# BREAST-FEEDING, WEANING, AND ACCULTURATION

NANCIE L. SOLIEN DE GONZALEZ, PH.D. Guatemala City, Guatemala

From the Institute of Nutrition of Central America and Panama (INCAP)

Reprinted from

THE JOURNAL OF PEDIATRICS
St. Louis

Vol. 62, No. 4, Pages 577-581, April, 1963

(Copyright © 1963 by The C. V. Mosby Company) (Printed in the U. S. A.)

# Breast-feeding, weaning, and acculturation

The incidence of breast-feeding and the time of weaning were studied among Indians and rural and urban Guatemalans of Latin ancestry. Breast-feeding becomes less common and shorter as these groups become more urbanized and, surprisingly, as medical advice becomes more available.

Nancie L. Solien de González, Ph.D.

GUATEMALA CITY, GUATEMALA

IN AN effort to learn more about social and cultural factors which influence the incidence of protein malnutrition in infancy and childhood in Guatemala, an anthropologic study was carried out between June, 1961, and June, 1962, at the Institute of Nutrition of Central America and Panama (INCAP). The study was aimed at uncovering information about practices and beliefs concerning breast-feeding, weaning, and infant and child diet among several different population types in Guatemala. These types were: (1) Traditional Indian, (2) Modified

From the Institute of Nutrition of Central America and Panama (INCAP), Guatemala INCAP Publication I-265, assisted by Grant No. A-981 from the National Institutes of Health.

Presented orally at the Thirty-fifth International Congress of Americanists, Mexico City, August, 1962. Indian, (3) rural lower-class Ladino,\*1 (4) urban lower-class Ladino, and (5) Black Carib. Since the Black Carib culture is distinct from that of the Indian and Ladino, only the first four will be considered in this paper, and the Black Carib data will be presented in a separate publication.<sup>3</sup>

One town representing each of the first three cultural types and two sections of Guatemala City representative of the lower class Ladino were chosen as the basis of the sample. Because of the differences in the cultures studied, the same field techniques were not applicable in all the communities. For the Ladino groups, the data were collected by the use of questionnaires followed by intensive interviews with selected informants. In the Indian communities questionnaires were neither practical nor reliable, so the key-informant technique provided all the informa-

<sup>\*</sup>A person of Latin, as opposed to Indian culture.

578 González April 1963

tion for this study. For comparative purposes, however, quantitative data on Indian practices are available from INCAP longitudinal field studies on the relationship between nutrition and infection which include data on weaning. It is interesting to note, from a methodologic point of view, that the two different field techniques provided similar results in regard to these Indian practices. The information here reported concerns the reasons for weaning and the age when children are finally weaned from the breast. "Weaning" here will be used in the sense of the total abandonment of suckling.

### TRADITIONAL INDIAN PRACTICES

Among the Traditional Indians studied, children were never weaned earlier than 18 months of age except in the event of the mother's death. The latest age for weaning among this group was 4 years, and the "ideal" age, as well as that most frequently mentioned as the actual age, was 2 to  $2\frac{1}{2}$  years. The longitudinal studies of INCAP in three Traditional Indian villages indicate that this "ideal" age is close to the actual average or median age of weaning.4

Other beliefs and practices which are typical of the Traditional Indian include placing the child at the breast within a few hours after birth, which assures that the child will receive the colostrum; and the continuance of nursing throughout the next pregnancy, the older child being weaned a few weeks after the new birth.

### MODIFIED INDIAN PRACTICES

In regard to weaning practices, the Modified Indian and the rural lower-class Ladino may be grouped together. In both groups weaning takes place anywhere from 12 to 24 months, with an average of about 18 months. During the first 3 or 4 days or until the "real" milk appears, the child is not placed at the breast; thus it does not receive the colostrum, which is expressed manually during these first days. The Modified Indians often ask another woman to nurse

the child during this time, but the Ladinos give their infants sugar water or nothing at all. Weaning among both of these groups takes place when the mother finds she is pregnant again, and in no case did I find two siblings being nursed at the same time, even for a short period. The reason given for weaning during the early months of pregnancy is that the milk becomes "tiernita" (immature) and colostric again in preparation for the coming child and that this would be harmful to the older child. A few women also expressed the idea that the growth of the fetus would be impaired if the older child continued to nurse.

If pregnancy does not recur, this group may still wean at about 18 months for reasons which appear to have a largely magical basis. Thus, a child is said to become very naughty and difficult to handle, both in childhood and in later life, if he nurses past the age at which he begins to talk. Also, it is frequently said that nursing after 18 months will make a child bleed from the nose—a sign that the milk he is imbibing is no longer really "milk" but blood.

### URBAN LOWER-CLASS PRACTICES

Urban lower-class Ladinos present a markedly different picture in the matter of weaning, which may occur even before 6 months of age, when the child is usually given a bottle containing some sort of milk substitute.

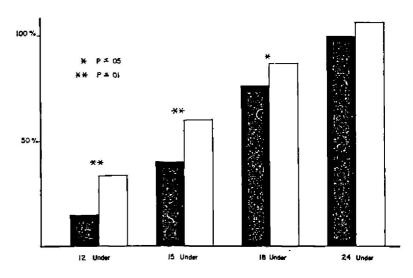


Fig. 1. Comparison of cumulative number of children weaned at different ages (in months) in rural and urban Ladino populations. White bar = urban; black bar = rural.

Volume 62 Number 4 Breast-feeding 579

Table I. Comparison of ages at weaning in rural and urban Ladino populations, Guatemala, August, 1962

-	No. and cumulative per cent of children weaned at given ages					
Age	Ru	ral	Urban			
(months)	No.	%	No.	%		
12 and under	116	23	77	43		
15 and under	208	42	105	60		
18 and under	371	74	145	82		
24 and under	480	96	176	100		
Over 24	21	4	0	0		
Total	501		176			

Table II. Feeding status of 334 Traditional Indian children, Guatemala, August, 1962

Age	No. of	Weaned		Breast-fed (partial or total)	
(months)	children	No.	%	No.	%
12 and under	145	2	2	143	98
18 and under	74	6	4	68	96
24 and under	64	16	25	48	75
Over 24	51	13	25	38	75
Total	334	37	11	297	89

This may be cow's milk—often very diluted in form—or it may merely be some cereal gruel made of cornstarch, oatmeal, or cassava starch. On the whole, children in this group are weaned much earlier than in any other. Most of them are completely weaned by the time they are 18 months old and the average age is about 1 year. Reasons given by the urban lower-class Ladinos are that the woman's health will be impaired if she nurses a child too long, or that the child doesn't need breast milk when receiving other food, or that the woman has either insufficient or poor quality milk. Many of these women reported that doctors or nurses advised them to wean early, often as early as 8 months. Investigation showed that in at least two public health clinics in Guatemala City this actually is the information given. In addition, many women in this group must supplement the family income by working outside the home, and, in some cases, the woman may be the sole support of herself and her children. In such cases the child may be

nursed for only a very few months, and, if the mother cannot take the child to her work, she must leave it to be bottle fed and cared for, usually by its grandmother, or an older sister, or an aunt.

The numbers and percentages of children weaned at different age levels in the Ladino groups studied are summarized in Table I and Fig. 1. Table II shows material from Traditional Indian villages for comparative purposes.

#### DISCUSSION

Any attempt to analyze the meaning of these findings must take into account historical events in Central America from the time of the Spanish Conquest to the present, as well as current processes of acculturation. It seems likely that the beliefs and practices of the Traditional Indian are pre-Columbian, and it is interesting to note, have persisted in spite of 400 years of contact with European culture. This is not to say that all Indians or Indian villages in Guatemala have remained unacculturated in regard to weaning practices. The original Spanish acculturation obviously had different effects on villages within the same area, as well as within Latin America as a whole.

#### HISTORICAL FACTORS

Certain current beliefs and practices related to breast-feeding and weaning may certainly be traced to Europe. These include ideas that a child should not receive colostrum, that he should be weaned when the mother becomes pregnant again, and that there is some relationship between milk and blood. These ideas were undoubtedly introduced during the Spanish colonial period, although it is difficult to ascertain at just what time. Duncum,2 in discussing the history of breast-feeding, traced such ideas from Avicenna in the fourteenth century through Peddie, a British pediatrician who wrote in 1848 as follows: "-when a woman becomes pregnant during lactation, the microscope is a most important diagnostic guide; for then the colostric characters of the milk are apparent, and thus we can, without hesitation, ad580 González April 1963

vise immediate abandonment of 'suckling.' "5 Avicenna also believed that a child should be weaned when the mother becomes pregnant again, although he did not specifically mention colostrum as the damaging factor. He pointed out that "(mother's milk) is the aliment of all other most like in substance to the nutrient material which the infant received while in the womb—the menstrual nutrients of the mother. It is these which are changed into milk after parturition, and such milk is better adapted for the infant. . . ."2 He thought that in pregnancy both the mother and the embryo would suffer if nursing continued.

It thus appears that the beliefs of the Modified Indian and rural Ladinos are in fact a composite of ideas current in orthodox European medical opinion throughout the centuries of conquest and colonization. These opinions, held by the sophisticated colonials, exerted a continuing influence upon both Indians and Ladinos. Nevertheless, throughout this time there remained some Indian groups which never adopted the newer ideas, although some who remained "traditional" in other aspects, did change their beliefs and practices which related to breast-feeding. Interestingly enough, it appears that the acculturation now going on among many Indians in Guatemala is leading to the same constellation of beliefs. In order to understand this, we should briefly discuss the current situation in regard to health and nutrition education in Guatemala.

## CURRENT ACCULTURATIVE FACTORS

The modern, urban, upper-middle-class Ladinos of Guatemala seek and receive medical care and advice which is generally comparable to that found in the United States and Europe today. Many women of this class do not breast-feed their children at all, and those who do wean from the breast to a bottle within a few months. Unfortunately, no figures are available to support this statement, but this is the opinion of several pediatricians consulted in Guatemala City. This group apparently wean for reasons of con-

venience and prestige although they may rationalize their actions in terms of inability to produce enough milk, failure of the child to thrive, poor health of the mother, etc. They also express notions of modesty, distaste and boredom in regard to breast-feeding. Financially, this group can afford to replace the mother's milk with cow's milk, either fresh or prepared from powders or liquid concentrates, and they also have sufficient education to ensure that the bottle feedings are prepared correctly and hygienically.

To an increasing extent, mothers among the lower-class urban Ladinos who express similar ideas, wean their children when they are from 6 to 10 months of age. If such early weaning becomes widespread, it will be disastrous for child health. Not only are the milk substitutes often nutritionally inadequate, but also the sanitary conditions of the home and the educational level of the mothers lead to improper handling of the bottles, which, in turn, may produce various kinds of intestinal disturbances. These women are under constant acculturative pressures, not only through the informal influence of the upper and middle classes whom they wish to emulate, but also through their contacts with medical personnel. In many cases both the private physicians and the public health doctors and nurses who reach these people strongly advise weaning before 1 year, and in some cases they discourage breast-feeding entirely.

The beliefs of the Modified Indians, on the other hand, are almost identical to those of the rural lower-class Ladino. Among these Indian women I have encountered none, not even those living in the urban area of Guatemala City, who express the attitudes of the upper-class Ladino toward breast-feeding. When city ideas take hold in the Indian villages, or when an Indian family moves to the city, the resultant cultural modifications, at least in regard to breast-feeding and weaning, are what we might call "Ladinoizations." That is, they fall in line with patterns described as characteristic of the unsophisticated, rural lower-class Ladinos. This may seem surprising when it occurs in the city

Volume 62 Number 4 Breast-feeding 581

where we might expect a direct change to the more modern practices.

I should like to suggest here that basic differences in personality and world view between Ladinos and Indians lead them along quite different paths of acculturation today.

The self-image of the Ladino leads him to minimize the cultural differences between himself and the upper classes. He tends to feel that the basic difference is economic and that with more money he would be indistinguishable from his wealthier upper-class countrymen. He is, therefore, extremely open and susceptible to the more sophisticated ideas which he encounters in the city. The Indian, on the other hand, recognizes and feels the cultural differences between himself and all Ladinos. It is, however, the lowerclass Ladino with whom he is most apt to come into close contact and whom he tries to emulate in any conscious attempt to Ladinoize himself.

The medieval beliefs of the unsophisticated Ladino fit in well with the Indian's own explanations of life and the universe. Basically, he needs no new orientation of thought to accept the idea that colostrum is harmful to a child and to the developing fetus. The fact that such beliefs are sometimes found in what otherwise appear to be Traditional Indian cultures support this view. But ideas that it is not "nice" or "refined" for a woman to nurse a baby in public or that breast-feeding may impair a woman's health or figure—examples of attitudes, now beginning to diffuse into urban Ladino lower-classes-are completely foreign to the Indian point of view and imply a whole new outlook on life. It should be noted also that the general acculturative trend here, as elsewhere in the world, is toward a shorter period of breast-feeding. The specific reasons which lead to the earlier abandonment of suckling will vary with the culture, as has been pointed out by Jelliffe in his survey.<sup>5</sup>

#### **SUMMARY**

Data presented here on weaning suggest that those Guatemalan Indians now undergoing rapid acculturation are being influenced most by traditional Ladino culture largely imported from Europe during the conquest and colonial periods. This process is occurring in both rural and urban areas, but it is more accelerated in Indians who have recently moved into the city. Rural lower-class Ladinos appear to be maintaining their status quo in regard to breast-feeding and, perhaps, in regard to their culture in general. Urban lower-class Ladinos, many of whom are first generation city dwellers, are rapidly accepting ideas and practices typical of the upper and middle-class Guatemalan culture, which they believe to be modern, scientific, and sophisticated.

#### REFERENCES

- Adams, R. M.: Cultural surveys of Panama-Nicaragua-Guatemala-El Salvador-Honduras, Washington, 1957, Pan American Sanitary Bureau Scientific Publication No. 33.
- 2. Duncum, B. M.: Some notes on the history of lactation, Brit. M. Bull. 5, 1141, 1947.
- 3. Gonzalez, Nancie S. de: Diet, health and disease in a Black Carib community (manuscript in preparation).
- 4. INCAP: Nutrition-Infection Project (Unpublished data).
- 5. Jelliffe, D. B.: Culture, social change and infant feeding. Current trends in tropical regions, Am. J. Clin. Nutrition 10: 19, 1962.