

7 MIL BC



500,000 BC

1.5 MIL BC

221 BC

First Course

From Raw to Cooked: PREHISTORY, MESOPOTAMIA, EGYPT, CHINA, INDIA

PREHISTORY

Animals don't cook. The ability to use fire is one of the crucial things that separates us from them. Scientists used to think that humans were different from animals because we use tools and have language. Then we discovered that animals use tools and can communicate with each other and sometimes even with us, like Koko, the gorilla who learned sign language. As Stephen Pyne, the world's leading authority on fire, points out, there may be "elements of combustion" on other planets, but so far, "We are uniquely fire creatures on a uniquely fire planet."¹

Humans Learn to Find Foods: Hunting and Gathering

Scientists believe that humans evolved for millions of years before they learned to use fire about 500,000 to one million years ago. The oldest fossils so far, excavated mainly in Africa, put the beginning of human-like creatures—hominids—at between six and seven million years ago.² From the jaws and teeth of these hominids, scientists deduce that they were primarily plant eaters—herbivores. Our back teeth, the molars, are flat like stones for grinding grain and plants and that is what we still use them for when we chew. Scientists think that over millions of years,

early humans developed two survival advantages: (1) between 4 million and 1 million B.C., human brain size tripled, growing to what it is today, approximately 1,400 cubic centimeters; and (2) they stood upright on two feet—became bipedal—which allowed them to see farther and left their hands free to use weapons for protection and to kill animals for food. Food historians speculate that early humans learned to like the taste of meat from small animals that could be caught and killed easily, like lizards and tortoises, and from scavenging the leftover carcasses of large animals killed by other large animals.³

These early humans were hunter-gatherers, nomads who followed the food wherever it wandered or grew. Between 40,000 B.C. and 12,000 B.C., Asian peoples went east and crossed into North and South America. The Ice Age had dried up the seas, creating dry land between Asia and Alaska, making it possible to walk from one continent to the other. So, the first people in the Americas were Asians.

Work related to food was divided by gender. Men left the home to hunt animals by following them to where they went for food, especially salt. Women gathered fruits, nuts, berries, and grasses because their lives revolved around a cycle of pregnancy, birth, and child rearing.⁴ Gathering was more reliable than hunting. Becoming carnivores—meat eaters—probably helped humans survive, too. In case of a shortage of plants, there was an alternate food source. Now we were omnivores—we ate everything. We still have the front or canine teeth, sharp like a dog's for tearing meat, to prove it. However, human teeth weren't sharp enough to pierce animal hides. For that, something else was necessary—tools.

Scientists believe that humans invented tools about 1.9 million to 1.6 million years ago. Early humans butchered animal meat, even elephants, with blades made out of stone, which is why it is called the Stone Age (as opposed to the Bronze Age and the Iron Age, which came later). Archaeologists call these people *Homo habilis*—"handy man." Then, approximately 1.5 million to 500,000 years ago, another group appeared called *Homo erectus*—"upright man." These people migrated north to Europe and east to India, China, and Southeast Asia. They had better tools than any of the other groups. And for the first time, they had fire.

Humans Learn to Use Fire: Cooking versus Cuisine

Scientists speculate that lightning started a fire by accident, but humans figured out how to keep it going by appointing somebody keeper of the flame day and night, perhaps the first specialized job. For the first time, humans had a tremendous tool with which to control the environment. It kept night terrors and animals away. It was also sacred, "the only substance which humans can kill and revive at will."⁵ The god who controlled lightning was usually the most powerful god in early religions. Most cultures have creation myths of how humans stole or were given

fire by the gods and how they were punished and suffered for this divine knowledge. Fire completely transformed food from raw to cooked, which allowed humans to eat otherwise indigestible foods and made food preservation possible. Control of fire gave humans control of their food supply—a huge survival advantage.

Once humans had fire, how did cooking begin? Perhaps by accident, although anthropologists are still arguing about this. One theory is that an out-of-control fire burned down a hut and accidentally cooked some pigs. People wandered in, tried the cooked meat, and liked it. Another theory is that a forest fire first roasted meat; still others think that cooking was a more deliberate, controlled act by humans.⁶ In any case, now there were more options than raw bar and tartare.

It was cooking, but was it cuisine? Historian Michael Freeman's definition of cuisine is "a self-conscious tradition of cooking and eating . . . with a set of attitudes about food and its place in the life of man."⁷ So, cuisine requires not just a style of cooking, but an *awareness* about how the food is prepared and consumed. It must also involve a wide variety of ingredients, more than are locally available, and cooks and diners willing to experiment, which means they are not constricted by tradition. Since early humans were still eating to survive, and had no control over their food supply, it was not cuisine.

We might never know exactly how people mastered fire and started cooking their food, we only know when—between 500,000 and one million years ago. Roasting over an open fire was probably the first cooking method. Pit roasting—putting food in a pit with burning embers and covering it—might have come next. Then spit roasting, when hunters came home with the animal already on a spear and decided to cook it by hanging it over the fire and turning it. With sharp stone tools, meat could be cut into smaller pieces to make it cook faster. Food could be boiled in large mollusk or turtle shells where they were available, or even in animal skins,⁸ but pots were not invented until around 10,000 B.C. and there were no sturdy clay boiling pots until about 5000 B.C.⁹ Cooking in such vessels would probably have produced bacterial contamination, since there was no soap and no effective way to clean them. Finally, scientists believe that *Homo sapiens*—"wise man," the direct ancestor of humans—appeared between one million and 100,000 years ago.

Humans Learn to Communicate: Dance, Speech, Art—Culture

Before language was invented, early humans spoke with actions. They danced, which dance historian Joan Cass defines as "the making of rhythmical steps and movements for their own sake (as against steps and movements done in order to go somewhere, to do work, or to dress oneself)."¹⁰ They danced together in religious ceremonies to ensure fertility of humans and crops, for rain, for a successful hunt. If the dance

produced the result they wanted, they kept doing it exactly the same way again and again, turning it into a ritual. Music was added—beans or small stones in a pouch shaken or rattled, animal bones with holes drilled in them like a flute, maybe an animal skin stretched over a cooking pot to make a drum.¹¹ Then, about 100,000 years ago, we developed language. This, too, helped humans to survive. We could warn our tribe of danger, tell them where there was food, plan ahead and cooperate in work, name things and places, and generally organize the world, which is a step to controlling it.

Early art, too, was often communication connected to fertility and food. Small figures, women with exaggerated breasts and hips, were carved out of rock. Animals were painted on cave walls. A mask “changes your actual identity and merges you with the spirit that the mask represents.”¹² This is called sympathetic magic. As Sir James Frazer points out in *The Golden Bough: A Study in Magic and Religion*, the principle at work is that “like produces like”: if you make a symbol of what you want, it will happen. The woman will have a child, the hunt will be successful, the animal your mask represents will be found. You have control over these things because you have, in a sense, created them.¹³ The animals most commonly represented in prehistoric cave paintings are horses, followed by bison, deer and reindeer, oxen, the ibex, then elephants and mammoths.¹⁴ So food, art, and religion have been connected since the earliest human times—at least in France.

PREHISTORIC HUMAN ACHIEVEMENTS		
When—B.C.	Where	What
500,000–1 million		Fire
Before 100,000		Dance
100,000		Speech
33,000	Chauvet, France	Cave paintings and other art
25,000–20,000	Willendorf, Germany	Stone sculpture—Fertility goddesses
18,000; 15,000	Lascaux, France; Altamira, Spain	Cave paintings and other art
14,000	Middle East	Dogs domesticated from wolves
Before 10,000	Japan	Pottery
8,000	Ice Age Ends—Agricultural Revolution Begins in the Middle East	

Corpses, Middens, and Coprolites

How do archaeologists know what happened before written history? How accurate is the information? The same scientific tools like DNA and mi-

croscopic analysis that solve crimes today can solve ancient mysteries. Much of what we know about early humans comes from three sources: corpses, their preserved bodies; middens, their garbage piles; and coprolites, their fossilized feces. Bodies have been found all over the world, preserved by drying in hot climates, by freezing in cold climates, and by bogs in wet climates. Overdeveloped bones in the right forearm tell us that these people threw spears.¹⁵ Analyzing their intestinal tracts reveals what these people ate, and also that many of them had the same intestinal parasites that we still have today.¹⁶

From middens, archaeologists know that in some ways the eating habits of early humans were not that different from ours: they smashed or broke bones to get to the marrow, too. And they did it for the same reason—because they liked it, not because there was nothing else to eat.¹⁷ Today, this is called *osso buco*, Italian for “bone with a hole.” The difference is that early humans ate bone marrow with their hands while squatting around a fire, while *osso buco* is eaten with a silver marrow spoon in a fine restaurant. Many of the recipes in French master chef Escoffier’s cookbook *Le Guide Culinaire* have marrow as an ingredient, even sweet puddings like his *Pouding à l’Américaine* (#4438) and *Pouding à la Moelle* (#4439). Broken jaw bones and pierced skulls indicate that early humans savored the taste of animal tongues and brains. The shells of shellfish like mussels and limpets also survive in middens, telling us that humans ate these as far back as 60,000 to 120,000 years ago.¹⁸

From coprolites, we know what foods early humans ate because we can see what they excreted. Seeds, fibers, and other indigestible matter ended up in the coprolite. In this way, the human digestive tract was also part of the food chain, helping plants to spread. From these methods, we know that wild crab apples were consumed 750,000 years ago in Kazakhstan, just north of modern Afghanistan.

Dating the items found in corpses, middens, and coprolites is done by several methods. Carbon dating measures the amount of radioactive decay in a life form. Tree ring analysis—dendrochronology—can reveal what the climate was like and how much rainfall occurred at certain times. Analysis of pollens can also help decipher ancient dates.

THE ANCIENT AGRICULTURAL REVOLUTION

The two most important factors that determine where life is hospitable to plants and animals, including humans, are geography and climate. When the Ice Age ended around 10,000 years ago, the last of the glaciers receded and the planet warmed up. This was the first of three major climate changes planet Earth has experienced. The other two were

the Medieval Warm Period (A.D. 950–1300) followed by the Little Ice Age, which ended about 100 years ago. Some scientists think that we are in a new period of global warming caused by pollution from gasses produced by car engines and machinery (the “greenhouse effect”) and that we have to do something about it fast. Others think it is just part of a natural cycle. Still others think that climate is random and that a catastrophic change could occur suddenly for no reason and be completely out of the control of humans.

Humans Learn to Domesticate Foods: Sheep and Goats, Barley and Wheat

Gathering nuts and seeds and grasses and hunting wild game was unreliable, inefficient, and could support only a limited population. Humans wanted more control over their environment and a guaranteed supply of food, especially food they liked. So about 10,000 years ago, humans began to tame wild plants and animals. From the earliest times, food was bred to taste better, be hardier, and yield more—in other words, it was genetically modified. This was a time-consuming and difficult process, because all plants and animals have ways to defend themselves—husks and tusks, shells and spines. The first domesticated animals were sheep and goats, then pigs and cows.

After domestication came farming. Fire was a force here, too. Slash-and-burn agriculture is one of the oldest and simplest ways to clear the land of trees. Once used extensively by primitive tribes, it is still used today in some places, like Borneo. The process: slash the bark on the tree, which stops the sap from flowing and eventually kills the tree. The leaves die and fall off, allowing sunlight to filter onto the forest floor where the fallen leaves decompose into fertilizer. Then crops are planted. In two or three years, when the soil starts to show signs of being depleted of nutrients, the dead trees are burned, the ash provides fertilizer, and more crops are planted. Unfortunately, this requires constantly moving into new areas and destroying the forests.

The first cultivated plants were barley, then wheat (*Triticum*) from wild grasses. There are about 30,000 varieties of wheat.¹⁹ Ancient wheats—emmer, spelt, einkorn—had several layers of protection, including a very hard inedible outer covering called chaff, which had to be roasted to be removed. Then friction had to be applied to the wheat to separate it from the chaff, a process called threshing. This was done by having oxen walk on the wheat, or by hitting it. The chaff was lighter than the wheat, so it could be blown or fanned away. Then the wheat had to be ground to make flour. This was done by hand until animals began to be used around 800 B.C. These flours were stone ground and coarse ground, and most likely still contained bits of chaff or fine particles of stone. The problem was that heating the wheat to remove the

chaff killed what makes it rise—gluten. So the earliest breads were flat, more like crackers. Some examples that still exist are Indian chapati, flour and water baked on a hot griddle; poori, also flour and water, but quick fried; and Jewish matzo, which is baked. An important change occurred about 7000 B.C.: wheat with a weaker chaff began to be grown, so the roasting step could be skipped and the gluten was free to rise.²⁰ Leavened bread was born, probably first in Egypt, and it was probably an accident.

Settling down and farming allowed humans to have some foods it is impossible to have if you are a nomad. One of these is wine. It takes two years before vines bear fruit, and there is a very short time frame, just a few days, during which the grapes have to be picked and crushed—until recently, by stomping on them. Then they must be kept at a temperature that will allow them to ferment, and stored. It is impossible to wander around and to make wine, too. So, two of the earliest professions were growing vines and making wine.²¹

Did domestication occur only once or more than once in different places? Some plants like barley, lentils, and rice seem to have been domesticated in multiple places. There is also evidence that pigs were kept around 7000 B.C. in the city of Jericho in the Near East and thousands of miles away on the island of New Guinea in the South Pacific.²² Domestication altered some plants and animals so much that they became

THE ANCIENT AGRICULTURAL REVOLUTION

When—B.C.	Where	What
10,000	Southwest Asia	Wheat, barley, sheep, goats domesticated
8000	Mexico	Chiles and squash domesticated
8000	Peru	Lima beans domesticated
7000	Southwest Asia	Bread wheat developed; flax for fabric
7000	Southwest Asia and New Guinea	Pigs domesticated
6000	Northern China (first agriculture in China)	Millet domesticated
6000	Middle East ²³	Apples cultivated
6000–4000	Southwest Asia (modern Armenia) ²⁴	Grapes cultivated for wine
5000–6000	Southwest Asia	Cattle, chickpeas, lentils domesticated
5000	Yangtze River Delta, China; Central India	Rice domesticated
4000	Southwest Asia	Olives domesticated
3000	Southwest Asia	Cities, irrigation, wheel, plow, sail
2686–2181	Egypt	Pyramid building
2500	China	Water buffalo domesticated

dependent on humans for reproduction. Maize, native to the Americas and what we call corn, is an example. The seeds, which are the kernels, no longer fall off by themselves, but have to be removed from the cob.

Salt: "White Gold"

One of the most valuable trade items from earliest times was salt. It is not a condiment like pepper or mustard or ketchup, but a mineral, NaCl, sodium chloride. Humans need it to live. Our nervous systems can't function without it. Its prevalence shows in the many phrases connected with salt: a valuable person is the "salt of the earth," which is how Christ referred to his apostles; a useless person is "not worth his salt." One of the oldest ways of obtaining salt was by boiling or evaporating sea water. This was done in ancient Egypt; in ancient Gaul (the Romans' name for France); in France in the eighteenth century, to avoid paying the salt tax; and in India in the twentieth century as a way to gain independence from England and the British salt monopoly. This is a very expensive and labor-intensive way to get salt compared to mining rock salt.

Currently in the United States, between two and three million tons of salt are mined each year from a mine that runs under the center of the United States, from Detroit and Cleveland south to Louisiana. This salt mountain is as big as Mt. Everest, the tallest mountain on earth. Only four percent of the salt that is mined is consumed; the other ninety-six percent is used to de-ice roads and by the chemical industry, which breaks it down into sodium and chloride. America also has the Great Salt Desert in Utah, and the Bonneville Salt Flats, where cars are test raced.

Fermented Beverages: Mead, Wine, Ale

Mead—fermented honey—was probably the first fermented drink, perhaps another food accident. Maybe honey was left out, rain fell, yeast settled on the mixture. In both Greece and Rome, before winemaking, mead was offered to the gods.²⁵ Honey was a mysterious substance to ancient people. Greeks knew bees were connected to it, but not exactly how. Romans thought honey fell from heaven and landed on leaves, "the saliva of the stars."²⁶ Honey is produced from the nectar in flowers gathered by bees to feed young bees. Most of the water in the nectar evaporates, resulting in honey, which is thirty-five to forty percent fructose, thirty to thirty-five percent dextrose, seventeen to twenty percent water, and small amounts of enzymes, etc.²⁷

Humans also started drinking wine very early. Maybe winemaking was done deliberately. Or perhaps wine was another culinary coincidence: grapes left at room temperature fermented naturally. Maybe crushed grapes and their juice left in the bottom of an animal skin fermented. Animal skins are all right for short-term transport of wine, but

they aren't an efficient way to store it. Pottery is, and by about 6000 B.C. clay jugs were being used. A clay jug with a narrow mouth can be stoppered up to prevent the oxidation that will turn wine to vinegar, while animal pouches can't. It is from the wine residue, tartaric acid, in these clay vessels that we know how long ago humans were drinking wine.

From the beginning, wine was an upper-class drink. Beer was the beverage of the masses, and it, too, might have been the result of an accident. The housewives who were responsible for food preparation malted their grain—they let it sprout because it tasted better and it was easier to mill and bake into bread. Somehow, the malted grain fermented into an alcoholic beverage and began to be produced on its own, and women became the brewers.

The early human settlements were small villages, extended family groups organized like a tribe or clan of 200 to 300 people, with an elder male as the final authority in disputes. Perhaps he was also a sort of spiritual leader or medicine man. Nothing was written, no laws were needed, because everyone was in agreement about what was right and wrong, and everyone was engaged primarily in the same occupation—procuring and preparing food. People who had special skills like weaving, carving, or making baskets or pottery, would have done it *after* their duties connected to food were done. But that changed as the advantages of farming and domestication became apparent. The settlements became larger, the land was irrigated with complicated systems of canals that required organization and cooperation, and governments arose.

Advanced Civilization: Cooking Becomes Cuisine

An *advanced* civilization has all the elements that our civilizations have now: cities with thousands of people doing specialized labor, advanced technology, structure and institutions like government, and a way to keep records. These advanced civilizations were possible because there was a surplus of food, so not everyone had to farm all the time. Specialized labor became possible—like artisans, priests, warriors, chefs, teachers, and government officials to keep records of the population so they could collect taxes and raise an army. Advanced civilizations are where cooking for survival changes to cuisine—cooking with awareness, for a purpose other than just to make food edible.

Some historians think that cities were started for the purpose of worship. Could one feeble voice raised in prayer reach the gods? Thousands would have a better chance of being heard. For whatever reason they began, cities became centers of trade.

Humans need fresh water to survive, so it is not surprising that the earliest civilizations began around rivers: the Tigris and Euphrates in southwest Asia, the Nile in Egypt, the Yellow (Huang He) in China, and the Indus in India.²⁸

THE FERTILE CRESCENT: THE TIGRIS AND EUPHRATES RIVERS

The Fertile Crescent is an area of land that runs from the Mediterranean Sea on its western end, then curves around in a crescent shape to the Tigris and Euphrates rivers in modern Iraq, down to the Persian Gulf. It was in this part of the world, the land called Mesopotamia, which means “between the rivers,” that scientists believe an advanced civilization began approximately 5,000 years ago—around 3000 B.C.

The cities in Mesopotamia were surrounded by walls for defense, and inside the walled city was another walled mini-city, the temple. Inside the temple was the most important building, the granary, where the city stored its food. Priests and priestesses honored the gods full time by preparing food for them and celebrating with feasts on their special days. So, from the earliest civilizations, food, religion, and government were connected.

As thousands of unrelated humans came to live together in cities, they needed organization. A leader named Hammurabi became known as “the law giver.” The Code of Hammurabi consisted of laws governing every aspect of life in Mesopotamia: the management of the irrigation canals; marriage, divorce, adoption; and construction. The punishment in many cases was literally “an eye for an eye” or a broken bone for a broken bone. Punishments were worse for committing crimes against the state than against other citizens. For example, the fine for stealing a sheep, pig, or ox from a temple was triple the fine for stealing from another citizen. The Code also governed the wine trade and taverns. Tavern owners, usually women, had to report any talk they heard about plots to overthrow the government. And they were warned about serving watered-down wine. The punishment fit the crime—death by drowning.²⁹

We know this because writing was invented in Mesopotamia, too. It was called cuneiform, which means “wedge-shaped,” after the symbols that were pressed onto blocks of wet clay with an instrument called a stylus. After the clay hardened, the symbols became permanent records. Writing gives historians more information than just corpses, middens, and coprolites. Some of the written sources for information about food are recipes, correspondence, songs, poems and other literature, laws, business records, and household lists from temples, palaces, and the homes of the wealthy.

Cuneiform went out of use in the first century B.C., and over the next several hundred years the tablets disappeared. In the 1840s, British archaeologists discovered 30,000 tablets and pieces of tablets.³⁰ Among them they discovered the world’s first recipe for ale.³¹ Sumerians brewed “eight barley beers, eight emmer beers, and three mixed beers.”³² Hops were not added until almost 4,000 years later in the Middle Ages in Europe. Today in the Sudan, a beer called *buza* is still brewed in this ancient way without hops.³³

"Let the gods eat roasted meat, roasted meat, roasted meat!"³⁴

The abundance of food in Mesopotamia is evident in the records of what was presented to the gods and goddesses, who needed to eat four times a day. Their mainstay was bread, as it was for humans. The main god, Anu, and three main goddesses, Antu, Ishtar, and Nanaya, got thirty loaves a day—each. They also got "top quality dates," figs, and grapes.³⁵ There was also much meat given every day to them and to other minor divinities, about ten total, at the four meals:

21 top-grade sheep, fattened and without flaw, fed on barley for two years; 4 specially raised sheep, fed on milk; 25 second-grade sheep not fed on milk; 2 large steers; 1 milk-fed calf; 8 lambs; 30 . . . birds; 20 turtledoves (?); 3 mash-fed geese; 5 ducks fed on flour mash; 2 second-grade ducks; 4 dormice; 3 ostrich eggs and 3 duck eggs.³⁶

This was sacred food, ritually prepared. The millers, bakers, and butchers had to recite prayers of thanks to the gods and goddesses as they ground the grain, kneaded the bread, and slaughtered the animals. Then the priests placed the food on golden platters and set it before the gods, perhaps on a table. Historians don't know what happened then, but speculate that the priests ate the food themselves or sold it if the temple needed money.³⁷

In addition to lists like these for religious purposes, we have forty recipes from Mesopotamia, from three different sources. They are typical of the way recipes were written until about 400 years ago: ingredients without amounts, and only a hint at technique. For example: "Meat is used. Prepare water; add fat [], milk (?), cypress(?) as desired, and mashed leek and garlic. It is ready to serve."³⁸ The brackets indicate that the translator cannot understand the words; the question marks indicate that the translator is not sure. One set of recipes is for twenty-five broths made with venison, gazelle, kid, lamb, ram, spleen, pigeon, mutton, and "meat" not further identified. There is one for turnip broth. The aromatics are usually onion, leek, garlic, and sometimes mint; the spices are cumin and coriander, which might be sprinkled on top just before serving. Sometimes the soup is strained, sometimes crumbs or flour are thickeners. Another set of recipes is more elaborate, giving instructions on how to slaughter various birds for religious ceremonies. One recipe is for small birds, cooked in a fatty aromatic broth, served en croûte. The birds are washed in cold water before they are put in the kettle, and again after they are heated in the broth, just as modern cooks skim the scum.³⁹

In Mesopotamia, foods were preserved by drying, salting, covering them in oil, or in the case of dairy, by turning it into clarified butter and cheese. Ingredients mentioned in other sources are pomegranates, arugula, fish, pistachios, cherries, plums, lentils, anise seed, grasshop-

pers, eggplant, jujubes (a kind of date), vetch (a legume), honey, turtles, sesame seeds, and pork. They did not eat horses, dogs, or snakes.⁴⁰

Such culinary creations call for great skill, so cooks were a highly regarded professional class who served apprenticeships to learn their trade. They were specialized, with cooks separate from bakers and pastry cooks. Their services were affordable only to the wealthy. A royal household might have 400 cooks and 400 pastry chefs.⁴¹ The gods mirrored this: a major god like Marduk might have a minor god, who would be known as “Cook of Marduk.”⁴²

How Humans Eat Together

By the first millennium B.C., Mesopotamians were giving elaborate banquets to display the power and wealth of the government. One was a ten-day feast to celebrate the building of the king’s palace:

. . . 69,574 guests were invited . . . Dozens of items were served in enormous quantities: 1,000 plump oxen, 14,000 sheep, 1,000 lambs, several hundred deer of various kinds, 20,000 pigeons as well as other birds, 10,000 fish, 1,000 jerboa [a rodent], 10,000 eggs, plus thousands of jugs of beer and skins full of wine.⁴³

Oil was also used at banquets, but not in the food—it was perfumed and used in the guests’ hair.⁴⁴

In contrast to these public spectacles with vast amounts of food, people in Mesopotamia, like people everywhere, had ceremonies that were more modest and personal.



Holiday History



KISPU

Kispu was a memorial meal that took place once a month on the last day of the Mesopotamian lunar calendar, during the dark of the moon. It was observed by all members of a family, living and dead. Kispu—from the word meaning “to break in pieces and distribute”—reinforced two important Mesopotamian beliefs: that your family was always with you, even after death, and that just because people were dead didn’t mean they didn’t need to eat. They just didn’t need to eat as much. It also reinforced the wider family of the community, because the king also observed *Kispu*. He honored the dead of his dynasty, the rulers before him, and all those who had died fighting for their country. Even the gods celebrated *Kispu*, proof that breaking bread transcends time.⁴⁵

Inventions That Aid in Trade: Wheel, Plow, Sail

Three extremely important inventions came out of Mesopotamia: the wheel, the plow, and the sailboat. The wheel and the plow were possible because of the availability of animal labor. Wheeled carts pulled by oxen or horses could transport more goods to market more quickly. They also made waging war with chariots possible. Animals pulling plows to turn the earth over for planting were far more efficient than humans. The sail made it possible to trade with countries that could be reached only by sea, or could be reached more quickly by sea, like India. All three inventions made the cities of Mesopotamia powerful trading centers with as many as 30,000 people each.

The wheel was put to use for one special food. A special breed of sheep produced especially delicious fat in its four-and-a-half-foot-long tail. But the tail was heavy and dragged on the ground, so humans made a little wheeled cart so the sheep could carry its tail around. Tail fat from this sheep is still highly prized today.⁴⁶

Even after thousands of years of domestication and farming, of the tens of thousands of edible plant species on earth, only about 600 are raised for food now. Many were first grown in the Fertile Crescent. Now, because the Tigris and Euphrates rivers have been dammed, only about ten percent of the fertile Mesopotamian marshlands still survive. The other ninety percent is now desert.⁴⁷

EGYPT: THE NILE RIVER

The Nile is the longest river in the world, its headwaters 4,160 miles upstream from where it empties into the Mediterranean Sea. The Nile was the giver of life for the ancient Egyptians. Water to drink and fish like carp, mullet, and sturgeon came from it. Every spring it overflowed its banks, bringing rich, fertile soil down from the mountains into the valley to grow food. There were three seasons in Egypt, all connected to the Nile and to planting: flooding was from the middle of June to the middle of October, when the floodwaters receded; sowing and growing lasted until the end of February; and harvesting continued until mid-June or July when the cycle began all over again. Humans scattered barley and wheat seeds by hand, then sent goats into the fields to walk on them and push them down into the soil so birds couldn't eat them before they had a chance to germinate. By 1300 B.C., apple orchards were planted along the Nile.⁴⁸ Like the Mesopotamians, Egyptians irrigated. However, sometimes the water stagnated and became hospitable to mosquitoes and other flies. Other vermin like mice and rats were also a problem because they chewed or burrowed their way into the granaries. Cats were domesticated in Egypt and worshiped because they kept the rodent population down.

One ancient food still eaten in Egypt is beans: “Beans have satisfied even the Pharaohs.”⁴⁹ Most popular were and are fava beans—*ful nabad*, and brown beans—*ful medames*, the national dish of Egypt.

INGREDIENTS:

*Egyptian Ful Medames*⁵⁰

2 pounds *ful medames*, soaked overnight
 2 to 4 cloves garlic, crushed
 6 *hamine* eggs (simmered in water with onion skins for
 at least 6 hours)
 finely chopped parsley
 olive oil
 quartered lemons
 salt and pepper

Ancient Egyptian culture revolved around a cycle of death and re-birth connected to the Nile. Many of the Egyptian gods and goddesses were related to death, but Osiris, who had triumphed over death, was also the god of resurrection and good. Egyptians believed that if they led good and orderly lives, they would be united with Osiris after death. On judgment day, when their hearts were weighed to see if they were heavy with sin, Egyptians made a “negative confession” to prove they had not violated the laws, many of which dealt with food and farming:

I have not mistreated cattle.
 I have not cut down on the food or income in the temples.
 I have not taken the loaves of the blessed dead.
 I have not taken milk from the mouths of children.
 I have not built a dam against running water.⁵¹

The pharaoh was equated with the Nile as the giver of life. The people expected the pharaoh, like the river, to reappear after his death. To rule properly in the afterlife, he would need two things: an impressive tomb—a pyramid—and his body.

The Embalmers—Cinnamon and Salt

The Egyptians salted human bodies to preserve them so the spirit would be able to find its home again after death. First the brain was removed

by drawing it out through the nose. Then the torso was cut open and the bowels and internal organs were removed. The cavity was stuffed with pungent-smelling spices like myrrh and cinnamon, then sewed back up. The corpse was submerged in a mineral salt called natron ($\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$) for seventy days. Then the salt was washed off and the body was wrapped in bandages. Now it was a mummy.

Mummification was done by the high priests, who had their heads shaved to be pure. Before the invention of insecticides in the twentieth century, shaving was the only way to guarantee that the servants of the gods would not have lice that could spread to the pharaoh. As a result of embalming, the priests knew a great deal about human anatomy. They used this knowledge to set bones; they also performed the first known brain surgery around 2500 B.C. They treated wounds with honey and moldy bread. This makes medical sense: the high sugar content of the honey draws moisture out of the cells, killing any bacteria,⁵² and penicillin comes from mold, which was discovered by British scientist Dr. Alexander Fleming in 1928.⁵³

The Book of the Dead: Food in the Afterlife

The great pyramids were built during a period known as the Old Kingdom, which lasted from 2686 B.C. to 2181 B.C. The pyramids were packed with everything a king would need to live and rule properly in the afterlife, including his wife and servants, who were killed when he died. This custom worked to protect the pharaoh from assassination by those close to him; they knew that if the pharaoh died, they died, too. Sometimes even pets were mummified. Foodstuffs found in pyramids include butter and cheese. Artwork and artifacts in pyramids reveal that the pharaohs ate well: a variety of meats, fish, dairy, fruits, vegetables, ostrich eggs, pastries.⁵⁴ Even beer making is depicted on pyramid walls.

Fermented Food: Bread

If the Nile was the giver of life, then bread *was* life. In ancient Egyptian, the word for bread was the same as the word for life.⁵⁵ In the beginning, bread was simple: grain and water patted into a flat circle with the hands, laid on a hot rock next to the fire to cook. Later, more elaborate shapes were made. As far as food historians know, Egypt produced the first leavened bread, perhaps by accident. One theory is that yeast landed on some dough left out; another is that ale was mixed with the flour instead of water. In any case, the gluten in the flour went to work and the bread puffed up—still an awe-inspiring event. A piece of the fermented dough from the previous batch could be kept to guarantee that the next loaf would rise, and sourdough was born. Or you could just take the

head off the beer or what was left in the bottom of the container after brewing, and add it to the flour. New technologies developed around leavened bread, such as closed ovens and molds shaped like triangles and long loaves. Commercial bakeries produced at least forty different kinds of bread and pastries.⁵⁶ Commercial bakeries were necessary to provide for feasts the pharaohs gave:

10,000 biscuits . . . 1,200 Asiatic loaves, 100 baskets of dried meat, 300 cuts of meat . . . 250 handfuls of beef offal, 10 plucked geese, 40 cooked ducks, 70 sheep, 12 kinds of fish, fat quails, summer pigeons, 60 measures of milk, 90 measures of cream, 30 jars of carob seeds . . . 100 heads of lettuce, 50 bunches of ordinary grapes and 1,000 bunches of oasis grapes, 300 strings of figs, 50 jars of honeycomb, 50 jars of cucumbers, and 50 small baskets of leek bulbs.⁵⁷

These foods were eaten with the hands. In early Egypt, upper-class diners reclined on mats or cushions on the floor in front of low tables, but over the years, chairs and standard height tables came into use. Servants brought the food. The wealthy had a separate room just for cooking, instead of doing it on the roof or in the back of the building. But there was a vast underclass that had completely different eating habits.

Pyramid Builder Food: The Jewish Diet

One of the earliest types of human relationships was slavery. In ancient societies, slavery was based on being in the wrong place at the wrong time: if you lost a war, you became the property of the winners. So the Jews became the slaves of the Egyptians. The Jews were the first people to believe in one god. This type of belief—monotheism—made their religion portable. Their one god was not connected to a particular place, but was everywhere, unlike the many gods in polytheistic religions which were attached to sacred groves or rivers or mountains. For example, many of the gods of the ancient Egyptians were connected to the Nile, so worshiping them anywhere else would have been impossible.

The Jews have many dietary laws. One of the most important is kosher butchering. The purpose is to inflict as little pain as possible on the animal, one of god's living creatures. The animal is hung upside down, then its throat is cut quickly with an extremely sharp blade. This has benefits for the animal and for humans. It is humane because the animal loses consciousness quickly and doesn't suffer. The advantage to humans is that gravity drains the blood away, so the butcher can easily see any tissue that is white, which means it is toxic to humans. Any animal that is not killed in this ritual religious fashion, for instance if it dies from disease or an accident, is considered impure—*treyf* (trafe)—

and is forbidden. The koshering process continues in the kitchen, where the meat must be soaked, salted, and rinsed to remove all traces of blood.⁵⁸ The words *kosher* and *treyf* crossed over into English to refer to things that had nothing to do with food. For example, a person or deal that is *kosher* is above board, honest, decent. *Treyf* is trash.

Other Jewish dietary laws prohibit eating the flesh of four-legged animals that don't ruminates—that is, chew their cud—or which have cloven hooves. Chief among these is the pig. Also forbidden: rodents, reptiles, and fish that do not swim or have scales—shellfish. Jews must not “boil the kid in the milk of its mother,” which prohibits eating meat and dairy foods at the same meal or even within several hours of each other. Orthodox Jews must wait six hours after eating meat to have milk.⁵⁹ They also keep kosher kitchens so that meat and dairy never touch each other. The kosher kitchen has two preparation tables, two sets of pots and dishes kept in separate cabinets, and two sets of cooking and eating utensils. Traditionally, red dishes are for meat; blue are for dairy. Some modern kosher kitchens have separate sinks and dishwashers.

There is a large third class of foods, neither meat nor dairy, that is safe to eat with anything. These are called *parveh* or *pareve*—neutral—and include plant foods like flour, fruits, vegetables, and sugar; salt; some beverages; and fish. However, there are some restrictions on these foods, too. For example, fruit must not be eaten until a tree has been bearing for at least three years.

While the Jews were enslaved, Moses went to Pharaoh and told him that god had said, “Let my people go, that they may hold a feast to me in the wilderness.” But Pharaoh wouldn't let the Jews go. They prayed to their god for freedom; he answered with a series of plagues that were intended to starve and hurt the Egyptians while saving the Hebrews. The plagues turned the Nile to blood so that the water wasn't drinkable and the fish died; covered the land with frogs that got into the ovens and the kneading bowls; filled the air with gnats and flies; killed the livestock of the Egyptians but let the Hebrews' animals live; covered humans and beasts with sores; caused it to hail so hard that the plants and the trees died; sent swarms of locusts to eat what was left of the crops and fruit; and covered Egypt with a thick darkness for three days.⁶⁰ The final punishment was the worst: god would send the angel of death to kill the first-born son in every house unless people did as he commanded. Passover is one of the most sacred celebrations in Judaism.

According to the Old Testament, that is how the Jews finally gained their freedom. The leader in their Exodus from Egypt was Moses, who parted the Red Sea and led them to Canaan (although he was not allowed to enter), the “land of milk and honey,” foods which represent a place of plenty.

 Holiday History **PASSOVER**

The Jews did as god commanded: they slaughtered a one-year-old lamb, dipped a bunch of the herb hyssop in the blood, and touched the doorposts and the lintel, the beam above the door, as a sign of where they were. Then they roasted the lamb and ate it with unleavened bread and bitter herbs. The angel of death saw the sign and passed over the houses of the Jews, but did take the first-born sons of the Egyptians and the first-born of their cattle. There was a great cry of grief throughout Egypt and Pharaoh finally let the Jews go.

God told the Jews when to celebrate Passover and what to eat. Passover begins in the “first month [of the lunar calendar], on the fourteenth day of the month at evening [and continues] until the twenty-first day of the month at evening.” Ritual foods for the Passover dinner, called a seder, include haroset (also spelled haroset, charoset, or charoses), a mixture of chopped apples and nuts that symbolizes the bricks the Israelites were forced to make when they were building the pyramids; horseradish represents the bitterness of slavery; a hard-boiled egg dipped in salt water is the tears the slaves cried. Unleavened bread—matzo—is eaten for seven days because the Jews left Egypt so quickly that there was no time to take leavening.⁶¹

The Christian holiday of Easter is connected to Passover. (See Chapter 2.)

CHINA: THE YELLOW (HUANG HE) RIVER

China has some of the most dramatic geography on earth, and plant and animal life to match. In Tibet, on its western border, are the Himalayan mountains and the highest peak on earth. At almost 30,000 feet, Mt. Everest is nearly twice as high as the tallest peak in the lower forty-eight states, California’s Mt. Whitney. China’s lowest point, approximately 900 feet below sea level, is more than three times lower than California’s Death Valley. China has climate extremes, too, from tropical rain forest to permanent ice caps. It has no Mediterranean climate, but drenching monsoon rains followed by drought. It also has an enormous population: by A.D. 2, sixty million people.⁶²

Historians believe that agriculture arose independently in China and Mesopotamia, because the Chinese cultivated millet, a grain that was unknown in the Middle East, at approximately the same time that wheat was domesticated in the Middle East. The earliest Chinese civilization, from approximately 6000 B.C., was the village of Ban Po in the floodplain of the Yellow or Huang He River in north central China. The village’s defense was not a wall, but a moat. The people lived in huts with

plaster walls and thatched roofs made of straw. Pigs and dogs were raised. Communal grain—millet—was buried in hundreds of pits scattered in the village. In 2005, archaeologists made an astounding find: millet noodles, perfectly preserved. This brought up the old rivalry between China and Italy over who invented noodles first. This “contest” began with the writings of Marco Polo (see Chapter 3), but each country still claims that it was making noodles first. The Italian response is that these are noodles, but they’re not pasta, which is made from wheat.

At around the same time in northern China, salt was harvested when lake waters dried up during the summer. Salt production, either by harvesting or evaporation, predates what is usually used as a source of salt in China—soy sauce. Salt production dates from almost 2000 B.C., soy from around 1300 B.C. Soy sauce began as fish fermented in salt. Then soy beans were added, and finally, the fish was omitted, leaving just soy beans and salt. Soy beans are extremely nutritious legumes: they nourish the humans who eat them and the soil in which they are planted.⁶³ Cinnamon, too, is one of the earliest spices known in China. It is mentioned in China’s first herbal book, in 2700 B.C.⁶⁴

Chinese New Year is one of the oldest festivals observed anywhere. Around 2600 B.C., the Emperor Huang Ti began keeping records based on a lunar month and the twelve signs of the Chinese zodiac. Just as we have Sagittarius, Capricorn, and Scorpio, the Chinese have the Rat, the Tiger, the Rabbit, and other animals.

Some Asian cultures celebrate New Year when China does. But around the world, New Year’s festivals are celebrated at many different times of the year, in many different ways. For some, it is a religious ceremony and a time of cleansing. For others, it is a time for partying.

The Chinese philosopher known to the west as Confucius (551–479 B.C.) declared that everything on earth would run smoothly if subjects respected rulers, younger brothers respected older brothers, wives respected husbands, and friends respected friends. He also supposedly assembled the *I Ching*, the Book of Changes, and the Book of Songs, a combination of court and peasant songs that reveals much about the cuisine and culture of the time. It mentions forty-four vegetables and herbs, including bamboo; Chinese cabbage and celery; peaches, plums, and apricots; pine and hazel nuts. Confucianism was the basis for government in China for many centuries. In the fifteenth century A.D., the Confucian scholars who ruled China made the decision that China would not trade with the rest of the world, which eventually proved damaging to China.

The Wall That Salt Built

In 221 B.C., Shi Huangdi, which means “first emperor,” decided to build the Great Wall to protect China from attacks by the Mongols to the



Holiday History

CHINESE NEW YEAR



The Chinese New Year celebration is called “Spring Festival” and is deeply connected to China’s ancient farming culture and to the moon. It begins at the new moon closest to the beginning of spring, usually the second new moon after the winter solstice. It always falls between January 21 and February 21, and lasts fifteen days.⁶⁵

New Year’s Eve dinner is a feast of traditional foods that are supposed to bring good luck and prosperity in the coming year. Each region has its own specialties. Near the sea, it might be prawns, dried oysters (*ho xi*), raw fish salad (*yu sheng*), angel-hair seaweed (*fai-hai*), and “sleep together and have sons”—dumplings boiled in water (*jiaozi*).⁶⁶ In the south, rice in pudding and wrapped in leaves are favorite foods, while in the north, it’s steamed dumplings made of wheat. A whole animal represents abundance, but fresh bean curd is avoided because it is white, the color of death. And don’t cut your noodles—long noodles mean long life.

The Festival of Lanterns is the last night of Chinese New Year, when lights and firecrackers drive away demons and promise a good year ahead. New Year’s Day is when *Hong Bao* (Red Packet) takes place. Presents and money wrapped in red paper—the color of good luck—are exchanged, along with greetings to relatives and neighbors.⁶⁷ Our year 2006 is 4703 in China. *Gong Hai Fat Choy!*

Chinese Years:

2007	Year of the Pig	2010	Year of the Tiger
2008	Year of the Rat	2011	Year of the Rabbit
2009	Year of the Ox		

north. It was an expensive project, paid for with taxes from the state monopoly on salt—the first such monopoly in history.⁶⁸ The wall, twenty-five feet high and thousands of miles long, was built by more than one million men. It is one of only a few man-made structures on earth that can be seen from space. Like the pharaohs before him or the Roman emperors after him, Shi Huangdi began other massive public works projects including a palace that held 40,000 people. Convinced that he was such a great emperor that he would rule China even after his death, he had 6,000 life-size warriors and horses and 1,400 chariots sculpted out of clay and put in his tomb. Shi Huangdi also standardized written Chinese, which helped to unify China. However, taxed beyond endurance, and with a shortage of crops because farmers were working on the emperor’s grandiose projects, the empire collapsed.

CROSSING CULTURES: NEW YEAR CELEBRATIONS

Country/ Religion	Name	Day	How Celebrated
African-American	New Year's Day	January 1	Hoppin' John (red beans and rice)
Cambodia	Chaul Chnam Thmey	April 12, 13, or 14	House cleaning, visiting Buddhist monasteries
Denmark	New Year's Eve	December 31	Boiled cod with mustard sauce
Greece	New Year's Day	January 1	Pass out <i>Vasilopita</i> (St. Basil's sweet bread w/lucky coin inside) in church
India/Hindu	Diwali	October or November	Victory of good over evil; fireworks, oil lamps
Iran	Nowruz	Spring Equinox	Purification with bonfires and spring cleaning; fish and herbed rice
Ancient Ireland	Samhain	October 31/ November 1	(now Halloween) Bonfires, bobbing for symbolic magic apples
Italy	Capo d'Anno	December 31	Fireworks, lentils, sparkling wine
Japan	Shogatsu	January 1–3	Cleansing to start new, view sunrise, soba (buckwheat noodles = long life)
Judaism	Rosh Hashanah	162 days after first day of Passover	Holy day; cleansing; sweet foods
Korea	Sol-nal	January 1	rice cake soup— <i>ttokkuk</i>
Russia	Novyi God	January 1	roast goose or chicken; sweet cookies, vodka
Thailand	Songkrah	April 13	Cleansing with water
U.S.	New Year's Eve/ New Year's Day	December 31 / January 1	Party and drink/ watch football
Vietnam	Tet Nguyen Dan	Lunar (Chinese)	Red envelopes with money; fireworks

INDIA: THE INDUS RIVER

Like the civilizations in Mesopotamia, Egypt, and China, early civilizations in India were centered around a river, the Indus, in the western part of the country. Because of its location at the junction of Asia and the Middle East, India has been the site of a great deal of cultural exchange through many overlapping migrations. The first of these occurred approximately 65,000 years ago. Then, around 6000 B.C., people from the Middle East migrated east into India, bringing domesticated cattle, sheep, goats, and their experience growing wheat. Other people migrated west from China, bringing rice and later, tea. By 750 B.C., Indo-Europeans had come south into India from the flat, dry grasslands called the steppes. They contributed the horse and their knowledge of iron. Other Indo-European-speaking people migrated into eastern Europe. Today, most of the languages spoken in Europe, India, Iran, and North and South America are based on this common Indo-European parent language. In math, India gave the world the zero and the decimal system.

Some important food firsts came from India: the first plowed field in the world, before 2800 B.C., and the chicken.⁶⁹ The technology for turning sugar cane into granulated sugar existed at least as early as 800 B.C. in India; the word “sugar” comes from India, *sharkar*. Many words for food come from ancient Indo-European or other Indian languages, even though the food might have originated somewhere else. The words for a rice dish with spices and meat—pilaf, *pilav*, or *pulao* in Persian and Arabic—come from the much earlier Indian *pallāo* or *pulāo*. English words for rice (*arisi*), pepper (*pippali*), mango (*mānggā*), orange (*nāgarangā*), curry (*kari*), and chutney all originated in India. Tamarind means “fruit of India” in Arabic.⁷⁰ Pulses consumed were peas, chickpeas, and lentils. Fruits included coconuts, pomegranates, dates, lemons, some melons, and possibly bananas.⁷¹ In the beginning, India was not a heavily vegetarian country. The sacred cow came later (see below).

Hinduism

India gave the world two major religions, Hinduism and Buddhism. Hinduism arose some time between 750 B.C. and 550 B.C. after Aryans (people “of noble birth”) arrived from the north. Its body of sacred literature, derived from oral traditions, is called the *Vedas*, but unlike the other great religions of the world, no one person was the founder. The *Vedas* describe methods of healing based on nutrition. This system of healing, called Ayurvedic medicine—Sanskrit for “the knowledge of life or daily living”—is still in use today.⁷² It balances the body by using food types based on heat, cold, moist, and dry. Certain foods are healing for certain body types but damaging for others. The *Vedas* mention barley, but not wheat or rice, sugar, distilled liquor, grinding stones, and the mor-

tar and pestle.⁷³ They also gave instructions on how to carve beef for the priests who ate it at feasts. Ayurvedic medicine influenced Tibetan medicine and some aspects of Chinese medicine.

One of the fundamental beliefs of Hinduism is a rigid caste or class system that determines everything about a person's life, including what and with whom he can eat. There was a racial component to the caste system: those at the top were Aryans, more likely to be wealthy and educated, while those at the bottom were darker-skinned, poorer non-Aryans. The highest caste is the brahmins, who are often also the priests. Lower down are warriors, then peasants. At the bottom are the untouchables, manual laborers and people in trades the Hindus considered necessary but less desirable or "unclean," like butcher and garbage collector. The "untouchable" was meant literally; the slightest physical contact with an untouchable *or even his shadow* would contaminate a brahmin physically and spiritually so much that he would have to undergo ritual purification. One of the means of purification involved ghee, clarified butter. By heating butter to remove the milk solids—the part that would cause butter to become rancid—the butter could be preserved for a long time, even in the hot climate of India. Hindus cannot change the caste they were born into during their life on earth. They can, however, move up in the next life. Through a series of reincarnations (rebirths), they can work out bad karma—past wrongs—and eventually achieve divine peace, one of the four goals of Hinduism. The other goals are wealth and power, responsibility, and physical pleasure, which is celebrated in temple carvings of many people having sex in a great variety of ways. The caste system persists today in India in thousands of complex social relationships that determine everything about daily life.

In ancient India, one drink, soma, was sacred to the priests, who used it in their offerings to the gods, particularly the goddess of the moon, who gave her name to the drink. This was a controlled substance, far beyond mere alcohol. All-powerful, it produced superhuman feelings and supposedly healed all diseases. It was made by grinding the plant, then "The ground mass was collected on a cowhide, strained through a cloth of sheep's wool, and the sparkling tawny filtered liquid mixed for consumption with milk, curds or flour."⁷⁴ There are several candidates for the plant that could have produced these effects, but Indian food historian K. T. Achaya settles on the fly agaric mushroom, *Amanita muscaria*, a hallucinogen.

Buddhism

India's second great religion, Buddhism, arose in the fifth century B.C. Unlike Hinduism, it does have a founder, Siddhartha Gautama, known as the Buddha, who sought to understand the cause of suffering in the world. Fasting by eating only six grains of rice a day didn't help. Wandering didn't help. Finally, he sat under a fig tree and meditated for forty-nine days and reached the wisdom of enlightenment. Buddhism rejected

the caste system of Hinduism, so it appealed more to the lower classes. It also rejected the many gods of Hinduism but kept the belief in reincarnation as a way to change and achieve perfect peace without pain, which Buddhists call nirvana. The Buddha declared that the flesh of many animals, in addition to humans, should not be eaten: elephants, dogs, horses, hyenas, bears, and the big cats—lions, tigers, panthers. But he never said that cattle should not be eaten. That happened around 2,000 years ago, after an ecological disaster in India made it culturally suicidal to raise cattle for food, and long after the Buddha was dead.



Food Fable

THE SACRED COW



Many people outside of Asia think that people in India revere the cow for no reason. In India, cows are sacred because they produce oxen, castrated male cows, which are work animals. Oxen pull plows in the fields and carts on the roads. Their dung is fuel, fertilizer, and free. An Indian farmer who owns an ox can feed his family; if his ox dies, they might starve or be forced to move to the city. He can't borrow oxen from his farmer neighbors, because the cycle of heavy rain, then no rain means that all the fields have to be plowed at the same time. The zebu cattle native to India survived because they were able to adapt to these rain-drought cycles. They have humps like camels where they store water and food, and they are resistant to tropical diseases. Cattle are so important to the economy that when India became an independent nation after World War II, it wrote a bill of rights for cattle into its constitution.⁷⁵ In India's neighbor, Tibet, its native cow—the yak—performs the same functions today as the cow in India: labor in the fields, transportation, fuel, and manure.⁷⁶

In the ancient worlds of Africa, the Middle East, the Indian subcontinent, and Asia, as humans evolved, so did human interaction. Over millions of years, humans had become bipedal; developed bigger brains; made tools and weapons out of stone, then bronze, then iron; progressed from herbivores to carnivores then omnivores; mastered fire and learned to cook; invented dance, language, art, and religion; domesticated hundreds of species of plants and animals; and created complex systems of irrigation, government, and law. In the first millennium B.C., as merchants from all of these areas traveled the trade routes, so did their cuisines and cultures. The knowledge of winemaking from the Near East, sheep and goat herding from the Fertile Crescent, olive oil from Egypt, and spices from India, especially black pepper, extended farther west and north than they had before, along the Mediterranean Sea, to another continent—Europe. All of these cuisines and cultures converged on a small, new country that would lay the foundations for western civilization—Greece.