

SLIDE 1: Nutritionists speak of nutrients in relation to health vs. disease, in relation to nutrient optimums that protect, that heal, that assure reproductive and developmental processes. The general public, however, speaks of food... of food quality, of dietary balance. As a nutritional geographer, I speak of food in the context of history, at specific geographical locations, in accord with cultural practices and how Americans and others make food choices and the nutritional consequences of these choices. Today, I will speak of food in its broadest context; I will pull back from molecular and cellular studies, from animal model research, from clinical trials, and will present a seminar on the essence of American food... where American food has been and where American food is going.

SLIDE 2: The American melting pot simmers and stews with innumerable local, regional, and national dishes. Classic American cuisine is the story of millions of cooks - - some famous most anonymous -- who took locally available foods and ingredients and created thousands of dishes highly variable by location and region. Classic American cuisine also is the story of ten foods that can be studied through a prism of ten time periods, a 10 x 10 matrix that forms the core of what Americans eat.

SLIDE 3: Last summer, after a national search, my food and culture research team was selected to curate and develop an exhibit on American food-related activities: ten foods through ten time periods. This project was the vision of the CEO of Hidden Valley Ranch, who believed that American food was interesting, and did not have to take a back seat to cuisines developed elsewhere. The project was managed by Publicis Dialogue, a prominent Public Relations firm in San Francisco. Currently, our work is displayed in San Francisco with additional venues scheduled for Chicago, Dallas-Fort Worth, Los Angeles, New York, and Philadelphia.

SLIDE 4: Before I begin, I wish to identify the members of my research and advisory team and recognize them for their hard work as we met printing and manufacturing deadlines. I thank you all for your contributions and hard work.

SLIDE 5: BLANK Ten foods through ten time periods: how have food and history marked American eating patterns? Cooks in eastern America created Boston brown bread, chicken à la King, Cole slaw, and succotash. Contributions from southern and mountain states have included burgoo, chitterlings, cracklin' bread, fried ham with red-eye gravy, grits, hoppin' john, jambalaya, and poke salads. Cooks in the American midwest and Great Lakes region developed brownie cookies, chicken pies with biscuit toppings, macaroni and cheese dishes, and wild rice casseroles. Inventive western and southwestern cooks prepared barbecued beef and chili recipes by the thousands, while creative west coast cooks invented dishes such as chop suey, cioppino, Hangtown fry, and a myriad of sourdough bread recipes.

Americans celebrate with food. Whether New Year's eve, President's Day, the 4th of July, or Thanksgiving, Americans commemorate holidays with favorite family recipes that are easy to prepare, that are pleasurable and satisfying. History reveals that American food has been bountiful, diversified, and sustaining. Some dishes have endured from Colonial times into the Space Age. Behind each classic, American food lies the story of its use at specific periods. Some stories are humorous, others poignant, many are thought-provoking.

SLIDE 6: Change always has characterized American culture and so it is with food. American cuisine is as diverse as the Native American and subsequent emigrant cooks who arrived in North America, who experimented, substituted, and modified recipes through the centuries. Innovation and creativity define American cuisine as Americans developed new dishes with many regional variations.

SLIDE 7: While regional patterns have become blurred in the late 20th century, American food has taken two specific directions. One direction reflects consistent use of relatively few foods through time, while the second direction reveals the adaptive nature of American cuisine -- ever-changing, ever-evolving in character, ideas reflected from new immigrants and new technology.

So let us feast on the foods that have characterized America. And in so doing, let us begin with maize and our first time period -- Pre-historic North America to initial Spanish colonial settlement in 1565.

SLIDE 8: Corn or maize was first domesticated in Mexico, then reached the United States about 800 years ago. This classic food has a unique history in America from antiquity to modern times. It is said that American humor is "corny." Americans speak of a "corn belt" that stretches from Indiana, westward through Illinois and Missouri, into Kansas. Corn has more than 800 different culinary uses in America today, and collectively, Americans eat nearly 50 pounds of corn products yearly.

SLIDE 9: For many Native American nations, maize remains central to diet. Many Native Americans believe maize has a spiritual origin, therefore, it lies at the center of tribal and personal religious beliefs. Maize is honored and in telling the story of maize, ethnic identity is reinforced and maintained..... as here in the Zuni creation story:

SLIDE 10: BLANK

After eight days where the plumes of a Tchu-e-ton [CHEW-E-TON] stood, rose seven corn plants, and they were called the seven maidens. The eldest was called yellow corn, of the Northland, the color of the light of winter. Next was blue corn, of the West, the color of the great world of waters. Next was red corn, of the South, the land of everlasting summer. The fourth was white corn, of the East, white like the land whence the sun brings the daylight. Next was

speckled corn, of the Zenith, with many colors like the clouds of dawn and sunset. The sixth was black corn, of the Nadir, color of the caves of first humankind. The youngest corn was sweet corn, who remains soft even when ripe.

SLIDE 11: Native Americans planted maize, beans, and squash together in the same field. They used fish to fertilize the soil. As the seeds grew, the beans twined around the maize stalks, while the broad squash leaves covered the ground and kept the soil moist. Eaten together, maize, beans and squash provided a balanced diet without meat.

SLIDE 12: BLANK Let us examine how Benjamin Franklin viewed maize, as with his letter to the editor of the London Gazetteer, dated January 2nd, 1766:

A writer in your paper, comforts himself, and the India Company, with the fancy, that the Americans, should they resolvæ to drink no more tea, can by no means keep that Resolution, [since] their Indian corn [does not afford] 'an agreeable, or easy digestible breakfast.' Pray let me, an American, inform the gentlemen, who seems ignorant of the matter, that Indian corn . . . is one of the most agreeable and wholesome grains in the world; that Johnny or hoecake, hot from the fire, is better than a Yorkshire muffin.

And if you wish a recipe for cornbread, you need look no further than the pages of Mark Twain's, A Tramp Abroad, written in 1880:

Take a lot of water and add to it a lot of coarse Indian meal and about a quarter of a lot of salt. Mix well together, knead into the form of a "pone," and let stand a while. Rake away a place among the embers, lay it there, and cover it an inch deep in hot ashes. When done, remove it; blow off all the ashes but one layer; butter that one and eat.

SLIDE 13: The word maize comes from the Taino language. Taino was the dialect spoken by the Arawaks, the Caribbean people who first greeted Columbus in 1492. The term maize became a loan word in Spanish and subsequently entered other European languages. The word corne, spelled today as c-o-r-n without the terminal "e," comes from the old English dialect term for grain and specifically is used to designate wheat. When the English-speaking Pilgrims encountered maize for the first time, they called it Indian Corne because they did not know or recognize the plant, but they knew it was a grain.

SLIDE 14: Our next selection was turkey and our focus the colonial era, a period that spanned 1565 through the eve of the American Revolution in 1776:

Turkey lore characterizes America. The founding fathers considered whether or not the wild turkey should be America's national emblem. While the wild turkey lost to the American bald eagle, turkey has continued to play roles in American folk-songs and slang. Turkey remains an enduring American food through association with

Thanksgiving and with other holiday festivals, so much so that the average American eats nearly 15 pounds of turkey and turkey products annually.

SLIDE 15: The Pilgrims arrived off Cape Cod in 1620. Most of the Mayflower colonists were not farmers, nor were they hunters or fishers. There was little food that first year, but by fall 1621, the first crops were ready for harvest. The Plymouth colonists and 90 guests from the local Wampanoag Nation celebrated what has been called the First Thanksgiving.

SLIDE 16: The feast lasted three days and included: venison, wild turkey and other wild fowl, bass, cod fish, and Indian corn [maize]. Only two texts have survived that describe the First Thanksgiving... here is one:

They begane now to gather in ye small harvest they had, and to fitte up their houses and dwellings against winter, being well recovered in health & strength, and had all things in good plenty; for some were thus imployed in affairs abroad, others were excersised in fishing, aboute codd, & bass, & other fish, of which yey tooke good store, of which every family had their portion. All ye somer ther was no wante. And now begane to come in store of foule, as winter approached, of which this place did abound. And besids water foule, ther was great store of wild Turkies, of which they took many, besids venison, &c. Besids they had aboute a peck a meale a weeke to a person.

SLIDE 17: The keen listener will note that foods presented at the first Thanksgiving did not include cranberry, peas, potatoes, pumpkin pie or mince pie, or yams... and that the most important meat was venison.

SLIDE 18: Most foods cooked during the Colonial era were prepared in kettles; sweet puddings commonly were cooked in the steam above the bubbling broth. Cast iron pans with long handles and three legs - called spider skillets - were used for frying.

SLIDE 19: Meats were commonly roasted and the spits were turned by hand. Sometimes, as seen here.... clever families put the family dog to work turning the spit! [PAUSE.....]

SLIDE 20: George Washington eventually declared Thursday, November 26th, 1789, as the first national Thanksgiving holiday. Over the years, presidents chose different days for the holiday. President Madison established April 13th, 1815. In 1863 Abraham Lincoln proclaimed the fourth Thursday in November, while in 1939 President Franklin D. Roosevelt declared the third Thursday of November. Congress passed a Joint Resolution in 1941 that returned Thanksgiving to the fourth Thursday of November.... where the celebration remains today.

SLIDE 21: Amelia Simmons wrote the first cook book in America and published it in 1796. Hers is the first book that developed recipes for foods native to America. Her

pumpkin puddings were baked in a crust and similar to present day pumpkin pies. Her stuffed turkey recipe has changed very little in over 200 years:

To stuff a turkey --- Grate a wheat loaf, one quarter of a pound butter, one quarter of a pound salt pork, finely chopped, two eggs, a little sweet marjoram, summer savory, parsley and sage, pepper and salt (if the pork be not sufficient) fill the bird and sew up.

SLIDE 22: The third classic American food selected was beans.... the era chosen spanned the American Revolutionary War through the westward movement to the eve of the discovery of gold in California.

Beans offer excellent nutrition and have achieved a unique place in American culinary tradition. More than 100 varieties of beans are cultivated in America, with most produced in Michigan, North Dakota, Nebraska, and Colorado. Whether dry kidney, navy, and pinto beans, or fresh string/snap or wax beans, American farms yield 1,500,000 tons annually. Beans occupy places in American slang and fads, from “spilling-the-beans,” to “bean-bag chairs, to “Beanie-Babies,[®]” and one bean dish is classic American.

SLIDE 23: Boston baked beans consists of navy beans cooked slowly with molasses and salt pork. Several historical sources report that early American colonists did not bake beans, and that slow cooking techniques were Native American in origin and subsequently adopted by the New England colonists. Other scholars argue, however, that baked beans had long been a traditional Sabbath dish among North African and Spanish Jews, who called this food skanah. They suggest that sea captains introduced the concept of baked beans to New England ports after long voyages along the coast of north Africa and the Mediterranean.

Regardless of origin, recipes for baked beans are closely associated with the city of Boston, Massachusetts, where Colonial Puritan women baked beans on Saturday, to avoid cooking on the Sabbath, and served them for Saturday dinner and as left-overs for Sunday breakfast and lunch. So ingrained is the association between Bostonians and beans, that Boston is sometimes known as “bean town.”

SLIDE 24: Lewis and Clark explored the American west for over two years. When their provisions that included beans ran out, they lived off the land. Both were extraordinary men, but poor spellers as their diary attests. Here is an entry for Christmas, December 25th, 1805:

We would have Spent this day in feasting, had we any thing either to raise our Sperits or even gratify our appetites, our Diner concisted of pore Elk, so much Spoiled that we eate it thro' mear necessity, Some Spoiled pounded fish and a few roots.

SLIDE 25: BLANK. During this era Thomas Jefferson introduced the waffle iron to America. He also introduced spaghetti and served fried potatoes with beefsteak. Some say that while he was in France, Jefferson obtained recipes for ice cream, although Dolly Madison probably should receive credit for introducing ice cream to the White House.

In 1837 a young Vermont blacksmith, John Deere, developed a plow that could clean, scour, and polish itself. This plow made it possible to convert the western prairies into vast fields of corn and wheat, and American food patterns would change forever as a result of this invention.

SLIDE 26: The fourth American food selected was apples and time period was the California gold rush era through to the eve of the American Civil War.

Apple pie and Mom: what could be more American? The problem is: apple pie was a British invention and English colonists brought apples to America. The unique American aspect of apples, are the varieties developed here: Golden and Red Delicious, Jonathan, and McIntosh. More than 2,500 varieties of apples grow in America today, and 4,300,000 tons are produced annually. From "an apple a day," to icon of the computer industry.... American apples have unique stories.

SLIDE 27: According to some accounts, the first apple tree in the Pacific Northwest sprang from a seed brought from London in 1824 by Captain Aemilius Simpson. The story goes that at a farewell banquet held in his honor, a young lady -- as a joke -- gave him the core of the apple she had eaten, and asked him to plant the seeds in the American wilderness. When Captain Simpson arrived at Fort Vancouver in what is now Washington state, he gave the seeds to Dr. John McLoughlin, then Chief Agent for Hudson's Bay Company in the Pacific Northwest. Delighted by the gift, Dr. McLoughlin entrusted the seeds to his gardener, who planted and nurtured them in a glass house. A single tree grew from McLoughlin's seeds and was carefully protected: ultimately it bore one fruit, and eventually the apples flourished.

SLIDE 28: BLANK. By the 1850's, production was high enough to begin exporting apples to California. Apples were shipped to San Francisco in theft-proof iron bound crates and fetched incredible prices. One account dated to 1853 reported that four bushels of apples were sold in San Francisco for \$500. Because of the potential for profit by selling apples to Gold Rush miners, Californians began to plant their own orchards. Ultimately, the demand for Pacific Northwest apples declined and prices dropped sharply. Construction of the Northern Pacific Railroad in 1893, however, made it possible to ship Pacific Northwest apples to eastern markets and the industry prospered once again.

SLIDE 29: John Chapman is better known to Americans today as "Johnny Appleseed." Although depicted by artists as scattering apple seeds across the land, he actually

planted apple seedlings, expertly and rationally, in nurseries. By 1801 he had created a chain of apple nurseries from the Allegheny mountains, through central Ohio, as far west as Indiana.

SLIDE 30: "Bees" were frontier rural gatherings that combined work with socializing. Women got together for apple bees to preserve apples for winter. They pared, quartered, cored, and strung apples to dry, while catching up on all the news. These activities declined after labor saving machines emerged during the mid 19th century.

SLIDE 31: BLANK. After gold was discovered in California, one could be off to the diggings... to do so required an investment of only \$55.00. The cheapest route to the California gold fields was overland across the American plains and here are the expenses for a 4-person wagon:

Wagon, harness, and 6 good mules		\$567.00
Food:		\$83.78
Flour: 824 lbs @\$2.00/100 lbs	\$16.48	
Bacon: 725 lbs @\$5.00/100 lbs	\$36.25	
Coffee: 75 lbs @\$0.07/lb	\$5.25	
Sugar: 160 lbs @\$0.05/lb	\$8.00	
Lard: 200 lbs @\$0.06/lb	\$12.00	
Beans: 200 lbs @ \$0.40/bushel	\$1.60	
Apples: 135 lbs @ \$0.80/bushel	\$1.60	
Salt/pepper: 25 lbs	\$1.00	
Miscellaneous.....	\$1.60	

Cooking utensils, including tin plates, spoons, coffee pot, camp kettle, knives, and extras, added an additional \$20.00, making the total: \$670.78. After reaching California pioneers sold off some of their supplies, mules, and wagons and likely received a return of approximately \$450.00 that could be used to establish a "stake" at the diggings. This left a net cost per individual for trekking across America at -- \$55.19.

SLIDE 32: Going west to California required careful planing; when to leave Independence, Missouri, in order not to be caught up in the early storms of Fall and Winter. Here is a passage from J. Goldsborough Bruff's diary, written in 1849, reporting a 4th of July celebration along the banks of the Platte River:

The banquet hall was formed of four wagons - two on each side covered over with tent cloths. There were tin platters and iron spoons, and knives and forks for the ladies. Down the center, the luxuries of the season were placed in tin pans: boiled beans and salt pork, bean broth, middling bacon, ship bread, and hot rolls of wheat bread, dried apple and peach pies, and stewed dried apples. The Star-spangled banner, floated through an opening in the roof.

SLIDE 33: Up Highway 50 on the way to Lake Tahoe, lies the goldmining town of Placerville. Originally, this settlement was called Hang Town for obvious reasons, and Hang Town Fry was an omelet made of oysters and eggs, the two most expensive items on the local Cary House menu. Miners who struck it rich in the gold fields asked for the most expensive dinner their money could buy, and the proprietors complied and invented Hangtown Fry in their attempt to relieve miners of their hard earned nuggets.

SLIDE 34: BLANK. The way west was a disaster for hundreds of pioneers not used to hardships, or to those who could not divorce themselves from the need to bring “just a little extra” food along the way. We reviewed dozens of documents confirming that piles of discarded food lined the emigrant trail to California. One report stated that no less than 30,000 pounds of bacon had been discarded at one site due to overloaded wagons! We also uncovered a record that an Illinois man once drove a flock of 2,000 turkeys from Independence, Missouri.... to California.... that must have been a sight!

SLIDE 35: Pork was our next selection and the time period spanned the American Civil War from 1861 to 1865.

Pork and beans, fried bacon, and ribs -- hearty food for hungry Americans. Imagine a time without pigs in America: Spanish explorers brought pigs with them and some escaped. These mean, wild “razor backs” even became the nick-name of some American athletic teams. From pork barrel politics to Super Bowl pigskin, pork-related slang and terminology has had a long colorful history. Today, nearly 60 million pigs are raised in America and the average American eats 46 pounds of pork annually.

SLIDE 36: In 17th and 18th century Europe, bread was the staple food of poor people. Americans, however, fed their grain to animals, then ate the animals -- instead of the grain. Geographically, America had enough land to make this approach possible, and pigs were among the easiest animals to keep. Pigs foraged for their food, and their meat could easily be preserved as bacon, ham, or salt pork. There evolved an American saying..... "to scrape the bottom of the barrel." This phrase means even today -- to be out of resources, -- and in actuality refers to the bottom of a "pork barrel."

SLIDE 37: James Fenimore Cooper wrote the following in his novel, The Chainbearer, in 1845:

As for bread, I count that for nothin'. We always have bread and potatoes enough; but I hold a family to be in a desperate way when the mother can see the bottom of the pork barrel. Give me children that's raised on good sound pork afore all the game in the country. Game's good as a relish and so's bread; but pork is the staff of life. . . . My children I calkerlate to bring up on pork with just as much bread and butter as they want.

SLIDE 38: Pork is a symbolic Christian Christmas food, and pork figured prominently in the diary of John S. Jackman, a Confederate Soldier:

December 25th, 1864: For breakfast had fresh pork, biscuit, baked sweet--potatoes, etc. Cool disagreeable morning. Bad prospect for a Christmas dinner -- can't cook in the rain.

SLIDE 39: Terrible atrocities characterized the management of prison camps in both the South and North. While the following passage describes deplorable conditions at Andersonville, Georgia, the same -- if not worse -- could be said for the Union prison camp at Elmira, New York:

The stated ration was: beef, one pound, or bacon, one-third of a pound; corn-meal, one and one-fourth pounds, with an occasional issue of rice, beans, molasses, and vinegar. Soon, however, the ration dwindled. The lack of vegetables, the crowding, and the filth brought on much sickness.

SLIDE 40: The American Civil War caused hunger, famine, and malnutrition well beyond the limits of the battlefield. I possess a manuscript prepared by my Great Great Grandmother -- seen here -- who walked nearly 500 miles across Confederate and Union lines to safety and security in Illinois. Such exploits were not uncommon during this era: ask, yourself, when was the last time you walked 500 miles?

The memory of hunger and famine appeared in the music of the Civil War era. For you American graduate students here today who can trace your family trees back into the mid nineteenth century and the era of the American Civil War, your relatives probably sang this song written by Stephen Foster: mine did.....

*While we seek mirth and beauty and music light and gay,
There are frail forms fainting at the door;
Though their voices are silent, their pleading looks will say
Oh, hard times come again no more.*

SLIDE 41: BLANK. Bacon was called sow-bosom by soldiers during the American Civil War. Biscuits were called "sinkers," "weevil fodder," or "death bells" by both Confederate and Union soldiers. The term pork cartridge was soldiers' slang for pork sausage, and Sherman's pies were soldiers' slang for hard-tack.

To live high on the hog -- a phrase still used today but coined during the Civil War era - - meant one was wealthy enough to eat the best meat on the pig, while others -- i.e. the poor -- had to subsist on pig's feet or "trotters."

SLIDE 42: Our next food choice was beef; the time period was the Post-Civil War era through to the eve of World War I.

Beef is the core, the essence of American food history. Oxen pulled covered wagons westward; cows produced milk for pioneer families; cowboys and cowgirls punched

herds along the Chisholm Trail. The story of beef IS American history: a story of challenge, survival, invention, and hard work. From steaks to hamburgers; from classic beef stew to up-scale flavored jerky. Americans have chewed on beef for nearly 400 years and today, average annual consumption by Americans is estimated at 112 pounds.

SLIDE 43: One form of beef especially associated with Americans has been the hamburger, made possible by the invention of the meat grinder -- seen here. While associated with Americans, the word hamburger probably existed by the end of the Middle Ages. In 1802 the Oxford English Dictionary defined "Hamburg steak" as salt beef. Referring to ground beef as "hamburger," only dates to the invention of the mechanical meat grinder during the 1860s. "Filet de boeuf a la Hambourgeoise," was sold in Boston in 1874, while a food known as Hamburger Beef Steak appeared on the Lookout House Restaurant menu in Cincinnati, Ohio, in the mid-1870s. During the last years of the 19th century ground round or hamburger became associated with a hot sandwich, and early 20th century illustrations depict hamburger served on sliced white bread or toast. "Hamburger Steak, Plain" and "Hamburger Steak, with Onions," was served at the Tyrolean Alps Restaurant at the 1904 Saint Louis World's Fair. The modern hamburger as served on a bun appears during World War I. The White Castle restaurant chain was established in 1916 at Wichita, Kansas and by the early 1920s sold hamburgers. Some scholars say the first hamburger served on a bun appeared in 1917 at Drexel's Pure Food Restaurant, Chicago. By 1920 hamburgers on buns were sold in San Francisco and Cincinnati, and by the mid-1920s, hamburgers were recognizable to most Americans. Hamburger popularity continued to grow, and became associated with mobility and the concept of "fast food." The hamburger as an icon of American popular culture spread globally during the 1980s and 1990s with franchise restaurants opening around the world. American-style "burgers" now can be purchased from Moscow to Quito and from Tokyo to Cairo.

SLIDE 44: If arrival of the horse changed Native American culture forever, so did the arrival of cattle. Competition between cattle and the American Bison or buffalo for grazing, coupled with Native American territorial rights, were at the core of 19th century American history. During our work on this project we found nothing more poignant than this painting, drawn in 1877 by Wohaw, a Kiowa warrior captured and incarcerated at Fort Marion, Florida, far from his tribal lands. Wohaw's culture -- the old -- is portrayed to the left and is represented by buffalo and teepee symbols. The new competing European culture is to the right and is represented by cattle, cultivated fields, and frame houses. In a traditional gesture of respect, Wohaw offers the sacred tobacco pipe equally to the revered buffalo -- the prairie cattle of the Kiowa -- and to the European's spotted cow. Look carefully: Wohaw has seen the future. He has accepted the inevitable. See how his face is turned to the new life, and away from that of his culture.

SLIDE 45: At the conclusion of the American Civil War African Americans sought to find acceptance within mainstream American society, a process still taking place today in 1999. One avenue for independent African American men and women was to become cooks. Here is a recollection of a free man, Charles Gant:

I learned the cooking game from an African cook brought to America in the days of slavery... One half of coconut is the base for a filling composed of diced chicken, pork, and beef. Then grated coconut is sprinkled over the top, and it is ready for the oven.

SLIDE 46: The post-Civil War era saw the rise of cattle drives from Texas to Kansas. It is not widely recognized that women also drove cattle as reported by Mrs. Jack Miles who herded cattle as a teen-age girl:

I could stay in my saddle from morning until night. At sundown the cook struck camp and prepared supper, which consisted of chili beans, flavored with garlic, fried calf meat, or broiled calf ribs, biscuit bread, baked in a big iron skillet -- now called a Dutch Oven -- black coffee, stewed dried apples, and molasses. When a meal was ready, the cook would holler -- "Come and get it, or I am going to throw it out."

SLIDE 47: Cattle drive trail cooks were not well trained and the food often consisted of barely warm beans or tough stew served with sourdough biscuits and bitter, black coffee. Some historians have noted that trail cooks were despots who inspired the common sayings heard during the mid 19th century:

*Only fools argue with skunks, mules, or cooks.....and
God sends meat and the devil sends cooks.*

SLIDE 48: BLANK. The American west also was unsettled during this era, with interesting encounters between friends and foes, as this report on food and friendship by Annie E. Lesnett:

Geronimo used to come to our place quite often. Once he brought me a big wild turkey and another time he gave me a nice basket. In 1887 we moved to Lincoln County, New Mexico, where we lived during the Lincoln County War. I gave Billy the Kid several meals when he would come to our place . . . as I felt so sorry for him when he said he was hungry.

SLIDE 49: Besides the hamburger, another beef- or pork-related product is the hot dog. Hot dogs frequently are called "all American," but the hot dog actually is German.

Sausages produced in Frankfurt, Germany, were introduced to American tastes in St. Louis, Missouri, during the 1880s. Harry Stevens popularized frankfurter sales at the

Polo Grounds baseball park in New York City. The term "hot dog," in fact is recent, and was coined by cartoonist T. A. Dorgan only in 1906.

SLIDE 50: Our seventh selection was wheat: the period 1910 to the eve of World War II.

Wheat fields in America, turning gold in the late afternoon sun --- amber waves of grain. Wheat in America has been transformed from hand cutting to mechanical harvesting. The American wheat belt beckons from Texas northward through Oklahoma, into Kansas, from eastern Washington state to central Montana. Wheat bread and wheat cakes, from pancakes and waffles to wedding cakes... wheat holds a special, prominent place in the American food pattern.

In this historical era of flappers, bath-tub gin, the Wall Street crash, and Great Depression, one event captured and mesmerized the world.

SLIDE 51: What was the last meal aboard the most famed luxury liner of all time. The following 10-course meal was served to first class passengers, April 14th, 1912, aboard the R.M.S. Titanic:

First Course: Hors d'oeuvres; oysters

Second Course: Consommé Olga; Cream of Barley

Third Course: Poached salmon with Mousseline sauce; Cucumbers

Fourth Course: Filet Mignons Lili; Sauté of chicken, Lyonnaise; Vegetable marrow Farci

Fifth Course: Lamb, mint sauce; Roast duckling, apple sauce; sirloin of beef, chateau potatoes; green peas; creamed carrots; boiled rice; Parmentier and boiled new potatoes

SLIDE 52:

Sixth Course: Punch Romaine

Seventh Course: Roast squab and cress

Eighth Course: Cold asparagus vinaigrette

Ninth course: Pate de foie gras; Celery

Tenth course: Waldorf pudding; Peaches in Chartreuse jelly; Chocolate and vanilla eclairs; French ice cream

SLIDE 53: When the United States entered World War I, the American public was only beginning to learn about differences between proteins, fats, and carbohydrates. American nutritionists urged the following: if Americans could be persuaded to obtain proteins from beans and pulses -- rather than from meat -- and if they obtained their carbohydrates from corn meal, oats, and grains -- rather than from wheat -- and if they could learn to eat fresh fruits and vegetables that were too perishable to send to Europe

-- then soldiers and civilians overseas could be supplied, and there would be no need for rationing.

In fact, a standardized diet of beef, potatoes, white bread and milk was served to American soldiers during World War I. This limited food pattern played an important role in the “nationalizing” of American food tastes, and ethnic diets changed dramatically as more Americans adopted a more traditional “British pattern.”

SLIDE 54: BLANK. After World War I America entered the decade of the Roaring Twenties. Things were good -- for a time -- and part of this era of optimism was global captivation and attention given to brave exploits, and none was more brave than Charles Lindbergh, the first aviator to fly solo across the Atlantic in May of 1927. Lindbergh took off with a sack of five sandwiches and two canteens of water. He described the sandwiches only as being made from “meat.” As he flew eastward, he delayed eating, believing he would be overcome by sleep and crash. If you read his diary carefully you will conclude that he was sleep-deprived even before he departed, and Lindbergh ultimately went almost 80 hours without sleep -- before and during his flight. He also became dehydrated, and hallucinated at one point and became so disorientated that he unconsciously reversed course 180 degrees and flew west for a period -- back towards North America -- until he caught his error. Now comes Ph.D. qualifying examination question: should he have eaten or not, and why? Well of course: he should have eaten all his sandwiches!

Here is a passage from Lindbergh’s diary, an entry made after he had made landfall, crossed the English Channel, and was over French territory:

Why, it’s past supper time! I untwist the neck of the paper bag, and pull out a sandwich... my first food since take-off... Bread and meat never touched my tongue like this before. One sandwich is enough...

SLIDE 54A Little did the world know or appreciate the events that would follow in the 1930s after Adolph Hitler became Reich Chancellor of Germany. The Nazi-sponsored Olympic Games were held in Berlin in 1936. What foods were eaten by the American athletic contingent -- a group that included Jesse Owens?

The signature food served to members of the American Olympic team was beefsteak, usually cooked rare or medium. American athletes also ate on a daily average -- three eggs, custard dessert, and drank 1.5 liters of milk. Their food choices also were characterized by white bread, dinner rolls, and fresh vegetables -- specifically spinach and salads. American Olympians were taught to avoid citrus fruits and to limit their intake of sugar.

SLIDE 54B: Still in the bread category, let me turn my attention to the singular food considered favorite by University students in 1999: pizza. The origin of pizza is obscure, and may have been invented in ancient Greece. The pizza that Americans recognize today, however, was not developed in Italy, but appeared first in 1905 in New York City. A dish that faintly resembles modern pizza was common in Roman times and called focaccia. The word pizza, in turn, comes from the Latin, picea, meaning -- the black ashes from the floor of the fireplace.

SLIDE 55: Our eighth food selection was potatoes: the era -- World War II, from 1941 to 1945.

Potatoes: prominent in peace and critical during wartime. Potatoes, whether baked or boiled, dehydrated or fried, have presented opportunities to American chefs for more than 200 years. American inventiveness created the potato chip, and what high-energy breakfast is complete without hash-browns? Nearly 460 million pounds of potatoes reach American markets yearly, and Americans on average eat 49 pounds of potatoes per year. No controversial "hot potato" here: potatoes are good high energy foods!

SLIDE 56: White potatoes were domesticated in highland South America, exported to Spain, and appear in European botanical accounts only after 1553. The white potato did not appear in North America until 1719, when it was introduced -- from Europe -- to New England by Irish immigrants. By 1762, white potatoes had become field crops at Salem, Massachusetts, but the first American cookbook potato recipes date only to 1857.

SLIDE 57: One of the most interesting American books to emerge during World War II was M. F. K. Fisher's classic work, How To Cook a Wolf, published in 1942. Fisher provided numerous suggestions that ranged from how to cope with rationing, to the storage of food in bomb shelters. Her writing style was witty, and designed to "keep the wolf from the family door." Fisher was an important educator who taught careful food planning. Her social observations were also sharp . . . she wrote the following:

Potatoes are one of the last things to disappear in times of war . . . they should not be forgotten in times of peace.

SLIDE 58: BLANK. World War II meant that tens of thousands of tons of food was needed for American soldiers. First came the C ration -- where the "C" stood for combat. The C ration was the first individually packaged meal produced for American soldiers. Another name for the C ration was the LLRP or long-life-ration-packet. An individual C ration consisted of six B or bread units and six M or meat units: a standard breakfast B-unit consisted of biscuits, candy, sugar, and coffee product, while standard M-units were meat and beans, meat and vegetable stew, and meat and spaghetti. Ask a World War II veteran what they thought of C rations! Yummy!

Then came the famous or perhaps notorious K-rations, items eaten by millions of American GIs during World War II. K-rations were named after Ansel Keys, whose University of Minnesota team was responsible for the basic research that made K-rations possible. K-rations were the first American military rations created specifically as individual breakfast, lunch, and dinner packages. While of arguable taste, K-rations were scientifically based rations, that provided a quality diet to American soldiers and their allies during World War II. Here is another Ph.D. qualifying examination question: argue the proposition that when confronted with equal technologies on the battle fields of Europe, Africa, and Asia -- the superior dietary quality of food served to the Allies was instrumental in winning vs. losing World War II. And consider the following philosophical corollary to the above premise: well nourished soldiers fight better than hungry or malnourished soldiers.

SLIDE 59: Before World War II urban Americans had grown accustomed to soft, canned foods - the "modern" way to eat vegetables. The backyard Victory Gardens of World War II, however, reminded Americans of the joys of eating produce -- fresh from their own garden. As a result, crisp, raw vegetables regained popularity and American food patterns shifted from canned products back to fresh produce.

SLIDE 60: BLANK. But just as millions of Americans were abroad fighting fascism, other Americans -- because of their name, appearance, and ethnic heritage -- were placed in internment camps. A number of poignant diaries document this dark period in American civil rights history. Here is a passage by Hatsuye Egami that identified the foods served at the Tulare Assembly Center where she was incarcerated in 1942:

At noon we have soup, rice, salad and perhaps beans. For dinner there is meat or fish, and cake, pie, or pudding... [When] I see the elderly meekly eating what is offered them... my eyes become warm.

Of all the potato products available today in 1999, none has more widespread appeal in terms of sales as the potato chip. This "best-selling" product has an unusual American origin, and the story goes something like this:

While dining at Moon's Lake House, Saratoga Springs, New York, a finicky patron repeatedly returned his order of french fried potatoes. Chef George Crum became enraged, sliced some of the potatoes paper-thin, returned the plate to the guest, who loved them, and the potato chip was born. From George Crum to WOW chips with olestra. The potato chip has come a long way.

Consider the following interview with Marie Haggerty, an Irish-American, that linked chicken, death, and potatoes:

Sundays we always had chicken; not so much roast chicken, but boiled or fried in different ways. I remember once when some of my family died, people came for miles around and it was a custom to put baked potatoes in the coffin.

Potatoes were only eaten boiled during the early 18th century in North America since they were thought to be toxic. Cooks assumed that boiling removed the toxins. During the late 19th and early 20th centuries, many Americans put hot baked potatoes in their pockets during winter to help keep their hands warm.

Frenching -- not in the kissing sense -- but in the culinary sense -- describes foods cut into narrow strips or rounds. In the culinary sense, frenching is not associated with France, therefore, french fries need not be capitalized. It may be of interest to know that the term, french fries, probably dates only to the 1920s.

SLIDE 61: Our ninth food selection was chicken, and how it characterized the cold war from 1946 - 1976.

A chicken in every pot; chicken strips, even Chicken Little. And for many of us who lived through the peak of the Cold War -- like Chicken Little -- we thought that the sky would fall any day. During the 1930s most chickens were raised in America for egg production. Fried chicken served at Grandmother's Sunday mid-day dinner was a rare, special treat. This custom changed after World War II when an elderly man named Sanders -- dressed in a white suit -- altered American food patterns forever. Today, Americans eat nearly 50 pounds of chicken annually. Who says one person can't make a difference?

SLIDE 62: BLANK. In our archival research of this era we encountered what we called the "doomsday diet," a chilling reminder of the Cold War. How do you think about the unthinkable, when the unthinkable is atomic annihilation? The Cold War placed a heavy burden on Americans: should blast and fallout shelters be constructed in the family backyard, basement, or both? What to do when a friend or neighbor knocks on the door and asks to be admitted to your blast shelter -- lots of fun with that one..... The bomb was coming and all kids my age knew it. We went through "duck and cover exercises" in grammar school. The bomb was real: and we knew it.

Is there anyone here today who can claim to have seen the blast or the light flash from a nuclear explosion? Well I have. I was a junior in high school in Santa Paula, California. My chemistry instructor offered me extra credit if I would get up, watch the blast on television, and write a report. I needed the points. The televised blast was scheduled for a Monday; it didn't go off and was rescheduled for Tuesday; it didn't go off and was rescheduled for Wednesday. And on that Wednesday morning in 1955, the television announcer went... 5..4..3..2..1.. and at about at 4:30 A.M. -- if I remember right -- the television screen went black and I remember just like yesterday -- the eerie light that

filtered into the room where my mother and father and younger brother were watching. A soft, bright daylight at 4:30 A.M.... and none of us spoke for a moment, until my brother, John, said "Gee, that was neat." Brother John made a career in the U.S. Air Force, then retired, entered theological seminary, and today is a minister in Vermont. The light that he and I saw that morning influenced us dramatically, and even in 1999 the memory of the light from that blast continues to shape how I lead my life.

Numerous survival manuals from the time of the Cold War and impending atomic attack provided food-related advice:

As an absolute minimum, a 90 day supply of food is recommended; 6 months is more realistic; 24 months would not be beyond the realm of common sense. The following conditions will probably prevail in the event of a nuclear attack. Fresh milk will be impossible to obtain and canned evaporated or dry powdered milk must be substituted. Fresh eggs will be scarce. Since chickens have great tolerance for radiation, fresh eggs will probably be one of the first staples available after a nuclear attack. Buy only foods that will be enjoyed because shelter occupants will be under emotional stress. When buying shelter food select proper size containers to eliminate leftovers that might be difficult to preserve. Store, prepare, and serve the following inside shelter facilities: bacon; corned beef hash; sausage; meat balls; chili con carne; [you can also store] tamales; chipped beef; salmon steak; crab meat; shrimp; clams; oysters; [try to stockpile] smoked bologna; country cured ham; au gratin potatoes; spaghetti; macaroni; buckwheat mix; canned cheese; [don't forget] tomatoes; brown bread; flour; relish; maple syrup; oatmeal; hot cereals; and baby foods as needed. Finally, it might be sensible to keep a few packages of vegetable seeds in the shelter for a do-it-yourself post-war project.

Cold War planners also designed emergency travel rations for Americans for use after atomic attack. Manuals offered tips how to prepare travel rations for use outside bomb shelters. Items recommended were: packages of dehydrated chicken soup; cans of boned chicken, chicken stew, and chicken à la king; cans of tuna, beef stew, baked beans, spinach, even canned hot dogs.

Americans of my age were shaped by two events that defined the Cold War: the Soviet satellite Sputnik launched in 1958, and the Cuba Missile Crisis of 1962. I was a sophomore at Berkeley when Sputnik was launched; I was a Lieutenant j.g. in the U.S. Public Health Service during the Cuba Missile Crisis. These were not good times.

During the Cuba Missile Crisis of October, 1962, the world teetered on the brink of nuclear war. Do you remember what you ate for dinner? Here is what President Kennedy ate.....

October 23rd, 1962: President and Mrs. Kennedy dined with friends at the White House on the following; Rockfish Souffle Ambassade, Breast of Pheasant St. Hubert, Wild Rice, Green beans aux Amandes, Salade Mimosa, Brie Cheese, Biscuit Glacee aux Peches, Petits-fours sec.

On October 27th, 1962, we found evidence of a specific late-night snack eaten at the White House by President Kennedy and his Advisor, David Powers. The foods included boiled chicken, carrots, potatoes, and squash.

SLIDE 63: Our tenth selection was edible greens and the period selected extends from 1976 into the next century to 2076.

Greens and salad vegetables are being munched and crunched by Americans to the tune of 23 pounds per year. Crisp salads, textured cress and endive, specialty lettuce, and a host of exotic greens regularly add flavor and fiber to American diet. Good taste and sound nutrition in combination. You say: "Please pass me the green stuff." But what do I do? Should I hand you a dinner salad, or a stack of American paper dollar bills? How food patterns have changed: do you remember a time before salad bars?

SLIDE 64: It is fitting to contemplate the last frontier.... specifically, veggies in space. Can humans travel to Mars and return? A manned journey to Mars is a 12 month round trip. What would astronauts eat on outward and homeward voyage? What would they eat on the Martian surface? The space shuttle is not designed to carry enough food to meet astronaut needs on the so-called MMM or Manned Mars Mission. One solution is to grow food aboard the shuttle. But what variety and kinds of food would be required? The solution is to select items that balance known human nutritional requirements. Meats cannot be carried to supply food for 12 months, so plants will be selected and grown aboard the shuttle. Such plant foods, however, must have specific characteristics. They must grow well in a hydroponics or a bio-regenerative life-support system where human feces, as well as urine and dirty water can be used to sustain plant growth needs. Species selected for such conditions must be quick-growing, and small at maturity. Experiments at Cornell already have been conducted on carrots, celery, chard, lettuce, rice, soy bean, sweet potatoes, and wheat.

SLIDE 65: Since plants would be the key components of the MMM, astronaut diet would be primarily vegetarian. But then we have the quotation from America's best known astronaut John Glenn, who on October 31st, 1998, said: "Food tastes much more bland in space." Accordingly, Mars-Mission planners have agreed that certain condiments, meat flavorings, spices and sweeteners should be carried aboard the shuttle to make the plant-based recipes more appetizing.

SLIDE 66: As we envision space and a potential Mars mission, let us return, historically to our beginnings and re-visit George Washington who also was a "friend" of salads. General Washington was not trained in medicine but was a keen observer of his troops' needs. He knew that edible wild greens improved health and relieved scurvy as seen in the General Order that he issued, dated June 9th, 1777.

As there is a plenty of common and French sorrel; lamb's quarters, and water cresses, growing about camp; and as these vegetables are very conducive to health, and tend to prevent the scurvy and all putrid disorders . . . the General recommends to the soldiers the constant use of them, as they make an agreeable salad, and have the most salutary effect. The regimental officer of the day [is] to send to gather them every morning, and have them distributed among the men.

SLIDE 67: Thomas Jefferson, 3rd President of the United States, kept detailed notes on what he planted in his gardens at Monticello. He was very fond of salad greens.

April 9th, 1767: Sowed 3 rows of celery, 2 rows of lettuce, 2 rows of radishes;

May 27th, 1767: Sowed lettuce, radish, broccoli, and cauliflower;

April 9th, 1777: Sowed radishes, lettuce, endive, and red mustard;

July 24th, 1777: Sowed spinach, endive, lettuce, cress, and peas.

SLIDE 68: During the late 19th century, the word salad referred to cooked salads, whether hot or cold slaw, potato salad, or sauerkraut. Fresh green salads remained the exception well past the turn of the century. The shift toward green salad was partially due to the development of refrigerated rail cars which could bring perishable greens to market.

SLIDE 69: And then American technology produced a lettuce for all seasons. Iceberg lettuce, developed in 1894, had a compact head, due to its many leaves. It received its name because it remained crisp and cool as an "iceberg," even in summer. Previously, lettuce varieties were seasonal, highly perishable, and available in local markets only during Spring or Fall. After introduction of iceberg lettuce, and marketing by railroad, Americans could have their salads throughout the year.

SLIDE 70: In the twenty years since the end of the Vietnam War, more than 1.5 million Southeast Asians resettled in the United States. These new immigrants have made positive, visible changes and contributions to their neighborhoods by cultivating traditional vegetables and herbs in vacant city lots across America, from Sacramento to New York. And rising from the ashes of the Watts Riots, men and women of good will have turned their attention to gardening. In the early 1990s, Crenshaw High School students in South Central Los Angeles turned vacant lots into organic gardens. This inner-city project has continued to provide business training and experience for young students, and profits from the sales of community-grown produce have funded college scholarships.

SLIDE 71: BLANK. In conclusion.... what goes around.....comes around. Lettuce was first domesticated and grown as a food crop in ancient Egypt. Paintings and carvings inside ancient Egyptian tombs depict lettuce plants associated with Min, the god of vegetation and procreation. In ancient times the leaf was eaten as today, but lettuce seeds also were used. Lettuce seeds were pressed to extract oil, or crushed and used to prepare bread. From ancient Egypt to contemporary California.... lettuce is green gold

and represents one of the ten important foods that has characterized American food patterns through the ages.

Finally, some of you in the audience today may live to see the following:

Vaccine and cure for AIDS;
First woman elected President of the United States;
Powerful earthquakes leveling portions of California or Missouri;
Global population stabilized;
Atomic fission developed;
Reduction of poverty and world hunger;
Human colonies on the Moon and possibly on Mars;
First human born in a space station; and
The American Tercentennial celebration.

But I also predict that in 2076 -- when some of you here today will be alive -- remember you heard it from me: whether or not you dine on Swanson Food Cubes containing all the nutrients known to mankind; whether or not you drink non-alcoholic beer laced with ginseng, garlic, and ginkgo biloba extracts that eliminate hangover; whether or not you snack on non-caloric pizza or soybean hot-dogs smothered in vitamin enriched catsup..... beef and pork; chicken and turkey, wheat and corn, beans and potatoes, salad greens, and apple pie will still be American food favorites!

THANK YOU.