

*Medical and nutritional beliefs of lower-class inhabitants of Guatemala City are reported. Many rural folk beliefs still survive in the urban environment, even though new ideas have been adopted from the middle and upper classes. In some instances there has been an amalgamation of the new and the old, new practices and modern terminology being applied to or incorporated into the older patterns.*

## **BELIEFS AND PRACTICES CONCERNING MEDICINE AND NUTRITION AMONG LOWER-CLASS URBAN GUATEMALANS**

*Nancie L. Solien de González, Ph.D.*

THIS paper attempts to describe current medical and nutritional beliefs and practices among lower-class urban Guatemalans. A study based upon questionnaires and intensive interviews was conducted in 57 lower-class Ladino\* families living in Guatemala City and its immediate environs. The majority of the samples studied were born in rural areas and had moved to the city in early youth. The sophistication of urban life has impinged upon this group in many ways, but most of their basic values remain similar to those of the folk societies from which they have sprung.

### **Characteristics of the Group**

The persons observed are completely dependent upon wage labor for a living. None own land upon which they might plant crops, and although most have a small space near the house in which a garden might be planted, none do so for various reasons, the most important being lack of water. In addi-

tion, vegetables, the only items for which the available space might be adequate, form a small part of the total diet and are relatively cheap. Therefore, it is not worth their time and effort to plant such gardens. Although some of the families keep a few chickens, ducks, and pigs, these are relatively rare and serve as a kind of insurance against emergencies when cash is desperately needed.

Many of the women make and sell tortillas or candies to supplement their husbands' incomes, and a few work by the day as domestics or take in laundry. One woman makes cigars and another wraps firecrackers on consignment for local factories. But for the most part, these families are dependent upon the money brought in by the men, who have a variety of occupations. The highest in the wage scale are chauffeurs, weavers, and tailors. The majority work as day laborers at anything they can find, and many reported they worked only irregularly. No family reported an income of more than \$80 per month, and this figure was quoted by the wife of a policeman, whose house and obvious

\* Persons of Latin, as opposed to Indian culture. See<sup>1</sup> for definitions and discussions.

standard of living were somewhat better than that of any other family encountered. Incomes of some families are also supplemented by charitable donations of food and/or medicines from churches and public health services.

Literally all the necessities of life, as well as the luxuries, must be purchased. Most of the families are heavily in debt to a small local store, from which they buy all foods (except meat and milk), as well as soap, candles, some medicines, and various household items such as brooms, needles, thread, and the like. Clothing is usually purchased in the center of town, either at one of the large markets, or at cheap general stores. Some articles are ordered from local tailors and dressmakers. Nearly all families must buy water daily from the few persons in the community who have wells. I encountered only one family which had its own well. Only one house visited had electricity; the others depended upon candles or kerosene lamps for illumination. Cooking is done over an open wood fire built on top of an adobe platform—a typical Ladino cooking arrangement.

Meat markets are plentiful, and meat is available daily to those who can afford it. There are several dairies which make door-to-door deliveries in the area. The people supply their own bottles or containers, and the milk is ladled out to them from large cans. A few families reported using powdered milk, which is bought in one pound cans from the small stores. Occasionally a woman reported doing the bulk of her shopping at one of the large city markets once a week, but the majority are unable to buy in this more economical way because they never have enough cash on hand. They are therefore dependent upon the credit offered by the small "corner stores." Most shop throughout the day, running out several times to obtain what they need. Convenience and saving the 10 cents round trip bus fare

to the larger markets are also factors which determine where these women buy. Because incomes vary tremendously from week to week, and even from day to day in most cases, expenditures also vary. It was always extremely difficult, therefore, to make an estimate of the household's financial status.

People in this social class are rarely able to eat as they would really like. They are aware of and place great value on those items eaten by upper classes in Guatemala, but their actual consumption seems to vary little from that of the poor rural Ladinos. The basis of the diet is tortillas, most often made by the housewife, but occasionally purchased. Bread is also consumed by most families at least once a day. Aside from tortillas, black beans and rice are the standard fare; noodles or macaroni are occasionally used, more as an accompaniment rather than a substitute for the rice. Beets, cabbage, güisquil (*Sechium edule*), güicoy (*Cucurbita pepo*), and green beans are liked and eaten in small amounts two to three times per week. Tomatoes and onions are used more frequently, primarily as flavorings for rice and meat—often in the form of a sauce called "chirmol." On the average, meat is consumed about once a week, each family member receiving from two to three ounces of edible meat. Most families with children want to include milk in their diet, and in some cases they will sacrifice to buy it for the children, but rarely does a child receive more than one glass per day either as a supplement to the breast or as the only source of milk. A few families reported that they used Incaparina\* as a gruel for young children. In all cases they had heard of this vegetable protein mixture through the health center in their area. Pregnant and nursing women often described milk as a food they should have, but which most often

\* A low-cost vegetable protein mixture developed by INCAP.

they were unable to afford. These people like eggs very much, and those who have chickens usually consume their hen's produce, rarely more than one or two eggs per hen per week. Many times, on the other hand, the 5-6 cents for which an egg may be sold makes it desirable to trade the eggs at their small local store for other items more desperately needed.

A large amount of money is expended by these families for doctor's services and for "medicines" of various types. Most of these are patented syrups and pills, but they also purchase antibiotics and steroids, as well as dried herbs, roots, and seeds, for making "teas" and compresses. Many seek the services of private physicians and others buy medicines on the advice of friends, relatives, and neighbors. There are untrained persons within a few blocks of all houses who give injections for a small fee. All of the women interviewed had heard of vitamins, and although they did not have a clear idea of what vitamins are, they were convinced of their health-giving value. In all cases, however, vitamins were considered as medicines and were administered only to the sick.

There is a wide range in the use of the free health facilities offered in the nearby health center and the local hospitals. At one extreme are the mothers who take their children regularly to the well-baby clinic at the health center. Many others have never visited any of these institutions, and the majority go only after a prolonged illness has failed to respond to home treatments. Among the latter group, a great deal of dissatisfaction with the treatment received was expressed to me. For example, one woman said, "When my husband was stricken with 'attacks' I took him there for treatment, but they said he wasn't really sick." She consequently "cured" her husband by taking him to a spiritualist. Except in the cases of women

who had gone to the hospital for childbirth, similar comments were made in regard to hospital services. The women were extremely pleased and satisfied with their experiences in the maternity wards and most indicated a desire to return there for their next child. However, it is interesting to note that even these women generally do not go to the hospital for prenatal examinations until the final month of pregnancy, and some even arrive for their first examinations after labor has begun. Most of the women in the area still prefer a midwife for assistance in delivery, even though the expense is greater\* and the physical comfort less. The only reason given for this is embarrassment at being examined by a male doctor.

The study of this urban group has suggested several points which seem to me to be worthy of further emphasis and discussion. First, there is tremendous variation in verbal expression of certain beliefs and practices, due, in part, to the diverse origin of the people. In addition, some people are simply more interested in accumulating knowledge concerning health and nutrition, and as such serve as advisers to their neighbors and friends. In spite of this apparent variation, I believe it is possible to generalize concerning the entire body of lore available to this segment of the population, and also concerning the attitudes of these people toward nutrition and medicine. The following classification is offered as an attempt to describe and reduce these concepts to some order.

## Concepts Relating to Nutrition

### Negative Value Emphasis

Hot-Cold Dichotomy — Anyone familiar with Latin American culture will immediately recognize the widespread

---

\* Empirical midwives, as well as a few trained by the Public Health Department, deliver babies for fees ranging from \$1.50-\$15, depending upon the family income and the experience and reputation of the midwife.

belief in hot and cold foods.<sup>2-4</sup> Both extremes are felt to be dangerous under certain circumstances. All persons in a "delicate state," including small children and infants, sick persons, and pregnant and lactating women, should be careful to balance their diets in accordance with their own needs and sensitivities. Cold foods are generally considered to be more dangerous than hot, but it is interesting to note that most cold foods may be altered in some way so that they are safe to eat. Thus, milk boiled with cinnamon is no longer "cold," and pork cooked for a long period of time with cloves and black pepper becomes "regular." In fact, much of the art of cookery concerns not only the flavor given foods by additions of herbs, spices, and condiments, but also the manipulation of the hot or cold qualities of the foods. Contrary to what has often been reported, it appears that among this population the process of cooking, which of course involves changes of temperature, is important in determining the ultimate classification of the food. For example, "thrice-cooked gruel" is, by virtue of its number of cookings, very "hot." Leftover foods which have once been cooked are "cold," but heating them on the fire renders them safe to eat. Boiled water is "hot," but if it is left standing over night it becomes cold and must be boiled again before one can drink it with impunity (for parallel case see Wellin<sup>5</sup>). I am not suggesting that there is no difference between the concepts of heat as defined by temperature and "hotness" as a natural quality of food. I am suggesting, however, that there is some relationship between the two concepts—at least among the Ladinos studied in the poor urban sections of Guatemala City. It is possible that the observed ideas and practices concerning "hot" and "cold" foods are results of ongoing acculturation which has led to a reinterpretation of former beliefs. Further investigation

on this point in nonurban, relatively unacculturated centers of population should help clarify the matter.

**Strong Food**—Far more important than "hot" and "cold" foods to the average woman interviewed are those which she classifies as "strong." As in other cases, the particular foods which a given person will include in this category vary according to his or her own physical and mental constitution. The following foods, among others, however, are considered to be "strong" by many persons: meat, lard, chili. "Too much" of any of these foods is bad for anybody, but some persons can take more than others. In other words, a person with a "strong" constitution (which usually includes personality traits) can safely eat larger quantities of such foods. Children, especially younger than two years, cannot handle strong foods well and most often do not receive them; but when they do, as in the case of meat, they are given very small amounts just to chew and spit out. Occasionally, a child below this age is allowed to eat meat, and the mother's explanation is that that particular child is stronger than most. Sometimes mothers also express the child's unusual ability to tolerate strong foods in terms of the number of teeth he has or the precocious development of his stomach and internal organs. Strong foods differ from cold or hot foods in that their qualities are inalterable—one must simply eat less of them or avoid them altogether. It is of interest to note here that milk is sometimes placed in this category—especially goat's and donkey's milk. On the whole, however, the people in this study group place a high positive value on cow's milk (see below) and are not overly worried about its possible harmful effects.

**Indigestible Foods**—This should more properly be termed "foods which are more difficult to digest than others." There is some overlapping here with the



two classes discussed above, for "cold" foods and "strong" foods may also produce indigestion. However, apart from the former qualities, some foods are thought to be "heavy" or simply indigestible for some persons. For this reason, potatoes and rice are commonly excluded from the diet of very young children. Whole black beans and corn on the cob are also considered to be indigestible for the obvious reason that they sometimes appear in the feces. Powdered milk is sometimes claimed to be indigestible because it does not readily dissolve in water and sometimes lumps remain after mixing. As with the strong foods, there is nothing to be done about these foods except to avoid them in infancy, early childhood, or sickness.

#### Positive Value Emphasis

**Growth-Promoting Foods**—The concept of growth as an index of health is not only very prevalent, but seems to be the only area in which food is directly and positively related to good health. The people constantly refer to the healthy child as being big and fat. Thin children, although otherwise healthy, active and alert, are worried over, and the mother will claim that such a child "doesn't eat a thing." Diarrhea is considered dangerous for children because "it keeps them from growing," and "it keeps them from getting fat." Conditions of the skin, eyes, mucous membranes, and hair are *not* related to either qualitative or quantitative food deficiencies. In fact, changes in the condition of the body which may actually be evidence of dietary deficiencies *may* be attributed to the eating of a particular food or class of food.

Everyone has his or her own ideas as to what constitute nourishing foods, but in general the following list is agreed upon: milk, bread, tortillas—especially if made with yellow corn—noodles, oatmeal and other starchy gruels, vege-

tables, black beans, eggs, and sometimes beef.

Some people equated "hot" foods with "nourishing" foods, but in such cases they also expressed the belief that since these foods were so potent and so nourishing, one needed to eat them only in small quantities.

**The Diet of Infants and Sick Persons**—In addition to those foods which are generally nourishing, there are some that are thought to be particularly efficacious in treating sick persons and in rearing infants. Gruels of cornstarch, rice, and yuca are most important here. In addition, soft-boiled eggs and meat broths are frequently mentioned as being good for this class of persons.

**The Diet of Pregnant Women**—In order to ensure the health of the mother, proper growth of the fetus, and an easy delivery, the pregnant woman should also be careful of her diet. Milk, especially when fresh from the cow, and raw eggs, often mixed with sweet wine or beer, are recommended. Needless to say, most women in the group are unable to buy milk and eggs in sufficient quantities to feed both themselves and their children. That which money can buy almost always goes to the children first. It might be interesting in this regard to check possible differences in the prenatal health of primiparas and multiparas. "Hot" foods have a positive value emphasis in helping to avoid being "chilled," one of the dangers to be encountered during pregnancy, when the body is abnormally "hot."

**Lactating Women**—It is thought that for successful lactation a woman must eat well, and that she must consume larger quantities than usual of certain foods to ensure a good milk supply. Chocolate is the most frequently mentioned lactagogue, and ideally it should be drunk three times a day for 40 days after birth. In addition, gruels of oatmeal and of "masa" (ground lime-treated corn), boiled milk, and beer

are often recommended. Also included are special herbal teas which may be drunk to increase the flow of milk.

#### Neutral Foods

**Snack Foods**—A large number of foods, not eaten regularly, but enjoyed occasionally or even frequently, by most persons, even by quite poor families, include candy, soft drinks, potato chips, and fruits, either fresh or in syrup. Interestingly enough, the people seem to consume fruit as a snack more often than any other item. Fruits are proscribed, however, for lactating women, because of the fear that the mother's milk will become sour, rotten, acid, or will decrease in quantity. Sometimes fruits are thought to be "cold," and under certain conditions they may not be consumed because of this quality. In general, however, fruits are thought to be neither especially nourishing nor especially harmful.

These snack foods are seldom, if ever, consumed at mealtimes, and if the family income drops to the survival level, they disappear entirely from the diet.

### Classification of Diseases and Causative Agents

#### Physical Causes of Disease

**Contagion**—It is commonly understood that a sick person may pass on his disease to others through bodily contact or through a secondary agent such as bedclothes or eating utensils. The concept of contagion seems to apply especially to those diseases involving eruptions of the skin, such as measles, chicken pox, boils, dermatitis, and so on. There is also a corresponding concept of immunity which holds that some persons are not susceptible to diseases because they are particularly "strong." Children, who are in general "weak," are more susceptible than adults.

People have great faith in the power of vaccines as a preventive measure, but they think that vaccines are equally effective before and after exposure. Furthermore, many people believe that modern medicine has vaccines against all diseases. This misunderstanding often leads to great dissatisfaction with the services of local health facilities. For example, a woman whose child has been exposed to chicken pox may go to the clinic demanding vaccine as a preventive. If she does not obtain a shot of some sort, and especially if her child later develops the disease, she blames the clinic and feels that the personnel are withholding medicine from her for personal reasons.

The concept of contagion described above, although colored by ideas garnered from modern medicine, has its roots in older folk beliefs regarding "contagious magic." Another commonly held notion, and one widely distributed in European and American cultures, is that congenital deformities are caused by the pregnant woman's having come into contact with similarly deformed persons. In a very real sense, this type of contagion is not different from that described above, at least to the people involved. The only difference is that a vaccine is not considered helpful in this case.

The idea of contagion seems also to apply to conception. That is, a woman "catches" a baby by having intercourse with a man. Several women told me that they have heard that there were injections as well as pills which one could take to prevent conception. Even the terms used in discussing this matter indicate its relationship to disease; for when a woman becomes pregnant, she gets "sick," and the injections mentioned above are said to "cure" her. It is clear, however, that these injections are sought as a preventive measure, and not as an abortifacient, although it is also assumed that modern medicine has

ways of "curing" pregnancy in the latter sense as well. It is commonly believed, though the exact mechanism remains vague, that there are ways of "curing" a man so that his wife will not become pregnant.

Filth—Although many people have heard of "microbes," there is no real understanding of what they are. They are invariably associated with visible dirt, dust, droppings of animals, and spoiled food (garbage). If one is present, so is the other. On the other hand, if things look clean, they are clean. A soiled dish may be washed in dirty water, wiped with a dirty cloth, and considered clean if it appears to be clean (for a parallel example from Peru, see Wellin<sup>5</sup>). Similarly, a glass used by several people in turn may be wiped clean after each user with any handy rag.

Flies are considered to be disease bearers because they leave visible specks of dirt, especially on foods such as sugar. Also, dust in the air, as occurs often in the dry season in areas with unpaved streets, is considered to be unhealthy as well as unpleasant. The mouth and nose are frequently protected by handkerchiefs to avoid inhaling the dust when people venture out in the dry season. It is also thought that dust may cause eye irritations, especially conjunctivitis.

The occasional child who eats dirt is worried over, punished, and frequently purged for fear of sickness. A crawling baby may be restricted in his movements by placing him inside a box. He is seldom allowed to crawl about on the floor or in the yard without constant attention. Mothers frequently attribute diarrhea in young infants to their having eaten dirt or having sucked dirty objects.

"Spoiled" food is that which smells bad or which has become moldy, and it is considered unfit for human consumption (although it may be thrown to the

dogs or pigs). Actually, in these poor households where food is most often purchased and prepared each day, there are few leftovers to become spoiled.

In only two instances did I encounter beliefs concerning cleanliness in which visible dirt did not play a part. The first of these involved the scissors used by midwives to cut the umbilical cord of the newborn baby. One woman told me that her midwife was not careful to boil the scissors before using them and that this could cause infection of the umbilicus. Other women also stated that "dirty" scissors might be responsible for such infections, but they did not mention boiling as a preventive measure. They merely thought that the midwife should have a special pair of scissors used only for this purpose, and that they should be washed each time.

In general the idea of sterilization is linked only with hypodermic needles. Most persons interviewed knew that doctors and pharmacists boil the needles each time after use, and occasionally a disease was attributed to the "doctor's" not having boiled the needle before an injection, but this concept does not transfer to other items, such as baby bottles, for example. I found no women who boiled their bottles, although some said they rinsed them with boiled water. I highly suspected, although I have not enough data to confirm it, that the idea of boiling is more related to the hot-cold dichotomy discussed above, than to killing bacteria. Boiling may remove dangerous coldness not only in foods, but also in other objects. Other anthropological reports from Meso-America<sup>6</sup> indicate that metal objects (such as knives and scissors) are often considered to be "cold" and therefore unfit for cutting a baby's umbilical cord.

#### Psychological Causes of Disease

These have been well-outlined by other authors<sup>2,4,7</sup> and the present field work has provided only confirming data.

The most important and frequently mentioned psychological cause for disease is fright. An individual may be frightened by either natural or supernatural events which cause a variety of symptoms. Actually, any disease may be attributed to fright if the family is able to remember that the sick person had a bad experience shortly before the onset of symptoms. Fright is commonly given as a cause for the lactating mother's milk diminishing or disappearing. Anger may also be the causative factor here.

Embarrassment (*vergüenza*) is another possible cause for disease. This does not seem to be so important a factor as fright, and in this field study it was mentioned only in regard to children who were having difficulty learning bladder control. It was said that accidents in public led to apathy, sadness, and other symptoms of disease. On the other hand, shaming is a technic often used to "cure" such children—especially in the case of nocturesis. In such cases the embarrassment is not thought to produce other sicknesses.

The only other physiological disturbance related to psychological factors found in this study was spontaneous abortion. This is said to be brought about by a woman's not satisfying her food cravings. It is thought that the unborn child demands these substances and becomes angry if the mother does not provide them.<sup>8</sup> The craving can be successfully stifled in most cases by taking a pinch of salt with a glass of water.

#### Magical Causes of Disease

"Ojo" (Evil eye)—This concept does not require extensive treatment here since it has been well described by many others. The complex as encountered among the urban lower class is virtually the same as that in other Latin American groups, but it does seem to be diminishing in importance. Babies and small children frequently wear amulets

of one kind or another to prevent the possible ill effects of "ojo," but ascription of a disease or symptom to this cause is often only a last resort. The symptoms most commonly attributed to "ojo" are vague and generalized aches and pains, apathy, madness, and so forth. "Ojo" is a serious thing, since it may cause death, but actually there are many other things more to be feared than "ojo."

"Aire"—This concept, also fairly well described in the literature, is still highly important to the urban folk. There are various kinds of "aire" which may bring about disease symptoms. The most usual type is "cold" air, which may or may not be literally cold. Night air always has a magical cold quality, as does strong wind. These kinds of air are thought to cause colds, inflammation, whooping cough, edema, and occasionally diarrhea. In addition, there are the "bad airs," which usually have a bad odor and may be derived from decaying organic matter. The nose and mouth may be protected with a handkerchief when bad or cold airs are likely to be encountered. Small babies are also especially susceptible to air, and they are usually well wrapped in blankets and their heads are protected with hats or bonnets even in fairly warm weather. The air is not considered dangerous because it carries illnesses, but because in and of itself it is harmful to the body.

#### Summary

This paper has reported the results of a field survey of the medical and nutritional beliefs among the lower-class urban population of Guatemala City. Although this presentation is not exhaustive, some of the more general characteristics of practice and belief have been outlined. That the majority of the older rural folk beliefs still survive in the city is evident, even though many new ideas have been adopted from the more sophisticated middle and upper classes.



In some cases, the newer practices and modern terminology have simply been applied to or incorporated into the older patterns of folk medicine and nutrition.

REFERENCES

1. Adams, R. Cultural Surveys of Guatemala, El Salvador, Honduras, Nicaragua, and Panama. Washington, D. C.: Pan American Sanitary Bureau, 1957. Scientific Publ. No. 33.  
2. Gillin, J. Moche, a Peruvian Coastal Community. Washington, D. C.: Smithsonian Institution, 1947. Institute of Social Anthropology. Publ. No. 3.  
3. Foster, G. Relationships Between Spanish and Spanish-

American Folk Medicine. J. of American Folklore LXVI:201-217, 1953.  
4. Adams, R. N. Un análisis de las creencias y prácticas médicas en un pueblo indígena de Guatemala. Guatemala, C. A.: Editorial del Ministerio de Educación Pública, 1952. Publicaciones especiales del Instituto Indigenista Nacional No. 17.  
5. Wellin, E. "Water Boiling in a Peruvian Town." In Health, Culture and Community. Edited by Benjamin Paul. New York, N. Y.: Russell Sage, 1955, pp. 71-103.  
6. Tax, S. Heritage of Conquest. Glencoe, Ill.: Free Press, 1952.  
7. Foster, G. Relationships Between Theoretical and Applied Anthropology. Human Organization XI:5-16, 1952.  
8. ————. Culture and Conquest. New York, N. Y.: Wenner-Gren, 1960. Viking Fund Publications in Anthropology No. 27.

Dr. Solien de González is anthropologist, Division of Public Health, Institute of Nutrition of Central America and Panama (INCAP), Guatemala, C. A.  
This paper is an INCAP Publication I-287.