



UNIVERSITY OF CALIFORNIA PRESS
JOURNALS + DIGITAL PUBLISHING

Alaska's Vanishing Arctic Cuisine

Author(s): Zona Spray

Reviewed work(s):

Source: *Gastronomica: The Journal of Food and Culture*, Vol. 2, No. 1 (Winter 2002), pp. 30-40

Published by: [University of California Press](#)

Stable URL: <http://www.jstor.org/stable/10.1525/gfc.2002.2.1.30>

Accessed: 24/08/2012 17:13

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



University of California Press is collaborating with JSTOR to digitize, preserve and extend access to
Gastronomica: The Journal of Food and Culture.

<http://www.jstor.org>

Alaska's Vanishing Arctic Cuisine

BARELY A HANDFUL OF PEOPLE know that Alaska's Arctic cuisine is disappearing. But then, few people know it exists.

That we know so little about Eskimo¹ food preparation is not surprising—subsistence diets are rarely explored, apart from listing specific foodstuffs and their dietary statistics.

Cooking methods are usually of no concern. We look askance at diets filled with foreign substances, such as gobs of quivering blubber. Documentaries serve to fuel aversion by showing Eskimos eating raw meat, blood smeared across their smiling faces. No matter that Eskimos eat uncooked or chemically unaltered meat only in rare instances; the image still haunts us. On the surface Eskimo food appears too primitive for culinary investigation. However, native women created an extensive and complex repertoire of dishes, preparing hundreds of indigenous foods according to specific techniques.

In investigating traditional Eskimo food, I was lucky to have both a considerable knowledge of food and an understanding of the culture. Born in Shungnak, Alaska, prior to World War II, I am considered an elder by the Eskimo community, and being part of a well-known and respected family is culturally very important. In 1929, my parents had traveled to remote Eskimo villages to teach grades one through eight for the U.S. Government Bureau of Indian Affairs. Since teachers are esteemed in the villages, their name was easily remembered fifty years later when I returned to the Arctic.

Researching cuisine can often be a daunting task, but add a severe climate, and the quest becomes painful. Shungnak, a small native village inhabited by two hundred Eskimos, lies thirty miles above the Arctic Circle and one hundred and fifty miles inland from the Bering Strait. The mercury in our thermometer, which hung on the side of the schoolhouse where my family lived, plunged out of sight for weeks on end, reaching minus seventy degrees Fahrenheit. Then there were the blizzards, which can envelop a person within seconds. During a blinding snowstorm, Eskimos in familiar surroundings can lose their way traversing a ten-foot distance; an object one foot away is invisible. Within such an environment, it is understandable that writers have focused on those who face everyday dangers. The hunter is exalted, not the cook.

Time also hinders research. Living and working with Eskimo women necessitates acceptance into a close-knit community. Trust must be established, kindred relationships fostered. Furthermore, it takes a long time to explore a cuisine, and many Arctic foods themselves take months to prepare. Even though numerous dishes are not cooked at all, drying fish takes up to four days, and fermentation periods can range from weeks to months.

For centuries, subsistence living—the “customary and traditional, non-commercial uses of wild resources”²—defined Alaska's Eskimo culture. All food was hunted, gathered, and prepared for the family's consumption. Nothing was sold. Therefore, when food writers use elegant Western or Eastern dishes as the model for cuisine, Eskimo subsistence foods seem unrefined in comparison. However, once we begin to look at methodology, cooking tools, heat source, and the culture's distinctive seasoning, a remarkable picture emerges. We find that Eskimo women employed a surprisingly sophisticated body of knowledge to create their traditional dishes.

The History

The term “subsistence” no longer accurately describes Alaska's Arctic food culture, which has not been truly subsistent for over one hundred years. Historically, Eskimo women prepared food for their nomadic hunting and gathering tribe and hid it in the ground or in camouflaged caches along their winter traveling routes. But by the turn of the twentieth century, Arctic Eskimos had already settled into villages along riverbanks. They began moving into a mixed-economy lifestyle, which coupled subsistence hunting and gathering with fur trading to acquire guns and some clothing.

Today, nearly all Arctic Eskimos exist in a cash economy and purchase modern conveniences with money. Electricity lights their homes, and they draw water from kitchen faucets. They have stoves with ovens and eat white man's food from boxes, cans, and bags. Only elders prepare subsistence foods.

During the mixed-economy period, Eskimo men readily shifted to white man's hunting devices, but the women were slow to accept modern foodstuffs. Although small amounts of sugar, flour, and tea were traded, their use was minimal—

only the most successful hunters could frivolously trade furs for luxuries. Even so, adding tea and sugar to cold water was a treat too good to pass up. Flour was another matter. Without stoves, women were unsure of flour's powdery value. They knew no satisfactory method of incorporating flour into Arctic cuisine, and since no one taught them how to use the new product, they simply mixed flour and water and gave it to the family raw. Not until after World War II was white man's flour subjected to heat, and by then traditional Eskimo cuisine was already on the wane.

The mixed-economy era, which lasted from the late 1800s until World War II, was the most advanced for Alaska's Eskimos. During these years, families were extremely close-knit, and crime was practically nonexistent. Food preparation and utensils were highly developed and can be seen as hallmarks of the classical period of cooking that I describe here. But with the advent of World War II, Alaska's entry into statehood in 1958, and the introduction of modern society from the lower forty-eight states, Eskimo life changed drastically.

The Culture

When my aunt died in 1995, the vast knowledge of Arctic subsistence foods she had gleaned over eighty-four years disappeared, too. The culture was nearing extinction, and I was haunted by the need to document traditional foodways.³ Although young Eskimo men continue to hunt for sport, few young women skin seal and render blubber into oil. Nor do they seine for fish, fillet and dry them, or pick wild plants and preserve them in seal oil for winter eating. It was perfectly clear that as each elder died, a little of the culture vanished as well.

Sharing, especially the sharing of food, has always been an important value in Eskimo life, one that often meant the difference between life and death. Since obtaining food is no longer an issue of survival, when I returned to the village I decided to help the women with their work. Here was another form of sharing: I could lend a set of hands and help the women elders lift heavy skins and carcasses.

Elders readily took me on fishing trips, teaching me to gut and fillet salmon with an *ulu* (the traditional woman's

knife with a solid curved blade) and to hang fish for drying. They took me berry picking on tundra that stretched for miles; we traveled upriver to forage for wild greens to preserve in seal oil. In the evenings I frequently prepared simple dinners to create a comfortable atmosphere for storytelling. In return, these kind, generous people offered tales of fishing, hunting, gathering herbs and berries, drying, smoking, and fermenting—all of the old ways that existed during the good years of the mixed-economy era.

Piece by piece, the elders' stories revealed a remarkably ingenious cuisine. Eskimo women cut, chopped, sliced, and mashed myriad foods, using cooking methods as varied as those in the Western world. But only remnants of that life remain today.

Defining Arctic Cuisine

The Alaskan Arctic Eskimo cuisine described here is restricted to an area approximately one hundred miles to the north and south of Alaska's Arctic Circle. This cuisine existed before Eskimo culture was forced into the twentieth century, during a time when skins were turned into kayaks, furs and hides were sewn into intricately patterned parkas (hooded fur coats) and mukluks (waterproof boots made from hides and furs), and nearly all food was hunted or gathered.

Arctic cuisine differs greatly from the foods commonly dubbed "Alaskan," which represent a Western-style cuisine using some regional products alongside commercially prepared foods. Dishes made by oven roasting, frying with onions, or baking have no relationship to the Arctic Eskimo cuisine practiced prior to the 1940s. This cuisine also differs from the Eskimo cuisine of southern Alaska, which draws from the vastly different food sources available in that more temperate zone thirteen hundred miles south of the Arctic.

Eskimo women were extremely inventive. They developed complex preserving techniques and combined flavors to create new dishes that eventually became traditional favorites. While working with elders or compiling dishes described during oral histories, I initially could find no systematic organization to Arctic foods. However, once I began to list food preparation techniques and cooking methods, a



Seal oil dish used to light sod or snow houses and warm prepared foods.

COURTESY OF ZONA SPRAY

cleverly fashioned cuisine took shape.⁴ Arctic dishes were cooked and preserved by moist heat (boiling, poaching, simmering, blanching), by dry heat (roasting over an open fire), and by altering cellular structure through fermentation, drying, half-drying, and rendering. Food for winter consumption was nearly always prepared in large quantities during the summer and then frozen. While wood was summer's heat source, seal oil or other fats were used during winter to heat previously frozen food. All sorts of handmade cooking implements and large tools were designed specifically for picking, digging, and cooking; storage vessels were fashioned for long keeping. What unified the cuisine was the flavor of seal oil, the Eskimo's salt and pepper.⁵ Seal touched nearly every food, either in its preparation, as a preservative during storage, or as a final seasoning.

Indigenous Foodstuffs

Because land above the Arctic Circle is covered with snow for nearly nine months a year, food sources were limited. At first glance, the icy seas and vast snow-covered tundra appear to be barren wastelands, but when summer's long, sun-filled days finally arrive, the rivers, seas, skies, and miles of tundra, wet from melted snow, come alive. During the short summer season, the Arctic becomes a veritable supermarket.

The traditional Eskimo diet relied on the same food groups as those in the U.S. Department of Agriculture's ideal food pyramid, but the pyramid was turned upside down. High-fat, high-protein foods predominated; there were no grains. The nearly two hundred edible wild plants of the Arctic provided important dietary supplements, as did a multitude of sea and land mammals, fish and fowl. The extra vitamins, minerals, proteins, and valuable unsaturated fats⁶ from these sources ensured a balanced and nutritious diet.

The Heat Source

Along the barren Arctic coast trees are almost nonexistent, so driftwood was sparingly burned. Inland, however, forests of scrub spruce trees yielded an abundant source of wood.

During the summer, work was endless. The long days stretched endlessly into white nights, with only a few hours of dusk hinting at the arrival of a new day. Outdoor fires were used to prepare foods for freezing. Women and children constantly tended them in a rush to preserve every possible edible food for the winter months ahead. During this season, too, the sun's heat rendered blubber into oil,

while the wind and low humidity pulled moisture from strips of mammal flesh and fish fillets hung to dry. All serious cooking was carried out when food was plentiful.

Nearly all cooking and preserving ceased during the winter. Because the typical, low, rounded sod houses (igloos) were vulnerable to open flames, cooking was relegated to an area adjacent to the living quarters. The only light and heat source inside the igloo came from a shallow stone dish carved from jade or flint or another indigenous material. Seal oil filled the dish, fueling a tiny wick made from twisted wild Arctic cotton. The seal oil dish was an important vessel, and the wife's sole property. Bringing it into the igloo established a marriage, while keeping it burning ensured good times and spiritual peace. Removing the dish from the igloo signaled divorce. The dish burned continuously throughout the winter and warmed thinly sliced uncooked frozen fish or meat, similar to sushi or carpaccio. It also gave warmth to previously cooked, dried, or fermented food that had been frozen for winter consumption. The seal oil bathed all foods in a familiar seasoning.

Seal Oil: The Basic Flavoring

Seal oil was the salt and pepper of Arctic cuisine, and to this day it is coveted by the elders. Seal oil bound the culture with a common flavor. Not only was all food stored in the oil, but a hint of seal oil—or, at the very least, a delicate fish flavor—permeated most of the food chain. Virtually every living thing in the Arctic feeds on the sea, and the flavor of fish is apparent in all sea mammals and many land animals; even the flesh of fish-eating fowl is suggestive of the sea. The low-growing tundra salmonberry exemplifies this pervasive fish taste. Unlike the tall, bushy salmonberry found on the northwest coast of the United States, the lowbush tundra salmonberry grows inland, as far as one hundred and fifty miles from the Chukchi Sea. Though the berry's salmon color reflects its name, its salmon flavor is even more telling.

In Shishmaref, a tiny coastal village on an eroding sandy barrier reef just below the Arctic Circle, I watched seal being butchered and blubber rendered into oil, an exhausting task demanding long hours and numerous hands. Little wonder that few elders flense seals and prepare oil today; even fewer young women want to learn the process. Lifting unwieldy, two-hundred-pound sealskins with blubber attached demands tremendous strength. The blubber is removed with an ulu and cut into two-inch-wide strips free of all blood and meat. The ideal air temperature for rendering is around fifty degrees. If it is too hot, the oil will turn cloudy, indicating a fishy taste. If too cold, the rendering

process slows down, and the oil can become rancid. Each step must be carefully executed or the quality of the oil will suffer. “The finest cooks prepare the best seal oil,” declares elder Esther Bourdon.

Small Cooking and Gathering Implements

The traditional utensils for preparing foods, such as the *ulu*, were small, designed for women's hands. The *ulu* was used for everything from sewing and fashioning caribou sinews into thread to cutting blubber from sealskins and cleaning fish for drying. Originally carved from stone or jade, the most common knife had a blade seven inches wide, shaped into a half sphere with an ivory or wood handle at the top. (For sewing, women sometimes used a tiny *ulu* no more than two inches wide.) By the late 1800s the most prized ulu was made from a carbon-steel sawmill blade, which took on a razor-sharp edge after only two or three swipes across a rock, unlike the stainless-steel *ulus* sold as souvenirs at every store and airport in Alaska.

Another implement devised to ease labor, especially for coastal Eskimo women, was the skinning board. Once a common wedding gift, the board is still prized by elder women. About fifteen by eighteen inches, it was placed upright on the ground and used as a vertical support for heavy, blubber-laden sealskins. The board relieved some of the backache caused by hours of bending from the hips while women cut fat from the skins.

For centuries Eskimo women have carved digging trowels and picks from local jade and flint, which are used to uproot willow stems or rob roots from a mouse's nest. Poke blowers, for blowing air into pokes (sealskins used as containers) were fashioned from ivory or small, hollow bones. For stirring and mashing, women carved wooden tools. One specialized tool resembled a meat pounder without a handle; another looked like a long-handled wooden spoon, but with a wide, grooved foot rather than a concave bowl. Although furs were swapped for small metal digging tools at the turn of the twentieth century, few women owned them.

Early cooking pots were made of clay from the Kotzebue lagoons, a 150-mile trip from Shungnak by dogsled or kayak. Soft, short ptarmigan leg feathers were mixed with the clay to hold it together. Since clay pots were dried, rather than fired, they were set next to the fire for cooking, to prevent cracking. Hot rocks were added until the liquid and meat inside the pot boiled; the fourth rock usually did the trick.⁷ By 1900, Eskimos had traded furs for brass or iron pots that could withstand the heat of an open fire. During the summer, a pot was continuously suspended over an outdoor fire.

The vessel simmered, boiled, and braised a remarkable array of fish, fowl, meats, and plants. Even today, a large pot is continually in use in fish camps along the rivers.

Containers of all sizes and shapes were woven from reeds and grasses, and basket making became an art. Beautiful black baskets were woven from whale baleen (a new three-inch basket commands well over one thousand dollars today), and birch bark was shaped into rectangular baskets with handles. One clever berry-picking basket had straight twigs six inches long and one-half inch apart projecting from one side. Women could quickly fill a basket by swiping it through the low berry bushes. This basket was especially helpful for finding cranberries hidden under snow, saving fingers from hours of exposure.

Food Preservation and Storage

Gathering and preparing food was imperative for survival. Elders frequently told stories about famine, which occurred primarily before village life when families migrated in search of food or men hunted for months at a time without returning to the igloo. However, that time was not as long ago as we might expect—a mere one hundred years or less.⁸ Although food shortages are no longer feared, the stories still serve a purpose, reminders that everyone should be humble, thankful, and aware that today's abundance may not last until tomorrow.

Elder Caroline Penayak reminisced about gathering greens as a child on a camping trip, emphasizing the need to pick plants when available and waste nothing. During one warm spring, her family happened upon an area full of sourdock (*Rumex arcticus*), commonly known as sorrel in the Arctic. The plants were everywhere, and the family picked for three days without stopping, only to realize that they had no way to transport the huge volume of greens home. Rather than waste their bounty, they cooked the greens on the spot and buried them in the permafrost. Once snow had covered the ground, they returned by dogsled and retrieved their cache of greens. Not knowing what the future holds, Eskimos learned to take what is offered, when it is offered. No one could predict the availability of wildlife in winter or whether frozen berries would still be clinging to stems under the snow.

In food preparation, the important factor is how cell structure is altered. Thus the term “cooking” can be misleading, as it refers only to the application of heat. In fact, air, dry or moist heat, fermentation, and freezing all have the capacity to change a product. Because sun and wind were readily available, the Arctic Eskimos dried foods more

often than any other method of preparation and preserving. Abundant amounts of meats and fish were dried or half-dried for later cooking. Women also rendered, boiled, braised, steamed, simmered, fermented,⁹ and roasted food over an open fire. For winter consumption, everything was frozen. While interior peoples frequently cold-smoked their drying fish under a cover of branches or skins to prevent flies laying eggs in the moist flesh, smoking was unknown among coastal elders. Not only were the coastal lands barren, the continually gusty ocean winds made it impractical to try to contain smoke.

Thus long drying racks, which could accommodate huge quantities of fish, were a common sight along riverbanks and in coastal villages. Some racks resemble the skeletal remains of a frame house; others look like long clotheslines or lean-tos. All are constructed from driftwood, sturdy limbs, or skinny, gnarled tree trunks stunted from years of bitter winters. In coastal Shishmaref, the drying racks held fish and black seal, called *ugruk* in the Eskimo Inupiaq language. During a plentiful fish run, hundreds of pounds of gutted fish hung from the horizontal bars; breezes air-dried the fish within a few days.

Cold cellars were historically dug into the permafrost, or icy ground, to keep food-filled pokes and baskets cold during the summer and frozen during the winter. Some of the old cellars, laboriously carved into the frozen earth with walls as straight and smooth as any modern house, were six feet deep and six feet square. There were also huge cellars with circular walls, lined with burlap bags and grasses to hold tons of fish for the winter.

Even though it was stored for months on end, the food was of amazingly good quality. Sourdock mixed with seal oil or dried salmon eggs was frequently stored in cellars for over a year, yet it still tasted wonderfully fresh when retrieved. Reverend Brad Ham told of a whale dinner on St. Lawrence Island. The meat was taken from a poke that had been buried for twenty-two years; to his surprise, it tasted completely fresh, without a hint of freezer burn or any off flavors.¹⁰ Though few, if any, cellars have been dug within the last forty years, Eskimos still chill summer's bounty at their fish camps.

In Alaska's interior regions, large birch storage baskets, designed to be waterproof and repel mice, were constructed to nest neatly. When filled with berries and stacked one on top of another, only the largest and highest basket needed a cover. Like sealskin pokes, these baskets held berries, fish, meat, or a combination of cooked meats with berries or greens. They were stored in cold cellars to freeze.

Once the storage containers were filled, women fashioned mini cold cellars or simple shallow holes in the icy ground and lined them with grass. Then a layer of large,



highly acidic leaves, such as coltsfoot, sourdock, or rhubarb, either wilted or dipped in boiling water, was carefully pressed against the sides and bottom of the permafrost holes. After lining the hole, the women poured fermenting berry purees inside. The leaves served not only to waterproof the containers, but also to ensure safe storage, thanks to their high acidity. Another lining technique was to mash boiled acidic leaves into a puree, which was then drained and smeared directly onto the sides and bottom of the earthen cellar. This mixture was covered with additional pureed acidic leaves, then topped with grasses and skins, and then wood or dirt. Anything and everything was used to keep the contents clean, out of the sun, and away from flies, which lay dreaded maggot-bearing eggs. There was—and is—nothing more abhorrent to Eskimos than flies and their potential for ruining food.

Pokes made from sealskins or animal parts were fashioned into storage vessels for food or into containers for rendering blubber. Along the coast, small spotted sealskins weighing one hundred pounds were ideally suited for pokes because the fur and skin remained intact during long storage. Once the seal was boned out and the skin sewn into a waterproof container, it was turned fur side in, resembling a huge, unshelled, three-foot pecan. Amazingly, after being stuffed with meats, plants, and seal oil and stored for months in a cold cellar, the fur still adhered to the skin, and the poke contents remained clean and free of fur.

Sealskin poke filled with meat, dried fish, and seal oil. 1996.

COURTESY OF ZONA SPRAY

Pokes were also used for medicinal purposes. Instead of being stuffed with food, the skins were filled with a combination of young willow shoots and water. After a few weeks or months, either the liquid or the stalks were given to relieve mild maladies such as a toothache, or birthing pains.¹¹ Without knowing that willow leaves and shoots contain salicin, a natural aspirin substitute, women had learned from experience that willow had healing properties.

In the interior around Shungnak, sealskins were obtained by trading with coastal peoples, but caribou or moose stomachs were more readily available. Though small, they frequently sufficed as food vessels when the fat surrounding the stomach was left intact. The stomach was filled, often with fish eggs, then tightly sewn together and set next to a fire. Once the fat began to melt, the stomach was turned repeatedly to melt all of it. As each softened side was rotated away from the heat, the fat cooled and hardened, until a layer of congealed fat covered the stomach, which by then was hermetically sealed and ready for freezing. Duck skins, plucked clean, were also used for storage. Because of their small size, they were usually stuffed with fish eggs and seal oil.¹² Occasionally, a large fish skin served as a storage vessel, but few women knew how to prepare them.¹³

Dried and Half-Dried Fish

In my little village of Shungnak, women and children seined every day during fish runs, throwing out thirty-foot-long nets to catch hundreds of fish at a time. Fish were so plentiful that the river seemed to boil as fish fought their way to the spawning grounds. Everyone helped, except for males away on hunting trips. Even elderly women, too old to lift the heavy, fish-laden nets, sat on the riverbank amid hundreds of fish that had been tossed from the nets, with their *ulus* deftly gutting and filleting salmon and sheefish weighing fifteen pounds or more, readying them for drying or half-drying.

The drying process appears simple, and, if each step is carefully executed, it is. Eskimos do not teach by giving advice; they explain through stories or by example. So when I asked Esther to explain the drying procedure, she told me to follow her. On the bank of the Nome River, she quickly and meticulously prepared fish for drying.

First, the heads were removed with the *ulu* in one clean cut and saved for Stink Heads, a fermented delicacy aptly described by its name. Then the fish skeletons and guts were lifted out with two efficient, clean cuts and reverently thrown into the sea as a spiritual gesture, returning a kindness to the hungry sea creatures. For future bait, some eggs were mixed with sand and left to dry in the sun. The remaining eggs were layered with fish heads and fermented, or else turned into numerous variations of Eskimo ice cream (*akutuq*), a traditional dish made by beating a combination of fresh or frozen berries, cooked wild plants, shredded dried meat, and fish with a hard fat or seal oil until whitened. Nothing was wasted. Even the tiny livers and milt were saved, to be carefully simmered for a dish the elders adored.

To facilitate hanging, the fillets were left attached at the tail. Deep incisions were made crosswise across the fish, slanted toward the head, two inches apart and almost to the skin. Fish with the highest fat content received the closest cuts. This procedure ensured that the fatty fish would dry quickly: the quicker the drying process, the less risk of rancidity and off flavors. The largest and fattiest fish, such as king salmon, required the longest drying period—four to seven days. (Once dried, these fish were the tastiest of all, especially the flesh around the belly, which was heavily marbled with fat.) A quick rinsing in the river rid the flesh of blood and scales. No salt was added—there was none. With skin side out and tails pointed toward the sky, the fish hung on racks in the Arctic breezes, a proud sight with scales aglitter as the sun reflected off their silvery skins. Small, lean fish were simply split lengthwise, gutted, opened, and hung to dry with nearly severed head and backbone dangling—less attractive to the eye, but just as efficient.

When I was a child, a cover of branches or hides protected drying fish from summer's misty rains. Wet fillets do not dry, resulting in smelly spoiled fish and days of wasted work. Then, too, without breezes, flies lay eggs on the hanging flesh, which eventually develop into the despised maggots. The only remedy for eliminating small white fly eggs is hours and hours of painstaking scraping, a spirit-dampening task for everyone. To prevent flies in Shungnak, slow-burning embers efficiently smoked the flies away; the coastal people relied on breezes.

For half-dried fish, the fillets were hung for about two days until barely moist inside; only experience and knowing fingers could fathom the exact moment. Half-dried fish were always cooked or stored in seal oil to prevent possible spoilage. Longer drying was necessary to remove all moisture and took as long as five or six days. Once dried, the fish was thinly sliced and eaten without further preparation, except for a beloved dousing in seal oil; otherwise it was stored in seal oil for the winter. Dried salmon, finely sliced and wrapped in young willow leaves dressed with seal oil, has been a favored dish for centuries. It is still enjoyed today by those lucky enough to have it on their tables.

Moist Heat

When a heat source was plentiful, boiling was the technique most often used to prepare food. My mother always said, "Everything is boiled." Boiling was common knowledge, easy and reliable. There were no decisions and no creative mistakes to be made. Women had little time to devise new recipes, and as a cooking technique, boiling was consistent, if bland. However, the term "boil" might be a misnomer. Not once did I see a bubbling pot. Rather, the liquid gently shimmered at a perfect poaching temperature. With a limited heat source, if a pot did boil, it was only for a short time. Sourdock and many greens were blanched—quickly boiled in water—to preserve color and flavor. (Similarly, the elders stressed the importance of starting meat or fish in cold water to yield the best flavor.) Sometimes only a tiny amount of water was needed to braise or steam. But no matter the exact cooking method, the descriptive term was always "boiled." And in every case, timing was important to avoid overcooking coveted foodstuffs. The tasty broth from moist cooking was drunk, saved for another dish, or given to the dogs, who also needed nourishment. The dogs provided far more than an important mode of travel. Their keen senses saved many a sled from being pulled over life-threatening cracks in the ice, and when they had reached the end of their lives, their skins were sewn into warm clothing.

Following is a small sampling of recipes using moist heat, which I collected between 1993 and 1997 in interviews with elders in Shungnak, Shishmaref, and Nome.¹⁴ These recipes were passed on orally from generation to generation. They reveal not only a remarkable variety of foodstuffs, but also inventive combinations of flavors, especially sour and sweet. They also demonstrate awareness of how to add flavor with fats and the importance of temperature and timing. (In a nod to today's standards, some cooking times are stated here, although traditional "Eskimo time" meant that women simply took note of the changes occurring in the pot and gauged doneness accordingly.)

Duck or Seagull Eggs: Take from nests in early spring; boil, cool in cold water.

Tomcod (a fish from the interior thought to make one sick unless cooked): Boil.

Tomcod Livers: Use a lot, as they are small. Cook gently to render out oil; remove oil and cook until livers are shriveled. Add sugar and berries.

Whitefish: Cut into three pieces of equal length (head, body, tail), boil, and serve.

Smelt: Clean, cover with water, boil a few minutes only.

Bullheads (similar to small monkfish): same as above but cook 15 minutes, cut into three pieces, and serve.

Sourdock (also called Arctic chard): Boil in one-third its volume of water for 1 hour, stir, add more leaves, cook until thick and saucy. Serve with sugar or seal oil. Or boil in a little water, cool, mash with small pieces of blubber, cool, store in poke until blackberries are in season, then add berries to sourdock-filled poke.

Baby Birds, Owl, Ducks, Loon, Rabbit, Squirrels, and Ptarmigan: Clean, cut, boil.

Bear Meat: Boil, cool, add seal oil to flavor.

Ugruk or Seal: Boil only a few minutes, or cook half-dried *ugruk* a few minutes, put in poke layered with dried *ugruk* pieces on bottom, then blubber, then cooked meat.

Seal Intestines: Boil a few minutes just until they turn white, then eat or put in poke.

Cooked Blubber: Take pieces from poke, pour hot water over, cook until oil separates out, eat.

Seal Head: Remove head, cut into pieces as small as possible, cook for a long time. Eat meat, breaking the skull open and eating everything.

White Whale: Boil until done, add fat from inside small intestines, and cook.

Walrus: Boil, skin, and add fat to make soup.

Walrus Liver Broth: Cook walrus liver in water until full-flavored, remove liver and cook broth slowly until reduced and thick like a sauce. Set aside for two weeks, or until a little sour; use as a dipping sauce for seal.

Roasting

Spit-roasting, or dry heat, was a method mainly used for the immediate consumption of food on hunting trips or at summer fish camp. Since preserving food always entailed freezing, the charred exterior would certainly have imparted a bitter taste to the contents of the poke.¹⁵ Fish were occasionally spit-roasted, but this was tricky, because when overcooked, fish flesh separates, and dinner ran the risk of falling into the ashes. Elders rarely mentioned roasting meat.

Fermentation

When and where Eskimos learned to ferment is unknown. Some theories suggest that they carried the Asian fermenting process east into Alaska via the Aleutians or the Bering Strait. However, some anthropologists believe that the Eskimos traveled west around the Arctic, going to Iceland, Greenland, and Canada before settling in Alaska.¹⁶ Regardless of how fermentation arrived in Alaska, it is a centuries-old process that effectively preserves food.¹⁷

Two methods produced fermented foods: controlled fermentation and hunting. Controlled fermentation (which sometimes eluded control) was carried out in holes dug in the ground, or in waterproof baskets or pokes. Each step was carefully executed to create the necessary Ph environment. If the acidity level was not high enough, the dish could spoil and become deadly. Although Eskimo women knew that fermentation required an acidic environment, or at least that sour plants were necessary to the process, they didn't know why. They also knew that cool temperatures and minimal fat played an important role. If mold developed, valuable time and work were wasted. From years of preserving, during which they developed an oral history of health and sickness, Eskimo women established rules for safe fermentation. They learned to prepare combinations of berries, meats, fish, greens, fish eggs, and animal parts in an acidic environment that transformed them into delicacies.

When berries ferment, yeast feed on their natural sugars and multiply, producing carbon dioxide and ethyl alcohol. The berries eventually burst and begin to bubble over the top of their container. From long experience Eskimo women

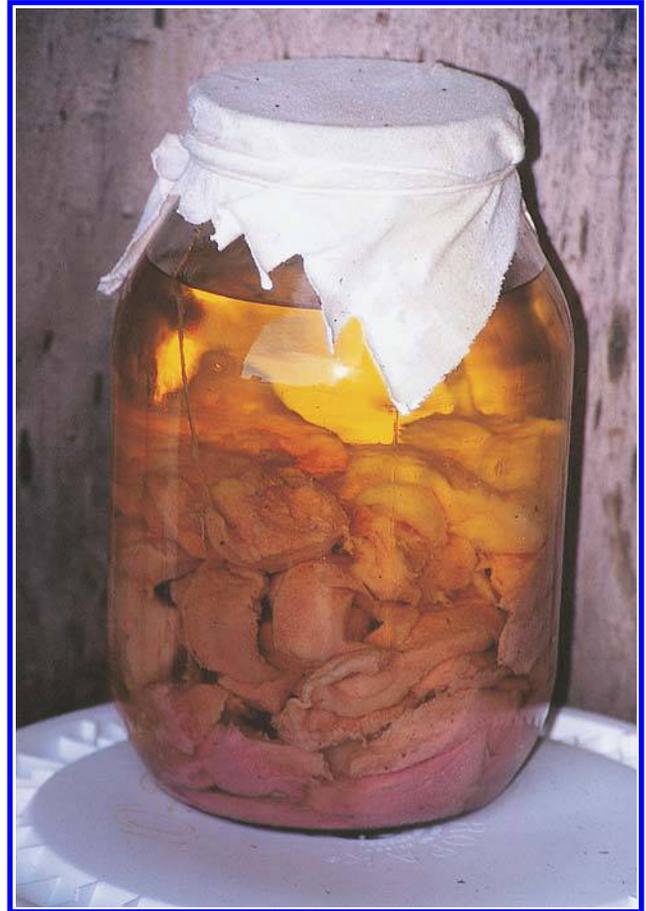
learned that they could slow down fermentation by restricting air, so they devised lids to keep the containers sealed. They also blanched and wilted acidic, sour-tasting leaves to spread over the fermenting surface. Sometimes the hard fat from caribou, moose, or bear was melted, poured over the top of the berries, and left to harden into an airtight seal. Seal oil or fish oil was poured over the contents only as a last resort, since these oils are not hydrogenated and do not congeal. Without a proper seal, air would easily penetrate the berries, and the fermentation process would continue.

Along the Arctic shore, Fermented Stink Heads were made by digging a hole in the sand and lining it with acidic leaves. Ideally, the hole was filled with salmon heads and one- or two-day-old salmon eggs, preferably from vigorous humpies or pinks caught on their way upriver to the spawning grounds. The heads were either individually wrapped or simply layered with wild celery leaves and/or dried eelgrass. They were then covered with more acidic leaves and topped with wood or dirt, and the contents left to ripen for two weeks to two months.¹⁸ Sheefish heads were often substituted for salmon, as in my village.

A similar dish, Fermented *Ugruk* Flippers, was a favorite of the elders. It was made by placing seal flippers in a shallow hole lined with grasses, then covering them with blubber to lend richness. More grasses were added, and the flippers were left in the hole for six weeks, until the fur peeled off easily. After the meat and bones had been picked free of fur, they were doused with hot water, poached for a few minutes, and cut into small pieces for eating or for use in soup.¹⁹ Fermented *Ugruk* Intestines and Soured Seal Liver took far less time to prepare. These were put into a basket (or, after 1900, into the rare enameled pot), covered with seal oil or blubber, and stored in a warm spot away from the sun for five to ten days.

When plastic buckets became available, women thought they would be perfect fermenting vessels. Unfortunately, unlike sand and earth and grasses, plastic does not provide the microorganisms necessary for an antiseptic environment. The contents decayed, causing extreme sickness and sometimes death. Since fermented foods are an acquired taste and botulism is a threat, it is not surprising that young people now hesitate to eat them. Without young men to eat fermented traditional dishes, young women do not prepare them. Thus young Arctic natives no longer consume fermented foods such as Stink Heads and Eggs or Fermented Seal Flippers.

The second method for procuring fermented foods was as a by-product of hunting. Herbivorous animals frequently ate lichens and grasses toxic to humans, but after the plants



Modern-day technique of rendering seal oil from blubber. The light yellow color and clarity of the oil reveal its high quality. 1995.

COURTESY OF ZONA SPRAY

had decomposed or fermented in the animal's stomach, aided by the acidic digestive juices, the stomach contents were perfectly safe for human consumption. These naturally fermented foods came from the stomachs of freshly killed moose and caribou, or from ptarmigan intestines. With a slightly sweet, earthy taste, they were a hunter's reward, and very welcome.

Rendering

Today, seal oil is rendered only sporadically, and how long the practice will continue is uncertain. Almost no young women render. The youngest woman I saw working in fish camp was fifty-five, and she had three grown sons who were excellent hunters, so she had a ready supply of seal. Young women today prefer teaching, nursing, or clerical work to butchering seals, which is hard labor. And besides, not all men hunt.

While rendering in Western cooking involves heat, Eskimos use no heat to extract gallons of seal oil from mounds of blubber. The process takes about two weeks for oil to ooze out of the blubber, a result of gravity more than

anything else. Carried out from spring until fall, the ritual of rendering seal oil was the most important activity an Eskimo woman could perform. As the touchstone of Arctic cuisine, seal oil flavored nearly every food ingested, and cooks were judged by the quality of their oil.

In theory, the process is similar to making extra virgin olive oil: gentle treatment, no heat. To achieve a light yellow oil, blubber must be free of all meat. Clarity also depends upon the absence of blood. Sheltering blubber from the sun's heat and maintaining temperatures at about fifty degrees Fahrenheit renders the mildest oil. Since the direct sun can be quite hot, even in the Arctic, in the old days branches or skins were used to shade the blubber and protect the oil from rain. Today, cardboard is used for the same purpose. Sealskin pokes were used for rendering seal oil until guns became the main hunting weapons, which often left the skins riddled with holes. Eventually, wooden barrels replaced pokes, although remote villages still proudly acknowledge women skilled in the art of making sealskin pokes.

Other fats were also rendered, but heat was necessary to render the fat of land animals. Any solid fat—from bear, caribou, reindeer, or birds' intestines—was gently rendered over an open fire. When the melted fat cooled, it congealed. It was used to ward off hunger during hunting trips and whenever food was scarce.

Freezing and Preserving

All food for winter consumption was frozen, either in cold cellars or mini cellars dug into the permafrost. Eskimo women preserved food without heat or canning jars. They stuffed pokes with meats, fish, greens, and berries and filled the air spaces with seal oil before freezing. This practice was similar to the French technique of preserving duck, goose, or pork in *confit*. The skin of the airtight poke also helped preserve the frozen contents, especially when stored longer than a year in a permafrost cellar amid leafy branches.

Both coastal and inland villagers also used another, far less complicated, freezing method. Raw meat was simply cut into usable sections and frozen, uncovered, in cold cellars, to be eaten at a later date. This frozen raw meat is known as *koowahk* (sometimes spelled *kwak*). For centuries, throughout the coldest months of the year—up to eleven months in some areas of the Arctic—*koowahk* provided an important source of protein, and it was served at all three daily meals. It is still eaten today.

Timing and texture are crucial to the dish. The frozen meat is allowed to thaw just to the point when a finger pressed against its surface leaves a slight indentation. Biting

into solidly frozen meat would be like biting into an ice cube, but thawed meat is equally undesirable. When the meat has reached the perfect, partially thawed consistency, the head woman of the house quickly slices it paper-thin, not unlike Carpaccio. But there's more to *koowahk* than the taste: the ice crystals in the meat crackle, then burst, in the mouth before quickly melting, affording a sophisticated sensory experience. Once the meat has defrosted and grown flaccid, its texture and taste are no longer pleasing. At this point, diners quickly dip their meat slices into the ever-burning seal-oil lamp to cook, and *koowahk* becomes a communal dish, much like Beef Fondue or the Chinese Chrysanthemum Pot.

Raw Food

Other than *koowahk* (which is not considered a raw food in the Arctic), the most sought-after uncooked delicacy is *muktuk*: whale blubber with skin attached. Each species of whale offers a slightly different taste. Beluga, though small, is highly prized for its flavor. The less flavorful bowhead easily feeds a village, thanks to its immense, forty-ton size, and whalers frequently share their bounty with villages up and down the Arctic coast. Although blubber and meat are typically fermented into a sweet-and-sour delicacy for celebrations, *muktuk* is always eaten raw. Like *koowahk*, it must be sliced extremely thin in order to bring out its special, flowery taste, which resembles a combination of roses and chrysanthemums spiced with almonds. When too thick, even $\frac{3}{16}$ -inch, *muktuk* requires endless chewing, so it must be cut with a razor-sharp *ulu*. When properly sliced, the pale, paper-thin blubber with its marbled pink surface melts sensuously in the mouth.

Conclusion

Until recently, traditional cooking practices were passed on orally from mother to daughter, but that changed with Alaska's modernization under white man's influence. Today, the only keepers of traditional cooking knowledge are the elders. As each one dies, a bit of the culture vanishes.

Traditional food preparation is intimately linked to Inuit²⁰ identity. Hunting, gathering, fishing, cutting, and butchering are ways of preparing and preserving the food that sustains life. Giving and sharing, especially sharing food caught or prepared with one's own hands, is a basic value in Eskimo culture. In today's cash economy, young people purchase food from stores—white man's food. Subsistence foods, by law, cannot be sold. Thus, purchased

beef replaces hunted whale, *ugruk*, and caribou. Salt and pepper season dishes, not seal oil. Without meals of indigenous foods and a common seasoning base, memories of traditional Arctic tastes will fade.

Sadly, with the disappearance of centuries-old foodways, traditional culture will also be lost: the Inuit social system, and its belief system, grew out of the need for food and clothing. It is the present generation and their parents who suffer most, caught as they are between a proud value system based on sharing, which is esteemed by elders and Inuit folklore, and the need to survive in a powerful society based on individualism. Alcohol deadens some of the pain; suicide, far too frequently, relieves it completely.

There are advantages to white man's ways, however. Modern medicine is more potent than many of the old homegrown practices. Hospitals are available; young girls have their babies with assistance, rather than being alone, as was once the custom. Infanticide is no longer practiced, and starvation is no longer feared. Lights go on with the flick of a switch; so does the furnace. And elders agree: driving a four-wheeler to the store to buy food is much easier than mushing a dog sled in subzero weather and hunting seal on the ice for three days. ❊

NOTES

1. The word "Eskimo" refers here to Alaska's Arctic Eskimo and is the term the elders prefer.
2. 1994 *Update* (Juneau, Alaska: Alaska Department of Fish and Game, Division of Subsistence in Alaska), March 1, 1994, p.1.
3. In 1995 the Arctic scholar Rob Stapleton stated that "Eskimo subsistence practices will be gone within ten years." Personal interview, April 1995.
4. A discrete cuisine becomes evident when we apply food historian Giuliano Bugialli's definition of cuisine to the foods of the Arctic. His five criteria are: 1) indigenous foodstuffs 2) a specific heat source 3) unique cooking methods and preserving techniques 4) specialized cooking implements and preserving equipment or tools 5) a distinctive flavoring or seasoning base giving all foods a unified taste (Personal Interview with Giuliano Bugialli, April 1989). A sixth criterion, creativity, should also be added. It is mentioned by Phyllis Pray Bober in *Art, Culture, & Cuisine: Ancient & Medieval Gastronomy* (Chicago: University of Chicago Press, 2000).
5. There were some regional and seasonal differences. Seal oil was traded between villages, but when it was in short supply, fish or whale oil was substituted when possible. Fat from caribou, bear, or mountain sheep was used when nothing else was available.
6. Elizabeth Nobmann, MPH, RD., *Nutrient Value of Alaska Native Foods* (Anchorage, Alaska: U.S. Department of Health and Human Services, Indian Health Service, 1993).
7. Linda Lee, Ruthie Sampson, Edward Tennant, eds., "Interview with Blanche Lincoln," *Lore of The Inupiat*, vol. III. (Kotzebue, Alaska: Northwest Arctic Borough School District, 1992), 239.
8. Because local food sources were declining, shortly after World War II a small group of villagers from Shungnak migrated thirty miles north up the Kobuk River to found another tiny village called Ambler, at a site where fish were more abundant.
9. Fermentation is not really a cooking technique; however, it does alter the chemical structure of the product.
10. Personal interview with Rev. Brad Ham, March 2001.

11. Personal interview with Caroline Penayak, August 6, 1994.
12. Hannah Mendenhall, Ruthie Sampson, Edward Tennant, eds. "Interview with Elmer Ballot," *Lore of The Inupiat*, vol. I (Kotzebue, Alaska: Northwest Arctic Borough School District, 1989), 27.
13. *ibid.*, 31.
14. Collected from personal interviews with elders Polly Kuwolak, Esther Bourdon, Ardeth Esau, and Hannah Miller in Shungnak, Shishmaref, and Nome (1993–1997).
15. As a consultant for a major frozen food corporation, I learned that grilled meats impart an unpalatable flavor to frozen food.
16. Dyfed Evans, ed., *The Eskimo* (Nome, Alaska; Nome Nugget, 1917), 3.
17. For more on fermentation see Jean-Louis Flandrin & Massimo Montanari, eds., *Food: A Culinary History from Antiquity to the Present*. English ed. by Albert Sonnenfeld (Columbia University Press, NY, 1999), 17.
18. Personal interview with Hannah Miller, April 10, 1996.
19. Linda Lee, Ruthie Sampson, Ed Tennant, Hannah Mendenhall, eds. "Interview with Bessie Anaasuk," *Lore of the Inupiat*, vol. II (Kotzebue, Alaska: Northwest Arctic Borough School District, 1990), 70.
20. "Inuit" is a comprehensive term that includes Eskimos throughout the circumpolar lands. This article deals specifically with the Inupiat and Yupik Eskimos in Alaska.