council of the Indian

- Territory Held at Okmulgee, I. T. from the 5th to the 15th of May, 1873," International Council file, Indian Archives Division, Oklahoma Historical Society, Oklahoma City.
- 32 Mulkey, *IPH* 65:368 (WHC); Bird Doublehead, *IPH* 25:239 (WHC); Flint, *IPH* 3:527; Cartarby, *IPH* 19:195, 203; Monroe, *IPH* 37:10; Cherry, *IPH* 79:159; *IPH* 95:534-35 (WHC); McCoy, *IPH* 102:82-83; Ludlow, *IPH* 106:394-95. The turnips in question may be Indian breadroot (*Pediomelum hypogaeum*) or the prairie turnip (*Psoralea esculenta*), indigenous to this hemisphere.
 - 33 Catlin, Letter no. 39.
 - 34 Lamar, *IPH* 31:23; Pusley, *IPH* 4:18; Sharp, *IPH* 44:237-38; Cherry, *IPH* 79:159; Culbertson, *IPH* 2:432; Czarina, *IPH* 21:432; Harkins, *IPH* 27:443-44; Lattimer, *IPH* 33:84.
 - 35 *ARCIA* 1843, 409; *ARCIA* 1845, 526; *ARCIA*, 522.
 - 36 Harris, *IPH* 63:413; McKee, *IPH* 102:182.
 - 37 Benson, *IPH* 14:422; Harkins, *IPH* 27:444.
 - 38 Crawford, *IPH* 104:467; Culbertson, *IPH* 21:291. On stockpiling in the larder, see Hurst, *IPH* 46:123 (WHC).
 - 39 Fleming, *IPH* 24:340.
 - 40 Flint, *IPH* 3:527; Frazier, *IPH* 3:589.
 - 41 Jack, *IPH* 30:473; Bohanan, *IPH* 1:211-12; Gardner, *IPH* 25:354 all WHC; on bear meat, see Johns, *IPH* 48:164 (WHC); and Taaffe, *IPH* 46:155 (WHC); on small game, see Mulkey, *IPH* 65:368 (WHC); Hayes, *IPH* 28:316; *IPH* 38:264 (WHC); Edwards, *IPH* 51:404.
 - 42 Cherry, *IPH* 79:168.
 - 43 Kelley, *IPH* 32:122; Norwood, *IPH* 7:537-38; Hayes, *IPH* 28:318; Johnson, *IPH* 106:195-96.
 - 44 Frazier, *IPH* 3:589.
 - 45 Camp, *IPH* 11:190-91; Culbertson, *IPH* 21:301; Putnam, *IPH* 41:26; Fleming, *IPH* 52:342; Harris, *IPH* 63:414; Folsom, *IPH* 91:347. That practice is illegal today in Oklahoma, as is dynamiting and using a crank phone to electrocute the fish.
 - 46 Ludlow, *IPH* 106:394-95; Netherton, *IPH* 37:517; *IPH* 106:432 (WHC).
 - 47 Bohanan, *IPH* 1:226; Cline, *IPH* 2:149-50; Thomas, *IPH* 10:382.
 - 48 Ludlow, *IPH* 106:395; Noah, *IPH* 7:518.
 - 49 Billy, *IPH* 38:130.
 - 50 Ward, *IPH* 11:194; Culbertson, *IPH* 21:291; Graham, *IPH* 26:255; Turnbull, *IPH* 47:384.
 - 51 Bohanan, *IPH* 1:225.
 - 52 Cole, *IPH* 20:229; Culbertson, *IPH* 21:298; Hornbeck, *IPH* 29:444; Lewis, *IPH* 106:242.
 - 53 *ARCIA* 1838, 508; *ARCIA* 1839, 469; *ARCIA* 1840, 313; *ARCIA* 1841, 334, 335, 337, 340, 342; *ARCIA* 1842, 445, 449; *ARCIA* 1844, 418, 425.
 - 54 For information and pictures of the three sisters planting technique, see "Three Sisters Garden," American Indian Health and Diet Project, www.aihd.ku.edu/gardens/ThreeSistersGarden.html (accessed 13 November 2014).
 - 55 "Beating into meal in a block of wood which had a bowl on the end of it," Wesley, *IPH* 49:187; "pounding it to make a cereal and mixed with water," Carnes, *IPH* 54:433. See also Dennis, *IPH* 78:332; Ross, 109:21-22 (WHC); Kelley, *IPH* 79:35 (WHC).

- 56 Andrews, *IPH* 12:379; Lattimer, *IPH* 33:83-48; Wesley, *IPH* 49:187; Pierce, *IPH* 70:286-87; *IPH* 13:127 (WHC).
- 57 Kelley, *IPH* 79:35.
- 58 For a tamfula recipe, see "Traditional Indigenous Recipes: Chahta (Choctaw) Tamfula," American Indian Health and Diet Project, aihd.ku.edu/recipes/chahta_tamfula.html (accessed 13 November 2014).
- 59 James, *IPH* 31:125; Pulsey, *IPH* 41:17.
- 60 Neighbors, *IPH* 37:474-75; Elliott, *IPH* 64:31. For traditional and modern riffs on Choctaw banana, see "Traditional Indigenous Recipes: American Indian Dishes," American Indian Health and Diet Project, www.aihd.ku.edu/recipes/chahta_banana.html (accessed 13 November 2014); Peter J. Hudson, "Choctaw Indian Dishes," *Chronicles of Oklahoma* 17, no. 3 (1939): 333-35; Muriel Wright, "American Corn Dishes," *Chronicles of Oklahoma* 36 (1958): 155-66.
- 61 Bates, *IPH* 6:38 (WHC).
- 62 Robert E. Trevathan, "School Days at Emahaka Academy," *Chronicles of Oklahoma* 38 (1960): 272.
- 63 Harjo, *IPH* 27:407.
- 64 Cross, *IPH* 22:77 (WHC).
- 65 Bushnell, "Choctaw of Bayou Lacombe," 8; Swanton, "Early Account of the Choctaw Indians," *American Anthropologist* 5 (1918): 58; Romans, *Concise Natural History*, 57.
- 66 John R. Swanton, *The Indians of the Southeastern United States*, BAE Bulletin 137 (Washington, DC, 1946), 291.
- 67 Turnbull, *IPH* 47:385; Bushnell, "The Choctaw," 8.
- 68 Cora Bremer, *The Chata Indians of Pearl River* (New Orleans, 1907), 7-8.
- 69 Romans, *Concise Natural History*, 42; Edwards, *IPH* 23:245-46; Noah, *IPH* 7:518; Fleming, *IPH* 24:342.
- 70 Bohanan, *IPH* 1:225.
- 71 Grant Foreman, ed., *A Traveler in Indian Territory: The Journal of Ethan Allen Hitchcock* (Norman, OK, 1930), 23.
- 72 *ARCIA* 1860, 353.
- 73 Frazier, *IPH* 25:76-78 (WHC); Jefferson, *IPH* 48:30 (WHC); Christie, *IPH* 20:19.
- 74 Edward E. Dale, "Additional Letters of Stand Watie," *Chronicles of Oklahoma* 1, no. 2 (1921): 136.
- 75 Holden, *IPH* 29:291.
- 76 Harlan, *IPH* 28:70, 73; Miller, *IPH* 7:214.
- 77 *IPH* 7:178-79 (WHC); Edwards, *IPH* 23:250; Cartarby, *IPH* 19:196; Miashintubbee, *IPH* 63:6; Culberson, *IPH* 21:292.
- 78 Cross, *IPH* 2:341.
- 79 Ward, *IPH* 11:191. See also Hampton, *IPH* 3:343.
- 80 Burk, *IPH* 17:374 (WHC).
- 81 Fullen, *IPH* 32:414 (WHC).
- 82 Turnbull, *IPH* 47:385.
- 83 See Devon A. Mihesuah, *Choctaw Crime and Punishment* (Norman, OK, 2010) for discussions about whiskey, Indian Territory violence, and tribal laws dealing with crime.
- 84 *ARCIA* 1889, 210.

- 85 Harvey Wickes Felter, *The Eclectic Materia Medica, Pharmacology and Therapeutics* (1922; Bisbee, AZ, 2001), 112–13; Steven L. Sewell's "Choctaw Beer: Tonic or Devil's Brew?," *Journal of Cultural Geography* 23 (2006): 105–16; ARCIA 1894, 143. See also Weston LaBarre, "Native American Beers," *American Anthropologist* 40 (1938): 224–34.
- 86 ARCIA 1852, 396, 416–17, 424; ARCIA 1854, 354; Carolyn Thomas Foreman, "The Choctaw Academy," *Chronicles of Oklahoma* 10 (1932): 92.
- 87 "Recollections of Peter Hudson," *Chronicles of Oklahoma* 10 (1932): 519; Leard, *IPH* 53:23 (WHC).
- 88 ARCIA 1859, 571–72.
- 89 ARCIA 1848, 503; school diets are also documented in various other years of ARCIA, in dozens of testimonies in *IPH*, and in Foreman, "Choctaw Academy."
- 90 For detailed information on health care at the Seminaries, see Devon A. Mihesuah, "Medicine for the Rosebuds," in *Cultivating the Rosebuds: The Education of Women at the Cherokee Female Seminary, 1851–1909* (Urbana, IL, 1993), 85–94.
- 91 *Cherokee Advocate*, 26 August 1893.
- 92 Annual Report, Medical Superintendent of Male and Female Seminaries, 7 November 1879, Cherokee Nation Papers, M 943–1–10, box 4, folder 876, WHC; Mihesuah, "Medicine for the Rosebuds," 85–94.
- 93 John W. Lane, "Choctaw Nation," in *The Five Civilized Tribes in Indian Territory: The Cherokee, Chickasaw, Choctaw, Creek, and Seminole Nations* (Washington DC, 1894), 58.
- 94 Romans, *Concise Natural History*, 64, 77.
- 95 Hall, *IPH* 92:255 (WHC).
- 96 Christie, *IPH* 18:91 (WHC).
- 97 For example, walnut and other trees were cut (often clandestinely) by the banks of the Arkansas, Grand, and Verdigris Rivers and quickly floated downstream out of the Cherokee Nation. CHN (Cherokee) vol. 119, 6 July 1881, ledger book, 68. National records of the General Council, Senate, and House of Representatives, census and mercantile records of the Five Tribes—Choctaw (CTN), Cherokee (CHN), Chickasaw (CKN), Creek (CRN), and Seminole (SMN)—are found at the OHS and WHC (see note 10) on microfilm and in ledgers. Some are written in the tribal languages. For discussions of tribal timber and resource issues, see Craig H. Miner, *The Corporation and the Indian* (Norman, OK, 1976); and Sandra Faiman-Silva, *Choctaws at the Crossroads* (Lincoln, NE, 1997).
- 98 For discussion about changes to the landscapes, see Charles F. Meserve, *The Dawes Commission and the Five Civilized Tribes of Indian Territory* (Philadelphia, 1896).
- 99 See National Records of the General Council, Senate, and House of Representatives, census and mercantile records of the Five Tribes. Also see *Constitutions and Laws of the American Indian Tribes*, 20 vols. (Wilmington, DE, 1975).
- 100 Camp, *IPH* 18:190.
- 101 James, *IPH* 31:124; Culberson, *IPH* 21:291.
- 102 W. B. Morrison, "Biographical Sketch of Wm. N. Jones," typescript in Wilson N. Jones Collection, box 1, folder 42, WHC.
- 103 Brown, *IPH* 17:80.

104 *Indian Citizen*, 31 January 1901.

105 J. Cole, *IPH* 19:175.

106 Some natives see traditional tribal foods as being “second class” foods, and others claim that fried white bread is “traditional.” See Krista Scott-Dixon, “Springtime in the Ancestors’ Gardens: Native Health and Finding Comfort,” *Spezzatino* 4 (2008): 34–41, spezzatino.com/wp-content/uploads/2009/03/spezzatino-v4.pdf. At a Department of Indigenous Nations Studies potluck I brought elk stew, and at a recent family (Comanche) reunion I brought venison and pinto bean chili; both were the least-consumed dishes at long tables of cheesy beef casseroles, fried chicken, chips, and desserts. Relatedly, see the documentary *Good Meat* (Native American Public Telecommunications, 2011), in which Oglala Lakota Beau LeBeau finds losing weight difficult because his household prefers chips and sodas. His family especially dislikes bison, once a mainstay of their ancestors’ diet.

107 Hill, *IPH* 42:116 (WHC).