

THE ALL AMERICAN ICE CREAM PARLOR

J.R. Harlan

Professor Emeritus, University of Illinois, USA.

RESUMEN: Menu: Sabores: Chocolate, Vainilla, Piña, Fresa, Mirtillo, Arándano, Papaya, Guayaba, Granadilla, Aguacate, Chirimoya, Lucuma, Lulo, Pepino, Guanabana, Capuli(n), etc. Frutos secos: Cacahuete, Anacardo, Nuez de Brasil, Pacana, Nuez negra, Piñón, Nuez americana, etc. Decoraciones de la mesa: Zinnias, Caléndulas, Fucsias, Dalias, Salvias, Cosmos, Nardos, Cañacoros y otras ornamentales utilizadas por los indios americanos. Los americanos nativos producían comida para los dioses y colores para deleitar la vista, y éstos se han extendido por todo el mundo.

PALABRAS CLAVE: Biodiversidad, alimentación, frutos americanos, vainilla, chocolate.

SUMMARY: Menu: Flavors: Chocolate, Vanilla, Pineapple, Strawberry, Blueberry, Cranberry, Papaya, Guava, Passionfruit, Avocado, Cherimoya, Lucuma, Lulo, Pepino, Guanabana, Capuli(n), etc. Toppings: Peanut, Cashew, Brazilnut, Pecan, Black walnut, Pinion nut, Hichory, etc. Table decorations: Zinnias, Marigolds, Fuchsias, Dahlias, Salvias, Cosmos, Tuberoses, Cannas, and other ornamentals developed by the American Indians. The Native Americans produced food for the gods and colors to delight the eye, and gifts have spread widely around the world.

KEY WORDS: Biodiversity, food, American fruits, vanilla, chocolate.

We are here celebrating the great watershed of plant exchange between the Old and New Worlds that began 500 years ago. The major social effects are obvious: sugar cane to the New World with the slave trade that followed, potato to Europe with a consequent population explosion and famous famines to follow. Wheat to North America and maize, manioc, cacao, peanut, and rubber to Africa, coffee and banana to tropical America, and so on. A feature of the grand plant exchange that might be lost in the historic panorama is the contribution of the American Indian to be delights and pleasures of this world.

The attached menu (Fig. 1) is not complete and does not represent all the contributions, but surely everyone can find some favorite fruit, nut, or flower on the list. In total, it is nectar for the gods, ambrosia for the self indulgent. I shall briefly annotate the menu.

The first on the list, chocolate, may be the most popular flavor world wide, used not only

for ice cream but in candies, icings on cakes, Napoleons, and other sinful pastries, in beverages both alcoholic and nonalcoholic and in mole dishes perfected by Mexican chefs. Chocolate held a special place among Mesoamerican Indians. The beans were used as currency and to pay tribute; a beverage beaten to a froth was consumed by the nobility in golden goblets, and FERNÁNDEZ DE OVIEDO (1944) adds an interesting note. Writing of Nicaragua, he inscribes Lib. XLII Cap I: "Hay mugeres publicos que ganan é se conçeden á quien las quiere por diez almendras de cacao de las que se ha dicho ques su moneda..."

Indeed, chocolate is not so innocent as some people belive. "Mucilage, polyphenols, tannins, cyanogenic compounds and the purines caffeine and theobromine have been found in this species." (SCHULTES & RAFFAUF, 1990 :447). Infusions of leaves and bark are used

medicinally in Colombia. People can be addicted; they are called chocoholics.

The commercial vanilla (vanillin) today is synthetic: the true vanilla is expensive and the supply inadequate to satisfy the demand for this popular flavor. The true vanilla comes from the pod of an orchid which requires a special insect for pollination, and when the vine is cultivated outside the range of the pollinator, pollination must be done by hand, and the crop becomes labor intensive and expensive. Even so, pods are in demand for their delightful scent and flavor.

The pineapple was a fully domesticated plant in the sense that it was sterile and completely dependent on man for survival when Europeans arrived in the Americas. It was widespread in tropical South America and the Caribbean at the time of contact and quickly appreciated by Europeans. Those of us who must buy fruits cut prematurely and softened (not ripened) in the store or warehouse cannot appreciate the magnificence of a fruit brought to perfection on the mother plant. At least once in a lifetime one should experience a fully ripe, sweet, juicy, aromatic pineapple freshly harvested on a hot, tropical day.

Some Europeans might object to the claim that the strawberry is American, and I note that in the deck of cards printed for this Congress that it is claimed by Europe. True, there are European strawberries, mostly diploid and some tetraploids, and the wild strawberry has an enchanting flavor and romantic implications. But, the large-fruited commercial strawberry is an octoploid and all American. Basically, there are four strains contributing to the modern fruit, two from eastern North America, one from beach dunes of California and one from southern Chile. The large fruitedness is primarily due to the Chilean race which was domesticated by local Indians. Early cronistas commented on the size and flavor of the fruits being brought to market.

The blueberry is a popular fruit in North America, perhaps used more for pancakes,

waffles, pies and pastries than for ice cream. The cranberry is also North American, popular as a sauce for feast days and as topping and short cake. The other fruits are local specialties as ice creams scattered through Latin America. They are not unimportant but none has the widespread popularity of the first four on the menu.

The peanut or groundnut is popular all over the world as a snack food. It is also one of the most important food/industrial crops on the world scene. The oil is used for cooking, in margarines and soaps; the cake is fed to livestock and the shells are used for insulation.

The cashew is recognized as an elite among nuts with its fine, mild flavor and crisp texture. The swollen pear-shaped pedicel is fleshy, edible and the juice produces a drink, "cajado" in Brazil. While there are many plantations, a substantial production still comes from wild trees in Amazonia. Leaves and bark are used in local medicines and an oil extracted from the pericarp used in brake linings, clutches, etc. The tree also produces an indelible ink.

The pecan (*Carya illinoensis*) is native in eastern North America and southward to Central America. It was intensely exploited by the Woodland Indians, but not domesticated until mid-19th century when people of European extraction began searching the forested bottomlands for trees with large nuts, thin shells and fine flavor. Bud wood was taken from selected trees and grafted onto seedlings, resulting in instant domestication, since the clones do not reproduce themselves. The so-called paper shelled pecan was popularized, and is now produced in many orchards from Illinois to Texas and on into Mexico. There are some 500 or more named cultivars, mostly selections from wild populations and substantial production is still harvested from wild stands.

The Brazil nut, *Bertholletia excelsa* is produced in large, woody capsules, which are something of a hazard when falling from one of the tallest trees in Amazonia. The capsules are

picked up after falling and split open with an axe. Most of the production still comes from wild trees of the rainforest.

Black walnut, *Juglans nigra*, is esteemed for its fine intense flavor, but exploitation is limited because it is a tough nut to crack. The shell wall is thick and the yield of nut meat is much less than that of the Old World walnut. Also, the product is likely to be in small crumbs because of difficulty in extraction. On the other hand, a small amount of meat will flavor a cake or a large volume of ice cream. Shelled nut-meats are expensive, but many believe worth the price. A durable brown dye is extracted from the outer husk, and the wood is considered the finest in North America for cabinet and furniture making.

The piñon pine, *Pinus edulis*, produces a nut rather like the Old World *P. pinea*, perhaps a little smaller and thinner shelled. It is used in the same way, eaten raw or roasted as a snack, as flavoring in cakes, cookies, ice cream, pilaf, paella, etc. The tree, however, is very different in appearance from the tall, stately, umbrella-shaped stone pine of the Mediterranean and Near East. The American piñon is often gnarled, shrubby and shows signs of struggling in a difficult environment. Young cones and cambium are also edible.

The American hickories are of two kinds, the shagbark (*Carya ovata*) and the shellbark (*C. lacinosa*). They are components of the Eastern Woodlands ranging from Quebec to southern Ontario and southward to Florida and Texas. The shellbark is found more in bottomlands and the shagbark on uplands. There are selected cultivars of both, but as with the pecan, these are recent developments. Wild nuts were important in the economy of the Woodland Indians, who crushed the nuts and extracted oil in quantity.

The American beech, *Fagus grandiflora*, produces nuts that are small but sweet and nutritious. They are not exploited much on a commercial scale, but are locally available. The

Indians made much use of them and beech mast was the staple of the passenger pigeon, once one of the most abundant birds in North America, but now extinct because of destruction of the beech forest.

As to the ornamentals, it is clear that the Mesoamerican Indians were very fond of bright, dazzling colors. Zinnias, marigolds, dahlias, salvias, cannas all have the most brilliant hues among domesticated flowers. The fuchsia may be brilliant red, but is usually more subdued. The form and grace of the flowers, however, are universally appealing. The tuberose, of course, touches the sense of smell as few flowers can. It can be overwhelming. On the whole, the American Indians were not ones to hold back; they went all out in their love of flowers.

The cronistas of the conquest of Mexico were much impressed by the fact that whole barrios of the city of Tenochtitlán were devoted to flower growing and vending. But, the flowers were not only for ornament and pleasing aromas; many were used medicinally. The marigold, *Tagetes*, is highly aromatic and has the reputation of controlling nematodes and, perhaps, other pests of the garden. It was used medicinally by the Aztecs and does contain some alkaloids. In a curious way, it has become a sacred flower in India. Garlands of marigolds are used to decorate holy shrines, tombs, temples, and are featured in religious festivals. The orange-yellow color may be part of the reason as well as the construction of the many-rayed flower. It is still used in local religious celebrations in Mexico as well.

This gift of delights, of flavors and textures and blazing colors and lovely scents is, I feel, underrated in the exchange of plants between the Old and New Worlds. Were the contributions as sweet and gentle as the package suggests? Well, it is said that some 10,000 human beings were sacrificed yearly to the gods in and around the Valley of Mexico. A bloody business and the blood red flowers were,

no doubt, incorporated into the rites as well as the blood red amaranths (bledos).

But, do I dare mention the auto-da-fés in the Plaza Mayors of Spain, the excesses of the Spanish inquisition? Do I dare mention the holocaust, the millions starved to death by Stalin in his collectivisation program? Can I call attention to some 40 million humans sacrificed in World War II, or what is going on now in China, the former Yugoslavia and former Soviet Union. Scripture tells us "Do not judge, or you too will be judged" Matt. 7:1. It may be that

our American Indian benefactors were the gentle ones after all.

BIBLIOGRAFÍA

- FERNÁNDEZ DE OVIEDO, G. (1994-1945). **Historia general y natural de las Indias, Islas y Tierra Firme del Mar Océano**. Real Academia de la Historia. Madrid.
- SCHULTES, R.E. & RAFFAUF, R.F. (1990). **The healing forest: Medicinal and toxic plants of the northwest Amazonia**. Dioscórides Press, Portland, OR.