Survival Food of the American West

23-29 minutes : 5/21/2021

Learn about the kinds of foods that kept best on the American frontier; how was it prepared, packed, and how contrary to lore, our ancestors liked flavor too.



How did western travelers and frontiersmen carry food in their travels?

Frontier food is one of the most commonly overlooked details by western writers and historians. There may be a brief mention of some "hardtack & Indian meal" or a few hunks of jerky but is that all you really need before taking on the outdoors? Our native forbears & ancestors carried a pouch of sagamite (corn meal and mesquite flour/other sweetener) and some dried 'jerked' meat or pemmican. This does much to allay hunger but a half-pound of sagamite coupled with a half-pound of dried meat will perhaps make about 1700 calories. It helps but one would not last long on this exchange without losing muscle mass, energy, and endurance in relatively short order.



Did they like bland food? Yes or No?

Just like today, some actually did and some didn't. There are many period meals that are lacking in flavor to 21st century Americans. This is primarily due to our modern taste buds being bombarded by MSG, & other artificial flavoring agents, heavily processed foods, and a critical overabundance of high fructose corn syrupin everything.

That said, our forbears produced a library of cookbooks featuring savory dishes with an abundant flavor as well as sweet deserts and other victuals to tempt the senses. Even some of the period sources here warned about how harmful the same, monotonous, dull fare is to the morale of frontier travelers. Although The Prairie Traveler is the proverbial 'bible' of expansionist era travel, the victuals Captain Marcy recommends are somewhat boring. Other travel guides would recommend a more diverse bill of fare.



The April 5, 1856 edition of Ballou's Pictorial showing perhaps the best known illustration of life in an emigrant camp titled 'The Last Day on the Plains'. Created by American Artist, Hammatt Billings, and engraved by John Andrew. This part of the image typifies the pioneer family cookfire. Notice the Indian guide instructing the young men in dressing newly killed game.

For this trip, you'll need to eat a-lot!

Consider the distance between starting points like Westport, Missouri or Fort Leavenworth, Kansas and now think of the distance needed to reach Astoria, Oregon or San Diego, California.

A poke full of jerky and meal may make a good mid-day snack but the average adult burns over 400 calories an hour when hiking under normal circumstances. With a daily requirement of about 2500-5000+ calories when traveling like a pioneer in the outdoors, the logistics must be better than that. Think of your living body as a flame and your food & water source as the candle upon which the fire burns. No matter how strong an individual is, eventually, you only have so much fuel in your pack and on your flesh. Once all of it is exhausted, you die just as the flame does when the candle is consumed.



Here are some key points the Frontier Traveler would keep in mind.

- This trip will be about 1,900 miles, possibly more. Considering the daily consumption of food being about 3-pounds per day, your wagon can carry enough food and supplies for 3-4 people on average.
- Regarding travel times, 15-20 miles is good work. It would be best to not ruin your animals by traveling more than 25 miles in a day.
- <u>Depending on road conditions</u>, the journey will usually take about 100 to 110 days. While more established road networks would eventually see a 75–90-day passage to the various western settlements, the bulk of your cargo will need to be food to support you and your fellow travelers.
- **Don't count on wild game and forage.** The fast pace of travel does not allow the emigrant travelers to forage and game remained scarce and evasive. Although a few deer, antelope, or buffalo (bison) could be picked off from time to time, it is not sufficient to sustain a large group of travelers.
- It is wise to provide about 2 1/2 to 3-pounds of food per person every day. While there is a likelihood they will not consistently eat this much in a day, it's better to be over prepared than it is to go without. Based on first-hand accounts, here are three ways to prepare for the trip.

How Much Food did the Average Pioneer/Frontier Traveler Eat Per Day?

Most of the travel guides recommended about 2 1/2 to 3-pounds of food per person (man, woman, or child), per day. This was more than sufficient provision but it was better to have more and not need it than to not have it and starve. A good example of acceptable provisions was referenced in the writings of Dr. John Rae who charted the infamous Victoria Strait where the ill-fated Franklin expedition became icebound in 1848. He listed the following rations for the men during that arctic excursion:

Pemmiean	1.25 lbs.
Biscuit	0.25 "
Edward's preserved potatoes	0.10 "
Flour	0.33 "
Tea	0.03 "
Sugar	0.14 "
Grease or alcohol, for cooking	0.25 "
	2.35 los.

Daily Ration for the British Soldiers and Sailors in the Rae Expedition of 1854. *Note: The body burns more calories in the cold so increasing the amount during cold-weather travel is a wise move.

-Dr. John Rae's Arctic Explorations (1854).

Some Early Fur Trappers and Traders Bragged that They Could Travel Too-Light



Frontiersmen such as **Richens Lacey** "Uncle Dick" Wootton described their trail rations as little more than some coffee, sugar, tobacco and whatever game nature provided. Perhaps this can be accomplished by a small nomadic party in regions of the country where game abounds, but the rule, not the exception is whenever you need some wild game the most, count on it to not be available. This was common knowledge along the routes and most knew that there would not be enough game and wild forage to sustain the thousands of emigrants along the way. While many of us would like to fancy themselves as a "great hunter", traveling the great plains without sustenance is a guarantee for starvation. The

National Wagon Road Guide of 1858 gave the following advice. "But little allowance should be made upon any expectation of procuring game by the way (during the trip), for if you get any, you will be fortunate, unless you call fish game."

-National Wagon Road Guide of 1858

Anyone traveling the old wagon roads would have attested to how scarce game becomes at the sight of an approaching body of wagons/animals and people. Even if game presents itself before darting off over hill-and-dale, it would be foolish to use up horseflesh in its pursuit. Some guidebooks warned strongly about charging after game as a single pursuit is as strenuous to a horse as a week of walking the trails would be.

The Basic Fare of Native People and Experienced Borderers

A borderer is another name for a frontiersman with many years of experience. When traveling in small groups off the beaten path, food is more abundant. Still, it is wise to carry something to sustain while traveling or when the hunt does not produce a harvest. Here are the most common food sources carried by those who lived closest to the land:



Tribal woman preparing jerked meat. Note the berries drying that she may use in making some pemmican.

Jerked meat — Using a sharp knife of knapped stone, cut the thinnest possible strips and try to make them as close to a half inch in thickness but not more than an inch thick. In this process, separate as much of the fat as possible. It is best if only lean meat is jerked in this manner. The meat is of fresh killed large game (antelope, deer, elk, buffalo). Erect a scaffold under the direct rays of the hot sun. The meat will be stretched upon a network of thin sticks or dried reeds and will quickly dry-out but will still require a few days to fully cure. (*Note: I recommend stowing these when the sun sets to prevent the creatures of the night from helping themselves to it.) I find it best if an individual carries not more than 2 pounds of

jerked beef and/or pemmican on their person. When packed in the wagon, it can exceed more than 25-50 lb. sacks.

If you only have hours to prepare, a low framework not more than 24-inches high over a slow fire will -get the job done with or without a hot sun to help you. The heat and smoke aids in the curing process in addition to deterring insects who often swarm over raw meat the moment it is presented. If you take game while traveling, the meat can be sun cured by hanging it in strings run along the sides of a loaded wagon, front-to-rear. Make certain that it is on the side of the wagon that is receiving direct sunlight but put it in a bag and pack it away at night.



Tribal women who appear bemused that a photographer would want to record such an everyday task. Note the 3-point trade blanket with its distinctive 3-lines.

Pemmican - when you dry the jerked meat until it is brittle, it can be pounded in a mono (Native American 'mortar & pestle') or ground in a metate (flat stone, with elongated stone grinder) until it is well ground in to small particles similar in appearance to some Copenhagen dipping tobacco. It may be packed into stout canvas sacks, pouches of animal skin with the hair-follicle side facing outward or it can be canned. Either way, fill the pouch with the pulverized meat and then add the liquified fat after it has been rendered for hours over a low flame. There will be just enough grease added to make the shredded jerkey into a solid mass. Some recipes call for dried berries such as elderberries to be added. Many

travelers do but I have heard just as many say that it shortens the shelf life to do so. I wouldn't know because I have never been able to keep it long enough before eating it. You can eat it as is or roll it in flour or corn meal and fry it. Either way, it tastes good, especially with chile (chili) powder or pepper sauce.



Mid 19th-century illustration of a 'Pima' (Tohono O'odham) woman performing the traditional task of grinding meal on a metate.

Sagamite – This goes by many names. I have heard it called 'pinole' by Spanish speakers, cold-flour by Gringos, or Tso-chi by my mother's tribe. In truth, I'm not certain if there is an Indian Tribe in this country who does not have a name for this dish. It is simply, fine ground corn meal or corn flour, mixed with a natural sweetener. Before the Europeans sweeteners like maple-sap in the Northeast, or Mesquite flour were common in the Southwest. Interestingly enough, there are accounts of tribal members making corn syrup from corn stocks which was of course, used as a sweetener. Europeans introduced the honeybee, sorghum, and sugar which was adopted into the fare. Here in the Southwest, sagamite is typically made with corn flour, mesquite flour and cinnamon. This could be carried by the hunter or borderer in a pouch either in the pocket, bullet pouch, or possibles pack. A pinch here and there will relieve the pangs of hunger or it can be mixed with water and made into a nourishing energy drink. In other cases, the solution can be boiled to make a hearty porridge.



Foraged greens – Farm-fresh vegetables like those featured here were not commonly available on the trail. Instead, there are many regional plants that may be harvested and eaten as an antiscorbutic and to keep greens in the diet.

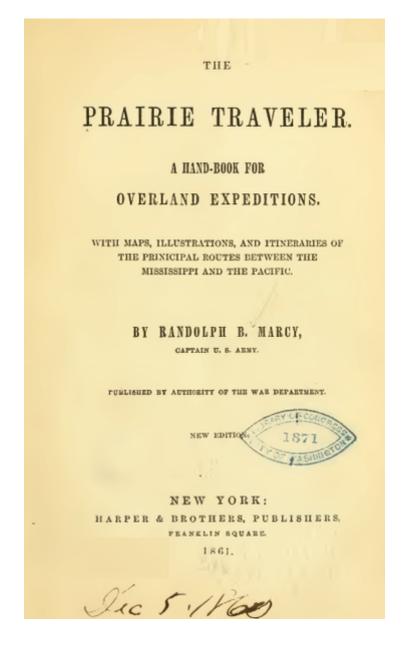
One example is the dandelion. This food has long been suspected to be one of the earliest green plants cultivated to be eaten by man. Variants of it are native to regions around the world and North America is no exception. Below is an example of preparing this survival food at the time when the old west was still 'wild'.

DANDELIONS, AS GREENS: Gather some tops of dandelions, wash well, and put into just enough salted boiling water to cover them. When tender squeeze out all the water, place them in the frying-pan, and fry for a few minutes, with a little salt, pepper and butter, or pork fat. When done, add some slices of hard-boiled eggs if obtainable.

-Hunter's Handbook, 1885

What do the Original Sources Say?

"The Prairie Traveler" (1859)



With 25 years' experience on the frontier, Captain Randolph Marcy, wrote "The Prairie Traveler". He gave a warning about carrying luxury items such as "Champagne, East India sweetmeats, olives, etc.," as "...not the most useful for a prairie tour". Although he spoke about the importance that accompanies antiscorbutic foods such as fresh or desiccated vegetables or canned butter, his recommendation for victuals was far more spartan than what one would have on the homestead. To sustain one person (man, woman, or child) for a 110-day journey would be:

- · 150 lbs. of flour or equivalent in hard bread
- \cdot 25 lbs.. of bacon or pork and enough beef to be driven "on the hoof" to make up the meat component of the ration (about 125 175 pounds per person).
- · 15 pounds of coffee
- · 25 pounds of sugar

· Also, a quantity of saleratus (baking soda) or yeast powders for making bread, and salt & pepper.

Marcy also gave superb insight as to how each of the basics were packed. In his own words, here is what he had to say about each item following his emphasis that supplies for a march should be put up in the most secure, compact, and portable shape.



When frying bacon, remove the rinds so that the slices don't curl up. Those rinds can then be deep-fried to make "cracklin's" which were a common frontier snack. *Note the channel dug in the coals between the fire dogs to create more heat.

Meat - Bacon should be packed in strong sacks of a hundred pounds to each; or, in very hot climates, put in boxes and surrounded with bran, which in a great measure prevents the fat from melting away. If pork be used, in order to avoid transporting about forty per cent, of useless weight, it should be taken out of the barrels and packed like the bacon; then so placed in the bottom of the wagons as to keep it cool. The pork, if well cured, will keep several months in this way, but bacon is preferable.

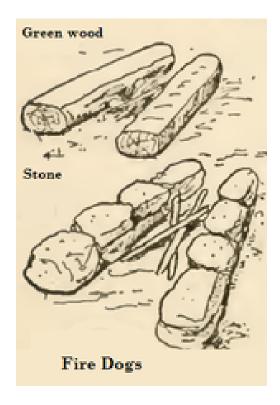


Photo courtesy D. C. Beard (ca. 1900)

*Note - **FIRE DOGS** - The bacon in the picture above is cooking faster because there is an airway underneath the pan. If your pan sits level on the coals, it will restrict airflow and lower coal temperatures. Digging an airway between the fire dogs oxygenates the fire to produce more heat. The fire dogs in the photo are of stone. Bild your fire between and over stones. When it settles into a coal bed, scrape out an airway between the dogs. This will serve as a stable platform for your coffee pot, frypan, and kettle. Green wood such as willow is a nice choice for fire dogs but I typically use them with a small pit fire.



Coffee - was typically bought raw and would be pan-roasted, then ground in camp. Folger's coffee company was revolutionary in developing a means of getting roasted, ground coffee that did not go stale from their factory to the far reaches of the gold fields. Arbuckles Coffee would become another big brand a generation later during the long-romanticized 'cowboy'-era.

Flour/Meal - Flour should be packed in stout double canvas sacks well sewed, a hundred pounds in each sack.



Flapjacks were arguably the most common bread in an unsettled land. It was easy to make and did not take long at all to cook. In this picture, it is being prepared with beans and coffee.

Butter- may be preserved by boiling it thoroughly, and skimming off the scum as it rises to the top until it is quite clear like oil. It is then placed in tin canisters and soldered up. This mode of preserving butter has been adopted in the hot climate of southern Texas, and it is found to keep sweet for a great length of time, and its flavor is but little impaired by the process.

Sugar- may be well secured in India-rubber or gutta-percha sacks, or so placed in the wagon as not to risk getting wet.

Desiccated or dried vegetables- are almost equal to the fresh, and are put up in such a compact and portable form as easily to be transported over the plains. They have been extensively used in the Crimean war, and by our own army in Utah, and have been very generally approved. They are prepared by cutting the fresh vegetables into thin slices and subjecting them to a very powerful press, which removes the juice and leaves a solid cake, which, after having been thoroughly dried in an oven, becomes almost as hard as a rock. A small piece of this, about half the size of a man's hand, when boiled, swells up so as to fill a vegetable dish, and is sufficient for four men. It is believed that the antiscorbutic properties of vegetables are not impaired by desiccation, and they will keep for years if not exposed to dampness. Canned vegetables are very good for campaigning, but are not so portable as when put up in the other form.

-The Prairie Traveler, R. Marcy (1859)

Beans & Peas - Although not mentioned by Marcy, historical research shows they were bagged in the same manner as the afore-mentioned flour & meal. Common weights for bags of flour, meal, beans, peas, rice, and even macaroni could be 3, 5, 10-, 25-, 50-, and 100-pound sacks.



Other items of consumption were packaged as follows: **spices**, **soda**, **cream of tartar**, **yeast**, or **salt** were typically kept up in tin boxes with removable lids and were popular for flavoring dishes then as now. **Honey**, **molasses**, **maple syrup**, **mustards**, **ketchups**, and **pepper sauces** were put up in bottles or even stoneware jugs.



Pickles - were commonly carried in food-bottles. Cucumbers were a favorite pickle but watermelon, and a variety of fruits, vegetables, and even eggs were also pickled and served as a favorite snack. Although the mason jar was patented in 1858, its widespread distribution was not seen until the years following the American Civil War.

Milk and eggs were rare upon the frontier trails. Emigrants did travel with cows, goats and chickens but the strain of the journey often meant that the long-anticipated milk and eggs may not materialize. Here were some alternatives.



Canned Milk – Gail Borden's condensed milk went into production in 1856 but the venture was not that extensive until the time of the American civil war. This was the time that canned milk really came into its own. They were packaged in hermetically sealed tin cans in the same fashion as canned meats, soups, and vegetables were.



Eggs – were a rarity but there are accounts of their use on the trail. Eggs can be preserved in the following manner. Mix a brine of $\frac{1}{2}$ bushel-water, one pint of coarse salt and one pint of unslaked lime. This way, eggs can keep for years but one broken egg can spoil the lot. Too rich a solution will dissolve the shells.

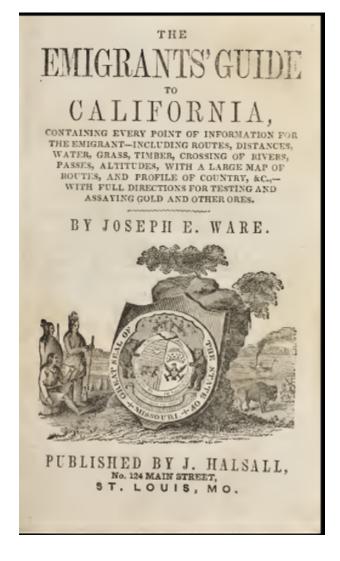
3-Ways to Check an Egg's Freshness



- 1. Press your tongue to the larger end of the egg. If it feels warm, the egg is still fresh.
- 2. **Place eggs in a basin of cool water.** Rotten eggs will float, eggs that are starting to turn will 'stand-up'.
- 3. Place an egg before a candle so that the backlighting shines through the shell. A bad egg is cloudy and not uniformly luminous.

Due to their fragility and rarity, eggs were a valuable medium of exchange in certain places and at certain times along the frontier. In his book **Beyond the Mississippi (1867)**, Albert Richardson observed a method of transporting eggs to the Gregory Diggings of Colorado (1859). Due to their rarity, these eggs sold for \$2.50 a dozen. The proprietor brought several barrels of eggs that were filled in with liquified lard. This method kept them safe for the 700-mile journey.

Ware's Guide to California(1849)



During the California Gold Rush, pocket-sized manuals drew upon the years of experience acquired during the 1830-40's by emigrants, freighters, and military personnel covering the various roads from "the States" to points along the Pacific Coast. Two of the better-known editions were **Ware's Guide to California** and **Disturnell's Emigrant's Guide to New Mexico, California, and Oregon (1849).** This entails the total supply for 3-men for a period up to one year and includes weight and cost.

- · 1080 lbs.. Flour \$20
- · 600 lbs.. Bacon \$30
- · 100 lbs.. Coffee \$8
- · 5 lbs.. Tea \$2.75
- · 150 lbs.. Sugar \$7
- · 75 lbs.. rice \$3.75
- · 50 lbs.. rice \$3.75
- · 50 lbs.. dried fruit \$3

- · 50 lbs.. salt, pepper, & spice \$3
- · 10 lbs.. saleratus (baking soda) \$1
- · 150 lbs.. Lard \$4
- · Candles & Soap (weight not specified) \$5.30

What I Saw in California (1849)

WHAT I SAW IN CALIFORNIA:

BRING THE

JOURNAL OF A TOUR,

BY THE ENIGRANT ROUTE AND SOUTH PASS OF THE ROCKY MOUNTAINS, ACROSS THE CONTINENT OF NORTH AMERICA. THE GREAT DESERT BASIN, AND THROUGH CALIFORNIA.

IN THE YEARS 1846, 1847.

"All which I saw, and part of which I was."

PAYDEN'S VIRGIL.

BY EDWIN BRYANT.

LATE ALCALDE OF ST. PRANCISCO.

LONDON:

RICHARD BENTLEY, NEW BURLINGTON STREET. 1849.

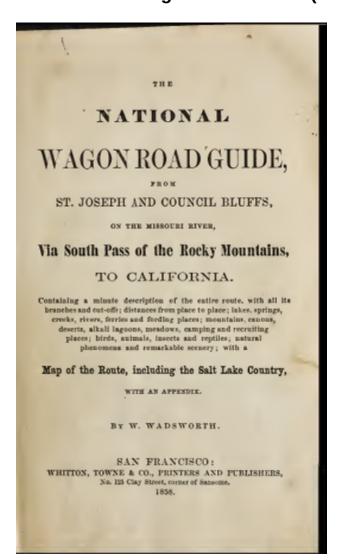
An additional account from Edwin Bryant was given in **What I Saw in California.** It addresses the required sustenance for a single man for a passage of up to 100 days crossing the mountains and plains.

· 150 lbs.. flour

- · 150 lbs.. bacon
- · 25 lbs.. coffee
- · 30 lbs.. sugar
- · "...a small quantity of rice"
- · 50-75 lbs.. crackers
- · dried peaches
- · "keg of lard with salt, pepper, vinegar, & etc."

Frontier People Understood that Months of Bland Fare Can Affect Mental Well-being

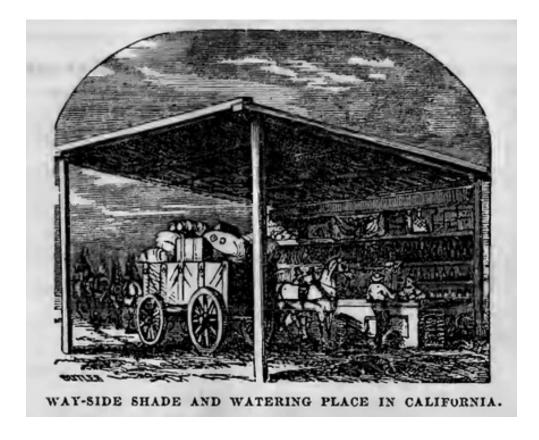
The National Wagon Road Guide (1858)



While Captain Randolph Marcy gives sound advice, he also gives it from the perspective of a man who has seen and survived many hardships in his 25 years on the frontier with the US Army. He may be used to making do with very little on the same boring victuals day in and day out but for the average emigrant on perhaps their one and only trip across the

mountains and plains, more provision should be allowed. In the **National Wagon Road Guide**, the author strongly warns against the advice of those who say "take plenty of hard bread and bacon, and all will be well..." by adding "...we say, don't you believe a word of it."

The given explanation is simple. "For, to live mainly upon any two articles of food, for days and weeks and even for months, and particularly upon hard bread, and bacon, the strongest men get tired of it; and we haven't seen such men, who were ready to give—after being a month upon the plains—almost any price, for even the taste of a luxury." So, in addition to the staples of living, the National Wagon Road Guide recommends taking dried fruits, can-fruits, and meats, and even good pickles (cucumbers, watermelon, various vegetables, eggs, etc.), as well as a box of raisins, and 1 or 2 drums of figs.



Gold-rush era, 'drive-through' store that provides vital goods and coveted luxuries.

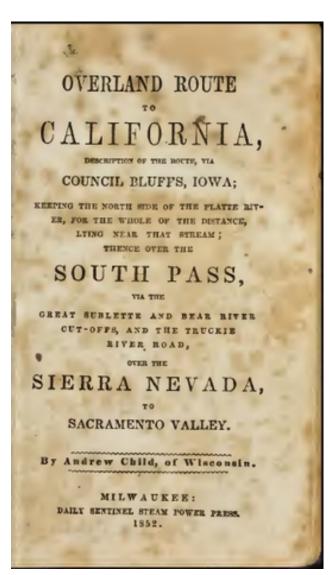
As with other publications, The National Wagon Road Guide, recommended about 3lbs.. (2.8 lbs.. to be exact) of food per man per day. In addition to luxuries, the basic food per man for a period of 100 days is as follows:

- · 50 pounds of flour
- 25 pounds of corn meal
- · 50 pounds of crackers or pilot bread
- · 50 pounds of hams
- 25 pounds of bacon

- · 10 pounds of butter
- · 5 pounds of dried beef
- · 20 pounds of coffee
- · 30 pounds of sugar
- · 5 pounds of rice
- · 5 pounds of beans
- · 5 pounds of cheese

Total complement is 280 lbs..

Andrew Child's Overland Route to California (1852)



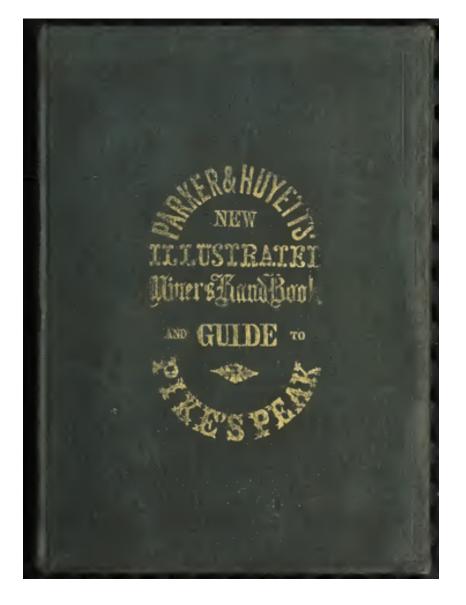
According to Andrew Child's Overland Route to California,

As the tastes of people differ, so will their stores of provisions; the following list was recommended to sustain 3-men for the trip.

- · 400 lbs.. Flour,
- · 75 lbs.. Indian Meal,
- · 200 lbs.. Butter Crackers,
- · 75 lbs.. Rice,
- · 250 lbs.. Hams and Side Bacon,
- · 75 lbs.. Dried Venison,
- $\cdot \frac{1}{2}$ bushel of Beans,
- · 100 lbs.. Sugar,
- · 50 lbs.. Coffee,
- · 2 lbs.. Tea.
- · 3 gallons Pickles in Vinegar,
- · 6 lbs.. Molasses,
- · 3 bushels of Dried Fruit

Miner's Handbook and Guide to Pike's Peak, Parker & Huyett (1859)

Here is something from the Pike's Peak gold rush which began about 10 years after the California gold rush started. Guides like this reflect a lot of improvements that were made in the short time of a decade. The roads are improved and resources such as food, hardware, and replacement materials are more available along the route. Still, when traveling through the wild, you were mostly on your own aside from the occasional outpost of humanity such as a homestead, town, or friendly Indian village.



10 sacks flour

200 lbs.. sugar

600 lbs.. bacon

80 lbs.. coffee

50 lbs.. rice

6 lbs. tea

10 lbs. baking soda

100 lbs. dried apples

20 lbs. dried peaches

80 lbs. salt

6 lbs. pepper

3 bushels of beans

1/2 bbl crackers,. 40 lbs.

1 ten-gallon water keg,. 15 lbs.

10 gallons vinegar,. 100 lbs.

10 gallons molasses, with keg,....,. 115 lbs.

1 box pickles,.. 50 lbs.

25 lbs. soap

1 box candles,. 40 lbs.

Life on the trail was hard but it was a necessary price to pay in order to have a fresh start in a faraway land of legendary proportions. The trip was difficult but not impossible. Many traditional foods came from such hard times and still endear themselves to American cuisine today. Simple dishes of meats, soups, stews, and breads live on reminding us of simpler, less luxurious and definitely nostalgic times. Still, that hardship built character and it continues to manifest itself in our culture's cookery. So the next time you help yourself to extra biscuits, flapjacks, beans, bacon, or barbecue, give a little wink to the sky and mutter a quick thanks to our iron-willed ancestors whose contributions from many lands continue to feed us today.

-DR