

## **THE AVOCADO IN THE PREHISPANIC TIME AVOCADOS IN THE PREHISPANIC TIME**

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The indigenous cultures of old America developed a vast knowledge based on the observation of their environment, obtaining a wide, precise and appropriate knowledge from the available resources including avocado. The legacy and inheritance of using the avocado by our prehispanic cultures is here discussed as a fundamental element to encourage the culture of the consumption of avocados. A review is made on the multiple uses the diverse Meso-American cultures gave to the avocado before the arrival of the Spaniards in order to maintain in our society the ancestral forms of use of this fruit in the different aspects of the pre-colonial life such as food, health and religion; many of which are still present and we practice them without being generally conscious that they come from our ancestors.

Key words: indigenous cultures, consumption of the avocado, feeding, health, religion.

## **EL AGUACATE EN LA ÉPOCA PREHISPÁNICA.**

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Las culturas indígenas de la América antigua desarrollaron un vasto conocimiento basado en la observación de su entorno de modo que desarrollaron un conocimiento amplio, preciso y adecuado de los recursos a su alcance, entre ellos el aguacate. Se aborda el legado y la herencia del uso del aguacate por nuestras culturas prehispánicas como parte fundamental del fomento de la cultura del consumo del aguacate. Se hace una revisión de los múltiples usos que las diversas culturas mesoamericanas daban al aguacate antes de la llegada de los españoles con el objetivo de mantener presente en nuestra sociedad las formas ancestrales del uso de este fruto en los diferentes aspectos de la vida precolonial como la alimentación, la salud y la religión; muchas de las cuales aún perduran y las practicamos sin la conciencia, generalmente, de que son conocimientos de nuestros antepasados.

Palabras clave: culturas prehispánicas, consumo del aguacate, alimentación, salud, religión.

## **INTRODUCTION**

Each human group develops a particular cosmovision that contributes to forge the cultural identity is defined as the conscience lived on collective property in relation to an historical or mythical past and that can be projected in happening common possible or utópico that it are expressed through participation indicators (territorial, biogenetic, linguistic, economic, religious, cultural and political), (Raveau, 1984).

The avocado is a fruit that has its origin in Mesoamérica, region that includes today to which is Mexico, Guatemala, El Salvador and Honduras. Its scientific name is *Persea americana* Mill., and belongs to the family of the Lauraceae.

The oldest cultures of Mexico had to be the guaje and the pumpkin, whose older rest date from the end of Superior the Cenolítico period. Later beans, maize, maguey, nopal, yucca, tomato, avocado, amaranth, chile, zapote, plum and cotton were domesticated. The agriculture of the maize has special importance, bases of the mesoamericana civilization.

The word avocado comes from nahuatl ahuacatl, which also significa testicles. The Spaniards did of ahuacatl the words aguacata and avocado, a this last already well-known word, that he designated to the lawyers formerly. In Portuguese he knows himself like abacate, in German knew itself like fruit mantequilla. In South America is known it like palta (Peru, Chile, Uruguay, Bolivia and Argentina). The Spaniards mentioned this fruit for the first time in 1519 in writings.

One knows that the avocado was a very important fruit, and possibly the tree was sacred, because the myth existed of which their fruits contributed to give strength to the man. In general the Aztecs, like other indigenous groups, thought that the form of a fruit, a plant or until of a mineral contributed to their properties: the outer form determines the inner forces. Of this form, as they saw form him of testicle the avocado, when eating it had it to transmit its strength to the companion at table testicles. On the other hand, the leaves and the crust were recommended by the hierberos like estomaguicidas and antidiarréicos. In addition, epicarpio, macerated or in dust, is still used like vermifuge in the popular medicine, that is to fight to the lombrices.

## **MESOAMERICANO ENVIRONMENT**

The mesoamericanas earth are located between 10° and 22° of North latitude. The central zone of Mexico, the isthmus of Tehuantepec, the Yucatan Peninsula belong to the region; Guatemala, Belize, El Salvador

and the pacific coast of Honduras, Nicaragua and Costa Rica until the gulf of Nicoya. One is a complex combination of several ecological systems. Coe (1996) groups the different high earth niches (those located between 1000 and 2000 msnm), that are known like plateaus; and low earth, with heights near the level of the sea, that do not exceed the 1000 meters of altitude. In the first group it is possible to emphasize his great climatic diversity, that goes from cold climates of dry mountain to the tropical one. They predominate, nevertheless, the climates temperings with moderate rains. In low earth the subtropical or tropical climates predominate, like in the coast of the gulf of Mexico and the Caribbean Sea.

Some of valleys of high territories of Mesoamérica have fertile grounds with agricultural vocation. So it is the case of valleys of Oaxaca, the one of Puebla-Tlaxcala and Mexico. Nevertheless, its intermontana situation prevents the passage of clouds. This situation is specially critical in hot land valleys of the Mixteca, perhaps most parched of high earth. In addition to the rain shortage, few hydric currents, of reduced volume exist. The first archaeological investigations in Mesoamérica raised that the climate had to be more benign in the past. Nevertheless, with the passage of the years and the deepening of the knowledge on the region, one knows that the climate did not have to be very different from which is now, although the ecosystems show a degree of important wearing down, caused by the human activity. Good part of high earth shows evidences of an early deforestation and several species have disappeared of their old habitats.

Therefore, the high territories of Mesoamérica, although are not extraordinarily rich, were too poor either like preventing the development of the high agricultural cultures of the pre-Hispanic antiquity. In fact, its situation is similar to the one of other regions of the world where early civilizadores processes happened, like the north of Peru, or the valley of the Indo river, in Asia. In these sites, like in Mesoamérica, the human beings had to learn to take advantage of to the maximum the resources of which they arranged in his ecological niches. The mesoamericanos of high earth, like agricultural towns, learned to store water and to lead it from their sources in mountains to territories of work. Perhaps most characteristic of the agricultural techniques of Mesoamérica it was the culture in chinampas, developed in the lakes of the Tarasca plateau and specially in the valley of Mexico, where some zones of chinampería in Xochimilco are conserved. In addition, they had to learn to count the time, since the period in which could seed it was included/understood between two seasons that threatened the good term of the harvests of the main culture - the maize -: the dry and hot season of beginning of spring and the winter frosts.

Very different it was the situation in low earth. Specially in the Southeastern of the coast of the gulf of Mexico, rains are too abundant. The tropical forests of thick vegetation covered good part with the coastal plains, and this represented an obstacle for the development of agriculture. In these sites, as much the vegetation as the excess of water represented a problem, for that reason, the old mesoamericanos devised drainage systems, of which today rest in the Chontalpa can be observed tabasqueña, where the calls subsist chontales ridges.

Since Mesoamérica is fragmented in ecological niches very reduced and diverse, no of the societies that inhabited it in pre-Hispanic times was self-sufficient. By it, from the last centuries del Archaic, previous period al Preclásico, the towns of the region specialized in the operation of certain abundant natural resources and soon they established networks of commercial interchange that corrected the deficiencies del environment. The towns of the West, for example, specialized in the agricultural production and of ceramics; the oaxaqueños produced cotton and cochinilla; from the coasts salt came, dry fish, marine shells and pigments like the purple; from low territories of the Mayan area and the Gulf cacao was obtained, hemstitches, skins of jaguar, precious birds like the quetzal or guacamaya; the center it left good part of the obsidian that used in the manufacture of weapons and tools.

Nahuatl was spoken by innumerable towns of Mexico pre-Columbian, established mainly in valleys of Mexico and Toluca, but with ramifications that arrived until Central America, town that exerted hegemony was Aztec, which it had extended his territorial dominion by extensive zones in which propitious areas for the culture of the avocado were included/understood, where the trees were similar but the fruits presented characteristics that differentiated them. (Sánchez *et al.* 2001)

## **ARCHAEOLOGY OF THE AVOCADO**

The avocado (*Persea americana* Mill.) he is original of the new World and it was used like food between the population in the regions where one took place. It had interest in anahuac and it was favorite fruit of the inhabitants of Mesoamerica. (Williams, 1977 mentioned by Sanchez *et al.* 2001).

The avocado had its cradle in the high parts of the center and Southeastern of Mexico, and high parts of Guatemala (7,000-5,000 bC.), in where it is also considered like the area where its domesticación was carried out. But it was several millenia before this wild variety was cultivated. Direct evidence of the domestication in the Mayan Classic period of the maize, pumpkin exists, yucca, cotton, avocado, sweet potato,

and the agave, which is sustained by rest of plant in the archaeological and linguistic context that give validity him to this list of cultures (Turner y Miksicek, 1984).

The oldest evidence of the avocado consumption was found in a cave in Coxcatlán, region of Tehuacán, Puebla, Mexico, dated between years 8,000-7,000 bC (Smith, 1966). Nevertheless, Storey *et al.*, 1986; Schieber y Zentmyer, 1992 (mentioned by Sanchez,1999) they report that archaeological tests that exist they indicate that the avocado was consumed by the native towns almost 10.000 years ago. Its culture would have begun possibly does about 6.000 years.

In the city Pre-Inca de Chanchan, the archaeologists have around discovered a great jar of water, old fashioned 900 bC, in the form of an avocado. Archaeologists in Peru found seeds of domestic avocado buried with momias Incas who date up to 750 bC. and are evidences of which the avocados were cultivated in Mexico 500 ago bC.

The plants of American origin that facilitated the historical process of the sedentarism are of the greater diversity and use: nutritional, textile medicinal, tintoreas, of basketwork, etc. Among them it is worth to mention in the first place the maize, around as one articulates a good part of the nutritional and cosmogonic culture of Aztecs, Mayan, Caribbean, chibchas, quechuas, etc., but also they are the potato, cacao, avocado, cotton, pineapple, pumpkin, guayaba, Peruvian bark, tomato, pepper, kills, tobacco, cocaine, peanut, higo, caimito, beans, sweet potato and the yucca... for the Aztecs the economy was based on the maize and all the men, with exception of the high religious and military civil employees, had to participate in the agricultural task.

The old cultures also counted on a good knowledge about the avocado and of its variants, as it is in the Florentino Codex, where are mentioned three types of avocado, that according to its description; "aoacatl" could be *Persea americana* var. *drymifolia* (Mexican race), "tlacacolaocatl" to *Persea americana* var. *americana* (Antillean Race) and "quillaoacatl" to *Persea americana* var. *guatemalensis* (Guatemalan race).

On the other hand, in the Mendocino Codex they exist hieroglyphic where the Ahuacatlan town is indicated ("place where the avocado abounds") that is made up of a tree with set of teeth in the stem ("ahuacacahuitl") and "calli" that means town or place. In the case of the tribute matriculation that occurred to the Aztec empire and that was used to identify the merchandise of the town of Ahuacatlan were "ahucacahuitl" single (Fig.1).



Figure 1. To the hieroglyphic left representing a populated place with Ahuacatlan, that means place where the avocado abounds and to the right matriculation of tribute used by the town of Ahuacatlan to differentiate sent merchandise as Aztec Empire like tribute. Drawn from the Mendocino codex (Taken from: Sánchez *et al.* 2001).

A great cosmovision permeated all the activities, until the point that are not possible to separate no natural event, climatologic, social, soldier, disease, agriculturist, etc., from the religious perception from which the life in Mesoamérica was included/understood. The religious celebrations and celebrations were constant. (Villaseñor *et al.*, 2002)

The species of *Persea* have been coming using for thousands of years not only by their fruit in the human feeding, but also the trees like firewood have been used, in the construction of houses, elaboration of work tools, like tree of shade, food of domestic animals, condiment and medicine (Bergh y Ellstrand, 1986; Gama y Gómez, 1992, citados por Sánchez, 1999). Other recent uses but have been the elaboration of teas and wines, oil to cook and cosmetics (Schroeder, 1990; Bergh y Ellstrand, 1986; Bergh, 1992 citados por Sánchez, 1999).

## THE AVOCADO IN THE PRE-HISPANIC FEEDING

During the pre-Hispanic time, the indigenous towns that lived the territory mainly had a diet based on vegetables. Of them it is necessary to indicate that there is a species of trinity that was common to many of them from at least year 3000 bC., is the maize, bean and chile.

Great mesoamericanas cultures, were fed materially with these three fruits but they associated them to other species of nonsmaller importance, like the tomato, the cacao, the avocado, the pumpkin, the nopal, divined all of them in the figure of Chicomecóatl, names nahua of the mesoamericana goddess of the maintenances.

A form of preparation and consumption of the avocado like protagonist, from the pre-Columbian time to the present time, is guacamole, the origin of this word comes from nahuatl *ahuacamolli*, that translated means soup

or sauce of avocado, the one that accompanies a great number of subjects of gossip and that is irreplaceable to savor many of them.

In elaboration of tamales (of náhuatl tamalli that means surrounded), indeed its envelope can be with leaf of maize, leaves of banana tree, leaves of avocado, accessible rind of tree and other nontoxic leaves. Most common they were the maize leaves, leaves of banana tree and avocado. The Aztecs contributed to knowledge and products of great value for the improvement of the feeding, as well as for the delight of paladar: bean, cacao, maize, hemstitch, tomato, potato, avocado, are articles that have become nutritional base in most of the world. In its kitchen it had, a great variety of subjects of gossip. The Aztecs were people of "good paladar" and they used the condiments appropriately, being his comparable taste to the one of the most refined gourmet. In his tables, they appear the preparations of fruits with "zapotets", plums, "camotli" (sweet potatoes), "ohuácatl" (avocado) and many other fruits.

According to Elizondo (2007), the pre-Hispanic kitchen occupies an important site and popular in the gastronomy because it became without fat, until the Spaniards arrived and then he became racially mixed kitchen that already contained it. Because the pre-Hispanic kitchen only handles three terms - to the steam, spanish stew and to the plate -, it is an important element that must remain alive, because some is without a doubt a culinario and cultural bequeathed invaluable.

### **THE AVOCADO IN THE PRE-HISPANIC HEALTH**

The mesoamericanos towns have generated a great set of knowledge relative to the medicinal properties of the plants. In the pre-Hispanic world the disease was product of a corporal imbalance, between the duality of the vital elements: the heat and fried, the light and the dark, dry it the humid thing, above and down. In this cosmovision, the medicine took care to help the patient to restore that balance that already was it lost. The medicinal plants were a resource of which the in habitants of Mesoamerica helped themselves to look for the cure their diseases. These plants were used of different ways, like ointments, to alleviate upheavals through the skin; like pocimas, vaporizations, etc.

The advantage of the natural resources for the health included, in addition to medicinal treatments, practical of hygiene, taken care of and to embellish of the human body. In 1552 a small manuscript was elaborated in the school of Santa Cruz in Tlatelolco of the city of Mexico that takes by I title of *Libellus of medicinalibus indorum herbis* (Booklet of the medicinal plants of the Indians) would know four centuries like Badiano Codex later. In this work of it describes the medicinal use of more than 150 original

plants of Mexico and that were used in the pre-Hispanic medicine. The indigenous medicine grouped the diseases according to an anatomical order: of the head on the feet. Still during the first one hundred years of the colony, the use that the Indians did of some medicinal plants associated with idolatry acts, already that the native treatments conserved rituals and practices of the previous religion.

Of the avocado from that time the rind of the seed, the one of the fruit or the leaves in preparing have been used that is taken in uninformed during three or four days expelling intestinal parasites. Also, in gynecological problems, cólicos menstrual, to facilitate the childbirth and to increase milk maternal, the cofoundation of the leaves is recommended. For the diarrhea, stomach pains and bile, preparing of boiled leaves of avocado with manzanilla, mint, cane and a little bicarbonate as use water. Equal he has been effective, through crushed of leaves or seeds mixed with oil of eatable ricino or, to avoid the fall of the hair, salpullido or dyes. In addition, the leaves are continued using against the headache and cooked they are used to mitigate the inflammation of stomach, liver, matrix, ovaries and belly. Him it has been considered aphrodisiac because it increases the tonicity of the reproductive organs, in addition, antiarthritic, against the pain teeth, for the scare, healing tenifugo, emenagogo and healing.

The oil of the seed serves against the tinea, and its dust, after roasted, in dose of a gram taken in the morning in uninformed, favors the treatment of disenteria.

Like part of the embellecimiento of the human body, the mesoamericanos elaborated pastes or creams with avocado done with the pulp of the fruit and milk, previous washing with water in the case of the parched skin. In resistance for the cases of skin with excess of fat they used the juice of sábila, whose penca they pelaban, his pulp rubbed it in the face and soon they cleaned with water. Also they elaborated pomada of avocado leaves that used to give massages.

The avocado seed is astringent and contains a milky juice, that when it is exposed to the air blushes and blackens gradually, reason why can be used like indelible red.

## **CONCLUSIONS**

The avocado is a mesoamericano fruit, as it demonstrates the discovery to it of fossil rest as well as the evidences of human consumption that date more likely from do 7 to 8 thousand years bC.



It was a highly popular fruit in the diet of the pre-Columbian cultures.

The seeds had a great value for the inhabitants of our country, between these also is the one of the avocado, that served to dye.

The mesoamerican towns knew to recognize and to take advantage of the nutrimental and medicinal properties the avocado.

The rescue and promotion of the ancestral uses of the avocado enrich the culture gastronomical, nutrimental, and medicinal of the present societies.

The knowledge and diffusion of the forms of consumption of the avocado by our ancestors contribute to forge the Latin American cultural identity.

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