# A COMPARISON OF TWO CULTURES IN PRACTICES

### OF INFANT FEEDING

by

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The purposes of this study were: (1) to examine maternal behavior of the lower socio-economic groups in relation to infant-feeding practices through two wellestablished cultural groups of North America, that of the Anglo and Spanish people; (2) to determine where there were differences in feeding practices between two cultural groups so that the nurse may apply this knowledge to her professional practice; and (3) to provide data which might contribute to the expanding knowledge of nursing education.

The technique used for the collection of the data was the interview-schedule with open-end questions administered to selected mothers. A sampling of twenty Anglo and twenty Spanish mothers who had infants under the age of two and a half years and were registered in Child Health Conferences within metropolitan Denver in the fall of 1959 were the source of data. A total of fifty-one children were represented by both groups interviewed.

The data were tallied, categorized into tables, and calculated into percentages. The critical ratio of probability was then computed and compared to the .05 level of significance statistically.

The findings of the study were that: (1) although the ages of the children in both groups were essentially identical, the Spanish mothers were currently breast feeding their children while none of the Anglo mothers were; (2) Anglo mothers permitted their children to nurse for a shorter time while Spanish mothers tended to allow longer and more frequently interrupted nursing periods; (3) the Anglo mothers were less able to anticipate the age their children would initially drink from a cup than were the Spanish mothers; (4) the Anglo mothers started their children on solid food at a much younger age than did the Spanish mothers; (5) more Spanish mothers insist their children eat food they disliked; and (6) the Spanish mothers were more apt to reprimand their two year old children for playing in their food than Anglo mothers.

This abstract of about 250 words is approved as to form and content. I recommend it for publication.

Signed <u>Mighley</u> Instructor in charge of thesis

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#### CHAPTER I

#### THE PROBLEM

I. INTRODUCTION AND NEED FOR THE STUDY

In recent years considerable attention has been centered on child-rearing practices in an attempt to increase our understanding of child development. During this period marked changes in acceptable child-rearing practices have been advocated by child-study experts. Extensive surveys of publications concerning child-development studies have been made by Ausubel and by Stendler<sup>2</sup> showing a trend from a standard of strict authoritarian control toward one characterized by permissiveness. "Permissiveness" when it is used to describe a type of attitude toward child-rearing indicates basic principles of respect for individuality, maturity and needs of parental acceptance of each child. The immediate intent of the permissive approach was to eliminate unnecessary friction between parent and child, and so reduce the incidence of behavioral problems associated with child-rearing.

Development. (New York: Grune and Stratton, 1958), pp.233-259.

<sup>2</sup>Celia B. Stendler, "Sixty Years of Child Training Practices," <u>Journal of Pediatrics</u>, 36: 122-134, January, 1950.

Within the continental United States will be found a "melting pot" of numerous cultural patterns. The individual within his cultural context evolves around environmental and hereditary factors which play an intrinsic part in his life. In developing an understanding of individuals, nurses should have knowledge and appreciation of their cultural backgrounds. The nurse in her everchanging role must equip herself with a knowledge of numerous interrelated aspects of the cultures. Nurses should strive toward recognizing the worth of individuals despite differences in their culturally conditioned behavior. It is hoped that the nurse can identify patients' needs through a better understanding of his cultural background. By developing understanding of the facets involved in the care of the individual within his culture, the nurse, it is hoped, will tend to develop a more accepting attitude toward the individual. In relation to this Lyle Saunders has written:

Medical personnel and others whose occupation or position brings them into association with members of ... any ... group exhibiting cultural or subcultural differences -- can probably develop more satisfactory relationships and give more effective service if they are sensitive to the implications of cultural differences and know something of the specific culture of the group with whom they are working and of the possible range of differences within the group.

<sup>3</sup>Lyle Saunders, <u>Cultural Differences and Medical</u> Care. (New York: Russell Sage Foundation, 1954), p. 98.

The study undertaken for this paper deals with a specific child-rearing practice, methods of infant feeding, and the possibility of culturally conditioned differences in techniques and desired results, between two groups chosen to represent (1) the American, native-born, cultural mode, and (2) the Spanish cultural mode. Since it would seem that a nurse can offer better care to a patient if she understands and can sympathize with cultural differences. and since members of every cultural group utilize differing methods of adapting their offspring to their own traditional ways, a nurse who deals with mothers and their infants would find her job much easier, and at the same time render better service to the mothers, if she is aware of the cultural differences which may find expression in child-rearing practices. Even similar or identical practices may have different meanings in different cultures, a fact which Orlansky points out in supporting his belief for the need of studying a particular infant in his cultural context.4

With greater cultural differences between groups it becomes relatively easy to recognize differences in the behavior of groups. These differences are reduced between the native-born American and Spanish of the Southwest, and

4Harold Orlansky, "Infant Care and Personality," Psychological Bulletin, 46: 1-48, January, 1949.

it becomes increasingly difficult to distinguish between cultural groups and to understand their behavior. Despite the similarities, there are, however, "differences in points of view and ways of behaving that occasionally make it difficult for members of one group to understand the behavior of the other."<sup>5</sup> Moreover, these differences in behavior are deeply rooted in cultural values, tastes, and attitudes. It would seem, therefore, that attitudes and values would vary considerably between cultural groups.

The infants within these diversified cultures will be subject to the demands of their total culture, regardless of class position. Each will have to achieve learning experience in the areas of feeding and weaning. These basic learning experiences occur in the development of all children. The manner in which each of these basic experiences is managed by the mothers is a reflection of her cultural group. Infant-feeding practices as described by selected mothers were considered to be an aspect of behavior which could be studied as a means toward a comparative analysis of two cultural groups, that of the Anglo and Spanish people.

5saunders, op. cit., p. 104.

## II. STATEMENT AND PURPOSES OF THE PROBLEM

## Statement of the problem.

The problem of this study was to compare two cultures in relation to early infant-feeding practices as described by Anglo and Spanish mothers. These infantfeeding practices have included the selected areas of breast feeding and/or bottle feeding, weaning, introduction of first solids, and progression onto table foods. Null hypothesis.

There will be no significant difference between the two cultural groups in relation to specific infantfeeding practices.

### Purposes of the study.

The purposes of this study were as follows: (1) to examine maternal behavior of the lower socio-economic groups in relation to infant-feeding practices through two well-established cultural groups of North America, that of the Anglo and Spanish people, (2) to determine whether there were differences in feeding practices between two cultural groups so that the nurse may apply this knowledge to her professional practice, and (3) to provide data which may contribute to the expanding knowledge of nursing education.

III. DEFINITION OF TERMS USED

#### Culture.

The sum total of the ways of thinking and doing,

past and present, of a social group. Culture is an integration of the traditions, or the handed-down beliefs, and of customs, or handed-down procedures.<sup>6</sup>

## Anglo.

The native English-speaking population whose culture is that of the United States as a whole.<sup>7</sup> Spanish.

This study uses the term to denote a group of people who when being interviewed in the Child Health Conferences gave their nationality as being Spanish. The Spanishspeaking of our Southwest constitute the largest culturally distinct unit within the larger population of the United States.

#### Infant.

As used in this study to mean a child under the age of two and a half years.

### Feeding practices.

Feeding practices are methods or techniques which mothers employ in feeding their infants.

<sup>6</sup>Emory S. Bogardus, <u>Contemporary Sociology</u> (Los Angeles: University of Southern California Press, 1932), p. 68.

> <sup>7</sup>Saunders, <u>op. cit.</u>, p. 249. <sup>8</sup><u>Ibid</u>., p. 12.

#### IV. ASSUMPTION

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#### Assumption.

This study presupposes that the feeding practices as described by selected mothers are indications of probable performance within the home.

V. SCOPE AND LIMITATIONS

## Scope and limitations.

This study included twenty Anglo and twenty Spanish mothers of infants under the age of two and a half years. It was limited to mothers living within metropolitan Denver in the fall of 1959. Mothers who had infants registered in Child Health Conferences were the source of data. The Child Health Conferences were selected on the basis of those clinics designated by clinic supervisors as having the highest concentration of Anglo and Spanish children registered. Because of the nature of the Conferences' eligibility policies, the socioeconomic status of the families attending them was low.

#### SUMMARY

Considerable attention has been focused on childrearing practices in recent years. It would seem that the cultural pattern within which a child is born places certain demands for cultural conformity upon him. The attitudes and values of a culture play a meaningful part in a child's basic learning experiences. A comparative analysis of infant-feeding practices as described by selected mothers in two different cultural groups, but of similar socio-economic status, was considered to be an area of behavior that could be studied in an effort to make available specific data which might be useful for nurses in working with mothers and infants whose culture is different from the nurse's own cultural background.

#### CHAPTER II

#### REVIEW OF THE LITERATURE

A comprehensive survey of the literature related to the cultural aspects of infant feeding practices revealed that an inappreciable amount had been written dealing specifically with this subject. However, there does exist a tremendous amount of literature which refers to generalized child rearing practices irrespective of cultural implication or influence. The literature on feeding in the American Journal of Nursing from 1930 to July 1959 was concerned mainly with nursing procedures. A complete survey of the Nursing Outlook periodicals was undertaken, but available articles pointed to the same general topics as were covered in the American Journal of Nursing. Periodicals in the fields of anthropology, dietetics, medicine, sociology, and psychology disclosed a wealth of information applicable to this study concerning infant feeding. Pertinent textbooks in the fields mentioned above along with nursing texts, were also surveyed. Information from these sources pertaining to the study undertaken fell into the categories of sociology and psychology with greater emphasis on the latter.

Within recent years the concept of the role of the professional nurse has deepened; the new concept takes into consideration the patient as a whole. In her new

role the nurse must develop a broader understanding of what is involved in the nurse-patient relationship. By developing this understanding the nurse will then become capable of relating to the patient's whole personality as focused on his particular problems.<sup>1</sup> A result of the new role of the nurse has been a pressing need for further study in nursing education of the sciences of human relations. Nursing areas have been studied and are believed to offer a tremendous challenge to curriculum planning in nursing education. One of the areas under discussion in the study concerned the nurse's relationship to individuals and groups, and how she relates to their various ages and cultural background.<sup>2</sup> In this diversified role of the nurse there arise countless opportunities in which she may better develop an understanding and acceptance of the patient as an individual within his own rights. In consideration of this it is hoped that the nurse will become aware of the effectiveness of understanding human relations.

A study of the available literature revealed that the need of the infant or child for adequate mothering is

<sup>1</sup>Hildegard E. Peplau, <u>Interpersonal Relations in</u> <u>Nursing</u> (New York: G. P. Putnam's Sons, 1952), p. 223.

<sup>2</sup>Lillian B. Patterson, "Using the Nursing Abilities Study in Curriculum Planning," <u>American Journal of</u> <u>Nursing</u>, 52: 1484, December, 1952.

a basic human relationship. Related to this line of reasoning is the newborn's apparent need for adequate mothering and the relationship of this to beginning feeding habits. Lawrence K. Frank takes the stand that

The frequent pattern of newborn care, especially in hospitals, is that he is taken away from his mother, deprived of cuddling and soothing and of opportunity for sucking and the comfort of breast feeding ... In consequence, eating, which should be a simple, pleasurable experience, may become an occasion for tension and emotional disturbances which may be the beginning of frequent feeding problems.3

It would seem then that the infant's being deprived of mothering during the feeding process at even the earliest age could give rise to emotional disturbances. The nurse, taking this into account, should strive towards realistic understanding of the needs of infants. Then she will be better able to translate the feeling reactions of arising situations between mother and child into a profitable interpersonal relationship. It is hoped the mother and child will be understood then in the family context.

Institutions of a society, beginning with the family, form the culture of its members. The values and traditions of the culture in which the child is reared are transmitted to him in this growing-up process. From the standpoint of the child, culture is the social heritage into which he is

<sup>&</sup>lt;sup>3</sup>Lawrence K. Frank, "The Newborn as a Young Mammal with Organic Capacities Needs and Feelings," <u>Psychoso-</u> <u>matic Medicine</u>, 7: 170-171, May, 1945.

born and in which he is reared. In support of this James H. Bossard, the eminent sociologist says:

... the child lives the family culture, and thus one must regard it as the most subjective, the most deeply embedded part of the cultural heritage, the one which carries over longest in the life span.4

In a general way the family serves as the representative of the culture in dealing with the child. Parents will differ considerably in how they interpret cultural norms in their child rearing practices.<sup>5</sup> It appears only logical that somehow the cultural pressures placed on the child will determine eating habits and attitudes to food.<sup>6</sup> This attitude is also supported by John Cassel, when he states that "Food habits are among the oldest and most deeply entrenched aspects of many cultures and cannot be easily changed."<sup>7</sup> Attitudes toward food can be viewed as playing an intrinsic part in early infancy. Wagner points out that

Feeding represents to the child his first learning about this world, the people in it, its rules,

4James H. Bossard, The Sociology of Child Development (New York: Harper and Brothers, 1948), p. 125.

<sup>5</sup>David P. Ausubel, <u>Theory and Problems of Child</u> <u>Development</u> (New York: Grune and Stratton, 1958), p. 260.

<sup>6</sup>Ralph Rabinovitch and Joseph Fischhoff, "Feeding Children to Meet Their Emotional Needs," <u>Journal of the</u> <u>American Dietetic Association</u>, 28: 616, July, 1952.

7John Cassel, "Social and Cultural Implications of Food and Food Habits," <u>American Journal of Public Health</u>, 47: 732, June, 1957. and his place in that world ... most food habits and attitudes are formed during infancy ... a pleasant experience with a food is likely to produce a favorable attitude toward that food.

In a 1957 editorial in the Journal of Pediatrics, Aldrich was quoted as having often said. "We should teach attitudes, and not a mass of specific details as to the feeding ... of the infant and child."9 A contemporary of Doctor Aldrich expressed his opinion that "You never feed food alone -- you always feed attitudes."<sup>10</sup> Here food is recognized as an avenue through which the child experiences favorable or unfavorable attitudes. Quite apart from matters of nutrition and satisfactions of appetite per se, the feeding process becomes a most important occasion for the communications of feelings and attitudes. Hence, the feeding process represents a symbolization of interaction between parent and child. It might be said that the first equation in the child's eyes is "love equals food."11 The process of eating may further serve as a learning experience as the child incorporates the attitudes of the

<sup>8</sup>Muriel Ginsberg Wagner, "Appetites and Attitudes," Journal of the American Dietetic Association, 30: 329-330, April, 1954.

<sup>9</sup>"The Importance of Attitudes," Journal of Pediatrics, 51: 620, November, 1957.

<sup>10</sup>James L. Hymes, Jr. "Significance of Feeding from the Viewpoint of Child Development," Journal of the American Dietetic Association, 25: 612, July, 1949.

llHelen Ross, Our Children Today, ed. Sidonie Matsner Greenberg (New York: The Viking Press, 1952), p. 59.

feeding behavior of those about him. In a study of twenty-four children dealing with relationships between infant feeding experience and later behavior, Niles Newton discovered evidence that attitudes of the mother are important factors in the relationship between early feeding and later behavior.<sup>12</sup> Looking at it in this light, maternal attitudes influence the mother's management of everyday practices. Since the most vital need of the infant has to do with food, food assumes psychological significance to him. Food symbolizing mothering to the infant, also signifies a sense of security and comfort.<sup>13</sup>

Probably the most significant findings of the past decade have dealt with the psychological aspects of infancy. A part of these psychological factors in infancy are felt to be woven into early feeding practices which transcend the more obvious effects.<sup>14</sup> The problems of weaning, adjustment to different food consistencies, progression of self-feeding and a host of other similar problems can be classified as psychological in nature because they involve

<sup>12</sup>Niles Rumely Newton, "The Relationship Between Infant Feeding Experience and Later Behavior," Journal of Pediatrics, 38: 38, January, 1951.

<sup>13</sup>Rabinovitch and Fischhoff, <u>op</u>. <u>cit</u>., p. 617. <sup>14</sup>Ethel Austin Martin, <u>Robert's Nutrition Work</u> <u>with Children</u> (Chicago: University of Chicago Press, 1954), p. 221.

individual behavioral patterns. The whole process of nutrition can be seen as being complicated by mental factors which arise out of behavior.<sup>15</sup> Doctor Jeans in referring to the psychological aspects of infant feeding has written the following:

The psychologic aspects of infant feeding are fully as important as those more obviously nutritional ... The interrelationship which are set up between mother and child during the early days and weeks after birth set a pattern which is important in determining the type of response the child will have toward eating ... Attitudes are communicated to the infant from the earliest moments and affect his behavior ... Acceptance or rejection of new foods is affected greatly by the attitude of the mother toward those foods ... the baby's behavior is modified by the unconscious attitude of the mother.l6

It is apparent then that the early feeding relationship will affect the behavior patterns of the infant, and that a systematic study of feeding practices will uncover related behavior patterns. Along with this there appears to be a close relationship between infant feeding behavior and personality traits. According to Doctors Gesell and Ilg:

The feeding behavior of the infant is perhaps the most inclusive and the most informative single indicator of his personality. The whole feeding

15Arnold Gesell and Frances L. Ilg, <u>Feeding Behav-</u> ior of <u>Infants</u> (Philadelphia: J. B. Lippincott Company, 1937), p. 148.

<sup>16</sup>Philip C. Jeans, "Feeding of Healthy Infants and Children," Journal of the American Medical Association, 142: 810-811, March 18, 1950. process may well be the most revealing single "test" of personality which could be devised. Feeding is a dominant preoccupation in the infant's psychic life and is doubtless more charged with affect, volition, and conscious control than it is in later years. It is intimately bound up with the parent-infant and family relationships. Feeding behavior ... reflects permanent constitutional characteristics even in the newborn. 17

For the above reasons feeding behavior appears to be a key to a better understanding of the infant's personality. By taking a closer look at the infancy period we can see that the infant achieves a measure of adaptation to the adult personality of the mother. The infant formulates his attitudes from those around him. Some of these attitudes are not necessarily favorable in nature and may eventually lead to feeding problems.

Indeed, it may be ventured to say that to arrive at the core of feeding problems a complete appraisal of the infant's nutrition is essential. As Doctor Benjamin Spock, the influential and widely accepted pediatric advisor has said:

Feeding problems are the commonest ... during the first year in our culture ... If the resistance to feeding becomes well established, it may last for years and have a harrowing effect on the personalities of child and mother ... This spreading of the battle is a common phenomenon in children's disorders ... The irritation of the frustrated

17Gesell and Ilg, op. cit., p. 2.

mother and the balkiness of the child easily spread into other aspects of their relationships.<sup>18</sup>

It appears evident that a complete appraisal of the infant's nutrition would be a prolonged undertaking involving many aspects of the relationships of both infant and mother. As nurses, this task could begin with us. By having an understanding of the sequence of growth and maturation, the nurse could better interpret the significance of feeding patterns to the parents. However, this would require a genuine recognition of the individuality of the infant which is formulated in part by culture influence. Herein lies a promising nursing field for parent-child guidance.

#### SUMMARY

The survey of literature in this chapter discussed the importance of early care, including feeding, of the infant in relationship to his developing personality. The literature was specifically derived from the fields of anthropology, dietetics, medicine, sociology, and psychology with greater emphasis on the latter.

Throughout the chapter the feeding process was interpreted in the light of behavioral and personality traits. The cultural aspects of the feeding process appeared to be deeply embedded in the infancy period.

<sup>&</sup>lt;sup>18</sup>Benjamin Spock, "Common Behavior Disturbances in the First Two Years of Life," <u>Journal of the American</u> <u>Medical Association</u>, 136: 811-812, March 20, 1948.

#### CHAPTER III

#### METHODOLOGY

The normative-survey was the method most appropriate for the study. The interview-schedule seemed to be the most applicable technique for collecting the data. Interviews with selected Anglo and Spanish mothers were conducted in Child Health Conferences in Denver. These mothers were asked questions pertaining to practices they employed relating to infant feeding.

## I. THE METHOD

## Normative-survey.

The normative-survey is sometimes referred to by such terms as <u>descriptive</u>, <u>survey</u>, <u>status</u>, <u>normative</u> and <u>trend</u>.<sup>1</sup> Since the purpose of this study was to obtain information concerning infant-feeding practices, this method seemed most applicable as it is directed toward ascertaining the prevailing conditions.<sup>2</sup> According to Good and Scates, this method is essentially a technique

<sup>1</sup>Carter V. Good, <u>Introduction to Educational</u> <u>Research</u> (New York: Appleton-Century-Crofts, Inc., 1959), pp. 166-167.

<sup>2</sup>Carter V. Good, A. S. Barr, and Douglas E. Scates, <u>The Methodology of Educational Research</u> (New York: D. Appleton-Century Company, 1941), p. 287. of quantitative description of a group.<sup>3</sup> They further commented that it

... Centers attention on ... important things to be reported; it is a great challenge to ascertain the central elements or the dominant and fundamental factors that will indicate the general conditions.4

It seems to describe the existing conditions and to answer the question, "What is?"

Since data for the study was collected from mothers regarding their infant-feeding practices and was available only through direct communications, the technique which was most suitable was the interview-schedule.

II. THE DEVELOPMENT OF THE INTERVIEW-SCHEDULE

#### The interview.

A variety of techniques can be used in the normative-survey. Carter V. Good and associates have summarized these techniques to be: (1) survey testing, (2) questionnaire inquiries, (3) documentary frequency studies, (4) interview studies, (5) observational studies, and (6) appraisal procedures.<sup>5</sup> Since the

<sup>3</sup>Carter V. Good and Douglas E. Scates, <u>Methods</u> of Research (New York: Appleton-Century-Crofts, Inc., 1954), p. 551.

4Ibid., p. 552.

<sup>5</sup>Carter V. Good, A. S. Barr, and Douglas E. Scates, <u>The Methodology of Educational Research</u> (New York: D. Appleton-Century Company, 1936), p. 295.

information sought was of a subjective nature, it was felt that the interview study would generate a personal element. Jahoda, Deutsch and Cook have pointed out that it was felt the personal element which the interview lends itself to would take into account cultural factors. thus clarifying basic misunderstandings, " ... a question with standard wording may have diverse meanings to different subjects, (and) may be comprehensible to some and incomprehensible to others."<sup>6</sup> By means of the interview tool clarification of issues would assure a higher percentage of returns.<sup>7</sup> Inasmuch as the study adapted itself to the interview, it provided an opportunity for the writer to go directly to the people who were in a position to know the facts and to ask for the desired information.<sup>8</sup> As Bingham and Moore have written, the interview is

... the straightforward approach ... attempts to establish a sound, co-operative relationship with the interviewee as a person who is as interested in providing the facts as the interviewer is in obtaining them. Here, the interviewer not only tells the other person what he wants to know and why he wants to know it, in doing so, he also

<sup>6</sup>Marie Jahoda, Morton Deutsch, and Stuart W. Cook, <u>Research in Social Relations</u> (New York: The Dryden Press, 1951), I, p. 156.

7Mildred Parten, <u>Surveys</u>, <u>Polls and Samples</u>: <u>Practical Procedures</u> (New York: Harper and Brothers <u>Publishers</u>, 1950), p. 73.

<sup>8</sup>Jahoda, Deutsch, and Cook, <u>op</u>. <u>cit.</u>, p. 160.

tries to arouse in the interviewee a high degree of motivation to co-operate actively. This process tends to minimize errors due to misunderstanding or defensiveness.<sup>9</sup>

## The interview-schedule.

The interview-schedule is occasionally referred to as a form or guide which may be filled out during a personal interview.<sup>10</sup> The interview-schedule thus becomes " ... a guide, a memory tickler, a recording device, and a means of limiting the scope of (one's) inquiry."<sup>11</sup> Good and Scates asserted that the schedule tends to standardize and single out particular aspects of the situation insuring response to the same item from all cases.<sup>12</sup> It was further stated by Lundberg that such a tool is more personal than the questionnaire inquiry which is usually mailed or distributed. He also commented that, " ... several related and corroboratory questions may be asked orally to secure a simple answer."<sup>13</sup>

A survey of literature related to the infant-feed-

<sup>10</sup>Good and Scates, op. cit., p. 605.

11C. Luther Fry, The Technique of Social Investigation (New York: Harper and Brothers, 1934), p. 55.

<sup>12</sup>Good and Scates, op. cit., p. 606.

<sup>13</sup>George A. Lundberg, <u>Social Research</u> (New York: Longmans, Green and Company, 1948), p. 179.

<sup>&</sup>lt;sup>9</sup>Walter Van Dyke Bingham and Bruce Victor Moore, <u>How to Interview</u> (New York: Harper and Brothers, 1959) p. 12.

ing practices was accomplished to prepare the interviewschedule. The interview-schedule was developed to be administered as open-end questions. There were a total of twenty-two questions each of which were followed by response items. Anticipated responses had been previously itemized and every effort was made to have the order of the questions appear logical to the mothers. If the individual's response was not indicated among the items, the specific response was listed as such. See Appendix B.

#### III. THE POPULATION

#### Description of the population.

During the preliminary stages of the study it was decided to interview mothers attending Child Health Conferences. The Child Health Conferences are strategically located in twenty-four stations throughout Denver. An interview with the Director of Denver Commission on Human Relations disclosed the concentrated areas of Spanish people in Denver.<sup>14</sup> The decision was made to select clinics designated by the clinic supervisors as having the highest concentration of Anglo and Spanish mothers.

<sup>14</sup>Helen L. Burke, "Location and Problems of Minority in Denver," <u>The Police and Human Relations</u>, (Denver, Colorado: Denver Commission on Human Relations and Denver Police Academy, 1957), p. 5. (Mimeographed.)

A sampling of twenty Anglo and twenty Spanish mothers that attended Child Health Conferences on scheduled days were selected. These mothers were chosen according to the predetermined limitations as previously indicated. The Denver Department of Health and Hospitals screens mothers attending Child Health Conferences in accordance with their eligibility policies.<sup>15</sup> Thus, the status of families is, by the nature of the eligibility policies, in the lower group.

### IV. THE PROCEDURES

### Permission for the study.

Included among the initial steps in the study was securing cooperation from the personnel of the Child Health Conferences under surveillance. The permission of the Medical Director of the Maternal and Child Health Service, the Director of the Visiting Nurse Service and the consultant of the Maternal and Child Health Services along with the various clinic supervisors was obtained. See Appendix A for the letters.

### Role of the interviewer.

By way of distinction from the Child Health

<sup>15&</sup>quot; Child Health Conference Manual," (Denver, Colorado: Maternal and Child Health Service, Department of Health and Hospitals, July, 1959), p. 2. (Mimeographed.)

Conference personnel it was decided that the writer should wear street clothes. It was felt that a more natural response would be obtained through similarity in dress. The writer arrived prior to clinic time to become familiar with the charts and to select a requisite quota of mothers according to limitations for selecting sample. Method of collecting data.

In the initial contact, after greetings were exchanged, the purpose of the interview was explained to the mother and her cooperation was enlisted as being important. The mothers were informed that specific names would not be used in the study. The purpose of the interview was stated in terms of the mothers' capacity to understand. Recording of the data.

Each mother was asked to respond to a set of twentytwo questions. If her answer corresponded to those items indicated on the interview-schedule a check mark was placed next to their choice. However, if her response was not as indicated among the items which were listed, it was written on the interview-schedule. Symonds and Dietrich supported the method of recording data during the interview in an investigation of the time interval prior to recording the data. It was disclosed that " ... an interview recorded immediately contained the maximum of details such as dates and places and was more complete in

general."<sup>16</sup> Repetition was occasionally employed in the interview to clarify questions.

V. THE PRELIMINARY TEST OF THE INTERVIEW-SCHEDULE Purpose of the preliminary test.

According to Parten " ... the pilot study should reveal the shortcomings of all procedures."<sup>17</sup> A pilot study or preliminary test was made to test the interviewschedule. It further served as a check upon the time needed to conduct the interview.

## Findings of the preliminary test.

The preliminary test included three Spanish and two Anglo mothers. Out of the five mothers interviewed only one Spanish mother appeared uncomfortable. Only after the interview had progressed did the mother appear at ease. The remaining mothers appeared flattered by the attention, and readily responded to the interview. Due consideration was alloted to each question formulated in the interview-schedule. Questions related to what the mother anticipated doing at some future date held no significance for either culture. Further clarification of the question

16Percival M. Symonds and Donald H. Dietrich, "The Effect of Variations in the Time Interval between an Interview and its Recording," <u>The Journal of Abnormal</u> and Social Psychology, 36: 597, October, 1941.

17parten, op. cit., p. 57.

involving time left their answers vague and irrelevant. Additional questions asking for anticipatory feeding practices gave a high percentage of "I don't know", regardless of the child's age or culture.

Only minor changes were needed in the interviewschedule prior to final collection of data.

## VI. SUMMARY

The normative-survey was the method employed in this study. The technique most applicable for the collection of the data was the interview-schedule. The study was conducted in Child Health Conferences which were designated by clinic supervisors as having the highest concentration of Anglo and Spanish children registered. Permission to collect data for the study was obtained from the Directors and supervisors of the Child Health Conferences. A pilot study was undertaken to refine the interview-schedule, and estimate the time needed for each interview. Minor changes were made in the interviewschedule for collecting data.

#### CHAPTER IV

#### ANALYSIS AND INTERPRETATION OF THE DATA

Data for this study were collected by interviews with selected Anglo and Spanish mothers known to the Child Health Conferences in Denver. A total of twenty Anglo and twenty Spanish mothers were used in a comparative study of infant-feeding practices. A total of fifty-one children fell within the age range for the study. Questions were developed to encompass selected feeding practices utilized by mothers in the first two and a half years of life. The twenty Anglo mothers interviewed had a total of twentyfour children and the twenty Spanish mothers had a total of twenty-seven children.

The first step in the analysis of the data was to tally the responses of the Anglo and Spanish mothers in the order of the interview-schedule. The responses were then categorized into tables and calculated into percentages. After percentages were calculated, the usual test for statistical significance of difference between the two groups of percentages was used.

A null hypothesis was set up as a first step in determining the statistical significance of difference between the Anglo and Spanish mothers. This hypothesis asserts that there was no real or true difference between

the two groups. Was the difference between the two groups large enough to cast serious doubt on this null hypothesis? In order to answer this question, a critical ratio or CR was computed from the percentages of each item. This CR of probability was compared to the .05 level of significance statistically. A CR of 1.96 or above was held to be significant at the .05 level. The .05 level was an arbitrarily selected standard of significance. Experimenters and research workers have for convenience, chosen several arbitrary standards of which the .05 level and .01 level are most often used. The .05 level was employed throughout the remainder of this discussion in the interpretation of the data. This statistical analysis applies to all of the data with the exception of Table I.

#### I. DATA ON THE FAMILIES

Information pertaining to the family's statistics was obtained from each mother prior to the interview. See Appendix B. The husband's occupation was eliminated in the final analysis as being insignificant. During the process of the interview several fathers expressed their feelings pertaining to feeding practices but these feelings were excluded in the analysis of the data. It was recognized that fathers' feelings toward feeding might influence the practices of the mother but it was an

uncontrollable variable not included in the study. It was noted that fathers' views on feeding practices frequently differed from that of the mothers.

The forty mothers interviewed in the process of collecting data had a median age of twenty years in both groups. The median was used as a measurement of central tendency because an extreme score was evident in the Anglo group. A general picture of the data on the families can be obtained from an examination of Table I. A mean age of the children showed the Anglo children to be 1.3 months younger. The number of families participating in the study with one and two children are expressed in percentages. The families with one child had an Anglo representation of 80 per cent as compared to 65 per cent for the Spanish families. Twenty per cent of the Anglo families had two children as compared to 35 per cent of the Spanish families.

The interpretation of the figures indicate that the differences in number of children per family were nonsignificant and hence implies no real or true difference between the two groups studied with respect to the data collected.

#### II. BREAST OR BOTTLE FEEDING

The analysis of the data collected from mothers

## TABLE I

# DATA ON FAMILIES IN THE STUDY

Anglo	Spanish
20	20
e-implex	
20	20
24	27
10 mo.	11.3 mo.
80%	65%
20%	35%
	20 20 24 10 mo. 80%

represented in both groups presented an inconsistent pattern in regards to the basic milk dietary. It was noted that the mothers alternated between breast and bottle feedings and bottle to breast feedings. One of the Spanish mother's two children were represented in both breast and bottle feeding categories having started on bottle feedings then changing to breast feedings at home. In order to clarify the data in Table II, the number of Anglo and Spanish mothers who first started their children on breast or bottle feedings were as follows:

	Anglo	Spanish
Started on breast	11	15
Started on bottle	13	12
Total	24	27

From an inspection of the data in Table II the questions pertaining to breast or bottle feeding elicted a variety of responses. From a comparison of the percentages of the two groups it would appear that the Spanish mothers breast-fed their children for a longer period of time than did the Anglo mothers. However, statistically there appeared to be no significant difference. At the time of the interview none of the Anglo mothers were currently breast feeding as compared to 14.8 per cent of the Spanish mothers. The CR of 1.96 was significant at the

TABLE II

CRITICAL RATIO AND PERCENTAGES OF ANGLO AND SPANISH CHILDREN WHO

1	WERE	OR BOTT	LE FED		8 8 8 8 8 8	
	Anglo		Spanish	8 8 8 8 8 8 8	A 8 8 8 4 8 8 8	
	No.	Per cent	No.	Per cent	CR	
Children breast fed:		r ()	(			
Less than a month		24.1	v۲	1.11	T0-T	
Three months to six months	101	100	9	22.2	1.36	
More than six months	Ч	4.2	Ч	3.7	60.	
Currently breast feeding	•	•	4	14.8	1.96	
Children bottle fed:						
Less than a month	•	••••	2*	7。4*	1.35	
One month to three months	••••	••••	• • •	••••	• • •	
Three months to six months	• (	••••	• •	• [	• •	
More than six months	2				11.	
Currently bottle feeding	TT	42.0	ТТ	1.04	0T.1	
Total	24	100.00	27	100.00		
			1			

\*These figures represent two children who were tallied in both breast and bottle fed categories because the mother employed both practices. The total figures account for these children only once.

.05 level. Two of the Spanish mothers interviewed expressed their desire to breast feed their children but had not done so; their reasons given were "was too sleepy to insist" and "had a breast condition."

The data pertaining to bottle feedings held no statistical significance, although 45.8 per cent of the Anglo mothers as compared to 40.7 per cent of the Spanish mothers were currently bottle feeding.

The interpretation of the figures indicate that there was a significant difference between the two groups in the item of currently breast feeding. Although a complete interview of their early regime of breast or bottle feeding was investigated, the remaining data held no statistical significance.

#### **III. SUPPLEMENTARY FEEDINGS**

An analysis of the responses in Table III revealed that none of the Anglo mothers studied had given their children supplementary feedings as compared to 81.5 per cent of the Spanish mothers. In other words 18.5 per cent of the Spanish children had received supplementary feedings. The CR of 2.29 is significant at the .05 level. Thus, it may be concluded that the groups differed significantly in this answer. Since there were no supplementary feedings employed by Anglo mothers one might question if they were aware of

朱正正 计分子的 化化合物 化化合物 化化合物 化化合物 化化合物 化化合物 化化合物 化化合		***************************************			
	Anglo	0	Spani sh		
	No.	Per cent	No.	Per cent	CR
Children received supplementary bottles:				n an	
Occasionally	•••••	•	Ч	3.7	9.7
Unce a day Tuice a day	••••	•	Ч	3.7	.9.
More than twice a day	• •	•	N -	1.1	н. С.
Not at all	24	100.00	52	81.5~	2.29
Total	24	100.00	27	100.00	

this practice.

IV. CHANGING FROM BREAST TO BOTTLE FEEDINGS

It will be recalled that the mothers presented an inconsistent pattern in regards to the basic milk dietary. How this pattern changed so rapidly in the first months of life can be seen from Table IV. A general picture of the data presented showed 54.2 per cent of the Anglo mothers as compared to 59.3 per cent of the Spanish mothers had started their children on bottle feedings or were currently breast feeding at the time of the study. Over and above the data presented it seems evident that 29.1 per cent of the Anglo mothers as compared to 11.1 per cent of the Spanish mothers had breast fed their children for a month or less.

The interpretation of the figures indicate that the differences were nonsignificant and hence implies no real difference in the data between the two groups in their answers to the question. However, the data does indicate a similarity in the number of Anglo and Spanish mothers that changed from breast to bottle feedings within a six month period. There was a slight trend for the Spanish mothers to breast feed for a longer period of time.

#### V. WEANING AGES

There are many pros and cons in regard to the age

	Anglo	nglo	Spanish		49 21 28 28 28 28 28 28 28 28 28 28 28 28 28
	No.	Per cent	No.	Per cent	CR
Children began on breast feeding				n an	
Less than a month	2	8.3		•	1.54
Two weeks to one month	Л	20.8	m	11.1	10
One month to three months	Ч	4.2	N	7.4	.48
Three months to six months	m	12.5		14.8	.23
More than six months	•	••••	Ч	3.7	.95
Not at all	13	54.2	17	63.0	.63
					in sector
Total	54	100.00	27	100.00	

TABLE IV

for weaning. Moreover, it seemed questionable whether mothers will depend on a rule of thumb for determining when to wean their children.

As would naturally be expected the children's ages for having been completely weaned were later than six months of age. An over-all view of the data in Table V shows the CR and percentages of the groups interviewed. A 54.2 per cent representation for the Anglo mothers as compared to 44.4 per cent for the Spanish mothers had not completely weaned their children. These mothers were placed in the item "not completely weaned with anticipation." A 20.9 per cent representation for the Anglo mothers as compared to 40.7 per cent for the Spanish mothers had no idea as to the age they would wean their children. These mothers were placed in the item "no idea without anticipation." By the age of 12 months the Anglo mothers had completely weaned 16.6 per cent of their children as compared to none for the Spanish mothers. Two of the Anglo mothers who had not completely weaned their children did express the feeling that they wanted "no bottles after a year." One of the Anglo mothers stated that she had been "too lazy to wean" her child. Another of the Anglo mothers felt that the child was "too young to understand." One of the Spanish mothers felt that her children should be weaned early as they "won't eat if they have too many bottles." The data

CRITICAL RATIO	ERCEN TAGES OF CHILDREN WERE	AND PERCENTAGES OF THE AGES ANGLO AND SPANISH CHILDREN WERE WEANED	ES ANGLO AND SI	ND SPANISH	8 84 84 84 84 84 84 84 84 84 84 84 84 84
8 8 8 8 7 8 8 8	Anglo				
	No.	Per cent	No.	Per cent	CR
Children weaned:					1
Six months to nine months	2	~ 2 2	••••	••••	1.54
Nine months to twelve months Twelve months to fifteen months	. ก	000	• <b>†</b>	14.8	1.71
Not completely weaned with anticipation	13	54.2	12	4.44	.69
No idea without anticipation	ГЛ	20.9	ΤT	40.7	1.52
Total	24	100.00	27	100.00	

TABLE V

would seem to indicate that a large percentage of the children of both groups were weaned after the age of fifteen months.

A statistical comparison of the data between the Anglo and Spanish mothers in regard to ages for the weaning of their children revealed no significant difference. The data had indicated that a similar number of Anglo and Spanish mothers had a notion as to the age they would wean their children. Five of the Anglo mothers as compared to 11 Spanish mothers had no idea as to the age they would wean their children. Although there was no significant difference there seemed to be a trend for the Spanish mothers to wean their children at an older age than did the Anglo mothers.

#### VI. LENGTH OF NURSING TIME

Within recent years child specialists have recommended opposing points of view regarding infant-feeding procedures. Obviously, there are many possible ways of handling the infant's hunger drive. The data presented in Table VI depicts the length of time for feedings that were employed by Anglo and Spanish mothers in this study.

The responses to the item "every time they cried," was interpreted to mean that the mothers fed their children whenever the child cried. The Anglo and Spanish mothers

AngloSpanishNo.Per centNo.Fer centNo.Per centNo.Per cent $\begin{pmatrix} 8 \\ 2 \\ 2 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$		PERCENTAGES ERS ALLOWED	OF THE LENGTH THEIR CHILDREN	OF TIME AN N TO NURSE	AND S.	HSI
No.         Per cent         No.         Per cent         CR           ren were fed:         ery time they cried         8 $33.3$ $13$ $48.1$ $1.07$ ery time they cried         8 $33.3$ $13$ $48.1$ $1.07$ drifted domand $14$ $16$ $37.1$ $1.07$ drifted domand $24$ $100.00$ $27$ $100.00$ zen nursed: $10$ $41.7$ $16$ $59.3$ $1.25$ ren nursed: $12$ $50.0$ $6$ $22.2$ $2.25$ mited time without $2$ $8.3$ $5$ $18.5$ $1.05$ consistent sucking $2$ $6.3$ $5$ $100.00$ $27$ $100.00$		Angl(		Span	i sh	
		No.	Per cent	. No	Per cent	CR
24 $100.00$ $27$ $100.00$ ren nursed: definite time mited time with to sucking $10$ $41.7$ $16$ $59.3$ $1.25$ mited time with nited time without consistent sucking $12$ $50.0$ $6$ $22.2$ $2.25$ mited time without consistent sucking $2$ $8.3$ $5$ $18.5$ $1.05$ 24 $100.00$ $27$ $100.00$	Children were fed: Every time they cried On a schedule Modified-demand	14 14 14	33. 83.3 6.3 4.6	13 14 10	48.1 14.8 37.1	1.07 .71 1.52
ren nursed: definite time mited time with consistent sucking 12 $50.0$ $6$ $22.2$ mited time without consistent sucking 2 $8.3$ $5$ $18.5$ 24 $100.00$ $27$ $100.00$		11 14 14	100.00	27	100.00	81 81 85 83 83 88 88 88 88 88 88 88 88 88 88 88
mited time with consistent sucking 12 50.0 6 22.2 mited time without consistent sucking 2 8.3 5 18.5 24 100.00 27 100.00	Children nursed: Indefinite time	10	7.14	16	59.3	1.25
mitea time without consistent sucking 2 8.3 5 18.5 24 100.00 27 100.00	Limited time with consistent sucking	12	50.0	9	22.2	2.25
24 100.00 27	LIMITED TIME WITHOUT consistent sucking	N	8.3	м	18.5	1.05
	Total	24	100.00	27	100.00	

TABLE VI

having one child responded to this item. A 33.3 per cent representation for the Anglo mothers as compared to 48.1 per cent for the Spanish mothers had fed their children "every time they cried." One of the Spanish mothers fed her child every time he cried because he was a "poor eater." The item pertaining to a "schedule" was interpreted to mean that the mothers had definite times to feed their children. The responses to the item were very similar between the two groups. The item pertaining to "modified-demand" was interpreted as a fluctuating time schedule for feeding. The responses to this item were insignificant. The above responses held no comparative significance.

A question pertaining to the length of nursing time was asked the mothers of both groups. The item concerned with an "indefinite time" for nursing was interpreted as allowing nursing to continue for forty-five minutes or longer. This included the habit of carrying a bottle around and nursing as the child desired. A 41.7 per cent representation for the Anglo mothers as compared to 59.3 per cent for the Spanish mothers had allowed their children to nurse for an "indefinite time." The item pertaining to a "limited time with consistent sucking" was interpreted as allowing nursing for ten to twenty minutes then removing the food source. A 50 per cent representation for the Anglo mothers as compared to 22.2 per cent for the Spanish

mothers had nursed their children "a limited length of time with consistent sucking." The CR of 2.25 was significant at the .05 level. The remaining item pertaining to a "limited time without consistent sucking" was interpreted as nursing for a period of time with interruptions during the feeding. Interruptions in the feeding took the form of playing with the child, changing diapers, and the like.

The responses to the question concerning a schedule were held to be statistically nonsignificant. However, the data would seem to indicate that the Anglo mothers fed their children preferably on a "modified-demand" and, secondly, "every time they cried." The Spanish mothers tended to feed their children "every time they cried" and, secondly, on a "modified-demand" schedule.

An interpretation to the question concerning length of nursing time was statistically significant to the item "limited time with consistent sucking." The Anglo mothers appeared to be more exact in the length of time allowed for nursing than the Spanish mothers.

#### VII. INTRODUCTION OF CUP AND SOLID FEEDINGS

Drinking from a cup and eating solid foods are two more steps to be accomplished in the learning process. The introduction of solid foods usually takes place within the first year of life. The ages at which the Anglo and

Spanish mothers first introduced cup and solid feedings to their children is shown in Table VII.

A 16.7 per cent representation of the Anglo mothers answered the item "no idea without anticipation" as compared to none of the Spanish mothers that had an idea as to the age they would start cup feedings. This difference showed a CR of 2.15 which was significant at the .05 level. A 4.2 per cent for the Anglo mothers as compared to 14.8 per cent for the Spanish mothers whose children were too young to have started cup feedings had anticipated the age they would start this practice.

In addition to this a comparison was made between the two groups in regard to the age at which the children were first introduced to solid foods. A 25 per cent representation of the Anglo mothers as compared to 3.8 per cent of the Spanish mothers had introduced solids at two weeks to one month of age. The CR was 2.19 which was clearly significant at the .05 level. In response to the item "more than four months" 4.1 per cent of the Anglo mothers as compared to 25.9 per cent of the Spanish mothers had introduced solid foods later than four months of age. The CR of 2.13 is also significant at the .05 level of difference. This would indicate that a significant percentage of the Anglo mothers had started their children on solid food at two weeks to one month of age, whereas, a significant

ND PER 0 THE	ENTAGES	ANGLO AND OF CUP AI	PANISH SOLID	REN'S	
	Anglo		Spanish	ish	
	No.	Per cent	No.	Per cent	CR
Children's age for first drinking from a cup: True monthe to six monthe	F	ແ ນ 	α	00	I r
Six months to nine months	100	4 	13	48.1	-0
Nine months to twelve months No idea without anticipation	:=	16.7	•	7.4	2.1 2.1 2.7 2.1 2.7
Too young with anticipation	1	4.2	4	14.8	N
	24 *******	100.00	27	0.00	8 88 8 88 8 88 8 88 8 88 8 88 8 88 8 8
Children's age for introduc- tion of first food:					
Two weeks to one month One month to two months	9 61	25.0	Ч 0		2.19
Two months to four months More than four months	1-1-		~~~	100 11/10 1010	
Too young	•	+ •	- m		
	24	100.	27	100.00	
1919年19月1日日日日1919年19月1日11日11日11日11日11日11日11日11日11日11日11日11日1					

TABLE VII

percentage of the Spanish mothers had started their children on solid foods later than four months of age.

The interpretation of these figures indicate that there was a significant difference between the two groups to the item "no idea without anticipation." The question was in relation to the age for drinking from a cup. The Anglo mothers represented in this item were unable to anticipate their children's age for starting on cup feedings.

The data related to the age for introduction of solids was significant in regard to the items "two weeks to one month" and "more than four months of age." The "two weeks to one month" item showed a significant number of Anglo mothers had started their children on solids within that age range. The item "more than four months" of age showed a significant number of Spanish mothers had started their children on solids later than four months of age. In an over-all view, the data seems to indicate that Anglo mothers started their children on solids at an earlier age than Spanish mothers.

### VIII. FIRST TYPE OF SOLID FOODS INTRODUCED

A variety of opinions and ideas are once more evident in regard to the first kind of solid foods to be introduced in the infant's diet. Pediatricians themselves differ

as to whether the infant should start on cereal, fruit, or other types of food. Needless to say, another point to be considered is the economic factor which cannot be completely overlooked in whether or not the baby starts on the commercial baby foods or table foods. As can be seen from Table VIII the data presented a variety of responses from both groups in regard to the first solid foods introduced to their children.

Seventy and eight tenths per cent of Anglo mothers fed their children cereal as their first solid, compared to 48.1 per cent of the Spanish mothers. The tabulated miscellaneous items entailed the feeding of eggs or a mixture of two foods. The Anglo mothers had a response of 4.2 per cent as compared to 18.5 per cent of the Spanish mothers to this item.

As to the first type of food fed their children, the Anglo mothers were represented by 83.3 per cent as compared to 63 per cent for the Spanish mothers that had first used prepared baby food. One of the Anglo mothers and two of the Spanish mothers had first fed their children regular cereal, as Cream of Wheat. The mothers asserted they "didn't know the difference." The doctors had given them instructions to feed their children cereal. Two of the Spanish mothers had begun feeding their children baby food but had immediately changed to table food, their

CRITICAL RATIO AND PI REGARD TO THE	ER CEN TA FIRST	ANGLO A	AND SPANISH FOODS INTRE	NISH CHILDREN IN INTRODUCED	
**************************************	Anglo	****	sessessessesses Spanish	11 Sh	89 89 88 88 88 88 88 88 88 88 88 88 88 8
	No.	Per cent	No.	Per cent	CR
Children's first solid foods: Meat	•	• (	г	3.7	
Cereal Fruit	12	70.8	он Н	48.1 3.7	1.64
Vegetables Miscellaneous Too young	- HE	16.7 4.2	или	118. 18. 18. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	1.57 1.35
				والمحاولة	
Total	24	100.00	27	100.00	
		<b>#</b> = = = = = = = = = = = = = = = = = = =		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Children's first type of food: Table food	400	16.7	00 1	29.6	1.14
Baby 1000 Miscellaneous			7.7 7.7	03.0	1.50
Total	24	100.00	27	100.00	

TABLE VIII

reasons given were the children "liked it better."

The interpretation of the data indicated that the differences were nonsignificant. Nevertheless, the data would seem to indicate that the Anglo mothers had introduced baby cereal as the first solid food into their children's diet. The Spanish mothers' responses were more dispersed although the percentages were highest to the items entailing "cereal" and "baby food."

IX. TIME SWEETS WERE PERMITTED

At this point, a question pertaining to sweets was introduced into the study. It was felt that sweets were being used as a "reward" or a "pacifier" in the diets of children. The interpretation of the word "sweets" was used to connotate cookies, jello, candy, or whatever else. Table IX presents a general picture of the data.

An analysis of the data showed that 45.8 per cent of the Anglo mothers and 63 per cent of the Spanish mothers had allowed their children sweets as they desired, sweets being frequently used as a between-meal "pacifier." A 25 per cent representation of the Anglo mothers as compared to 14.8 per cent of the Spanish mothers had apparently used sweets as a reward to children for eating their meals. The miscellaneous item included mothers of both groups who did not allow sweets or "could not afford them."

OTTEN HEATT TUA		PERMITTED SWEETS	TS TS	GUILD ACLUED	REN
***************	Anglo		Spanish		83 88 88 88 88 88 88 88 88 88 88 88 88 8
	No.	Per cent	No.	Per cent	CR
Children were allowed to					
nave sweets: Any time	TT	45.8	17	63.0	52.1
After eating dinner	9	25.0	4	14.8	.91
Occasi onally Miscellaneous	лN	80.9 8	mm	11.1	.19
Total	24	100.00	27	100.00	

A comparative analysis of the figures between the two groups indicated that the differences were statistically nonsignificant. Nevertheless, the data seemed to indicate that Anglo and Spanish mothers tended to permit their children sweets at any time. Responses to the item "after eating dinner" were next highest among both groups.

#### X. MEAN AGES FED WITH THE FAMILY

As a child grows older, he gradually adapts to the social patterns of the family of which he is a member. One of the first steps in this pattern is the eating of meals with the family. In this manner, parents hope that the child will gradually become accustomed to the family's eating patterns. In general, the data presented in Table X shows the ages at which the Anglo and Spanish mothers first began feeding their children with the family.

A percentage comparison between the two groups appears strikingly similar. However, looking at the mean ages, the Anglo children had started eating with the family at six months of age as compared to seven and a half months of age for the Spanish children. In response to the item "occasionally with the family" the mean age of the Anglo children was three and a half months as compared to four and a half months for the Spanish children.

An interpretation of the data concerning the age at

CRITICAL RATIO		ENTAGES, A DREN IN RE 	GARD TO	FEEDING V	WITH THE FAMILY	AMILY	
		Anglo			Spanish		8
	No.	Age	Per cent	t No.	Age	Per cent	CR
Children were fed:	-						
Mean age with the family	74	6 mo.	58.3	16	7 <u>2</u> mo.	59.3	.07
mean age by himself Mean age occasion-	9	th mo.	25.0	8	5 <sup>1</sup> / <sub>2</sub> mo.	29.6	.37
ally with the family	4	3 <sup>1</sup> / <sub>2</sub> mo.	16.7	б	44 mo.	1.11	.58
Total	24	and the states and the states of the states	100.00	27	na - nag <sub>era d</sub> a en ante e da general e de en acteur de la competencia de la competencia de la competencia de la c	100.00	

TABLE X

which Anglo and Spanish children ate with their families was statistically nonsignificant. The data would seem to indicate that the Anglo children were fed with the family at an earlier age than those of the Spanish family.

XI. REFUSAL TO ACCEPT LIQUID FEEDINGS

There are many feeding situations which occur frequently within the child's early learning experiences. Are mothers able to anticipate their reactions to situations which might occur? The child's refusal to accept liquid feedings at three months of age was introduced as the first hypothetical situation which was asked of each mother.

An analysis of the responses in Table XI revealed a close proximity among mothers in regard to their children's refusal to accept liquids. The tabulated miscellaneous item brought forth such responses as "changing the formula" by two Anglo and one Spanish mother, and "playing with the child" prior to feeding was mentioned by one of the Spanish mothers. A total of six Anglo and six Spanish mothers interviewed had "no idea" what to do if their children refused to accept liquids.

The answers to the question concerning their three months old child's refusal to accept liquid feedings were interpreted as being statistically nonsignificant. The two groups' responses were similar in nature.

XI
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	Anglo Spanish	lo	Spanish	88 88 88 88 88 88 88 88 88 88 88 88 88	
	No.	Per cent	No.	Per cent	CR
Children's refusal to accept liguids:					an dan dan dan dan dan dan dan dan dan d
Feed later Offer food	40	25.0 16.7	8 9	29.6	.37
Coax him Offer a cup	ЧΜ	4.2 20.8	0 m	1-2-F	10
Miscellaneous No idea	0.0	20. 20. 0	0.0	22.22	
Total	24	100.00	27	100.00	an a

#### XII. POST-WEANING DEMANDS

Some time during the early years of childhood the child will be introduced to the experience of weaning. The age at which the child is weaned varies from culture to culture. The data obtained for this study were concerned with the practices the mothers employed after their children were completely weaned. The ages of the children were not a matter of concern. Table XII presents a general picture of the items responded to by the mothers interviewed.

The percentages between the groups showed 33.4 per cent of the Anglo mothers as compared to 51.9 per cent of the Spanish mothers had "ignored their children" after weaning. A total of six Anglo and six Spanish mothers responded to the item "let him nurse or drink." Two of the Anglo mothers who had allowed their children to nurse expressed their reasons: "He's too young to take it away," and "I'd give it to him and ask the nurse what to do." One of the Spanish mothers who had allowed her child to nurse reasoned, "It's my first child and I'd let him have his bottle." The tabulated miscellaneous item showed such responses as, "offering a cup" or "glass" and "spanking" the child. Two Anglo mothers and one Spanish mother had "no idea" what practice they would employ.

A statistical comparison of the data pertaining to post-weaning demands of Anglo and Spanish children revealed

CRITICAL RATIO AND PERCENTAGES OF PRACTICES EMPLOYED BY ANGLO AND SPANISH MOTHERS IN REGARD TO THE POST-WEANING DEMANDS OF THEIR CHILDREN	ENTAGES O TO THE PO	AGES OF FRACTICES THE POST-WEANING D	EMPLOYED DEMANDS OF	PLOYED BY ANGLO AND SI ANDS OF THEIR CHILDRE	
	Anglo	0	1		
	No.	Per cent	No.	Per cent	GR
Children cried to be nursed after weaned: Ignore him Let him nurse or drink Offer solids Miscellaneous No idea	00000	20 00 0 40 00 0 40 00 0	エンヤのヤー	51.9 22.29 14.8 3.44	1.33 .155 .71 .68
Total	24	100.00	27	100.00	
		· · · · · · · · · · · · · · · · · · ·			8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

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no significant difference. The data seem to indicate that the Spanish mothers tended to ignore their children whereas the Anglo mothers' responses were varied.

XIII. FEEDING OF SOLIDS AND SPOON-FEEDING

A step further in the growing-up process entails the acceptance of solids and the child's first attempts at feeding himself. In reality the child is only experimenting with something new and different. However, are the mothers prepared to handle these new experiences? The data in Table XIII depict the practices employed by Anglo and Spanish mothers to the situations that arose or will arise.

A comparative analysis of the situational question concerning the "child's first solids that he pushed from his mouth" showed 50 per cent of the Anglo mothers as compared to 37.1 per cent of the Spanish mothers had "spooned it back." Two of the Anglo mothers who responded to this item stated that they "had fed babies before and knew what to expect." One of the Spanish mothers became upset over this incident and called her mother for help. Three of the Anglo and two Spanish mothers had "no idea" what they would do if the situation arose. A comparison of the responses to the question regarding "first attempts at spoon-feeding" showed a 87.5 per cent of the Anglo mothers as compared to 92.6 per cent of the Spanish mothers would

PERCENTAGES OF SITUATIONAL PRACTICES IN REGARD TO THE FEEDING OF AND SPOON-FEEDING Anglo Spanish No. Per cent No. No. Per cent No. 12 59.2 12 1 4.1 2 24 100.00 27 24 100.00 27			TABLE XIII			
Anglo No. Per cent I2 50.0 12 29.2 1 12.5 29.2 1 12.5 29.2 1 12.5 29.2 1 12.5 29.2 1 12.5 29.2 1 12.5 29.2 1 12.5 29.2 12.5 29.2 12.5 29.2 24 100.00 24 100.00 24 100.00 24 100.00 24 100.00 24 100.00 24 100.00 24 20.00 22 20.00 22 20.00000000	AL	ENTAGES ( THERS IN AND	DF SITUATIONAI REGARD TO THI SPOON-FEEDIN(	E FRACTIC	ES EMPLOYED BY OF SOLIDS	Y ANGLO
No. Fer cent No. No. Per cent No. 12  cdot 50.0  cdot 12  cdot 29.2  cdot 12  cdot 22  cd		22 24	10 ] 0	Span	reeteeree 18h	
the $\begin{array}{cccccccccccccccccccccccccccccccccccc$		No.	er	No.	Per cent	CR
the $\begin{array}{cccccccccccccccccccccccccccccccccccc$	Child pushed first solid feedings from his mouth:					
it a rew days ace food in the bottle 1 $\frac{1}{1}$ $\frac{4.2}{4.2}$ $\frac{2}{2}$ scellaneous 3 $\frac{1}{2}$ $\frac{4.2}{12.5}$ $\frac{2}{2}$ idea 24 $100.00$ 27 ren's first attempt oon-feeding: 21 $87.5$ $25$ ed him make a mess 21 $87.5$ $25$ ed him scellaneous 1 $4.2$ 1 scellaneous 24 $100.00$ 27	Spoon it back	12	50.0	01	37.1	-92
scellaneous 1 1.12.5 2 idea 24 100.00 27 ren's first attempt con-feeding: 21 $87.5$ 25 ed him make a mess 21 $87.5$ 25 ed him make a mess 21 $14.2$ 1 scellaneous 24 100.00 27			20.62	N N	11-11 2-11	1.12
ren's first attempt roon-feeding: t him make a mess $\begin{bmatrix} 21\\ 8,3\\ 1\end{bmatrix}$ $\begin{bmatrix} 87.5\\ 8.3\\ 1\end{bmatrix}$ $\begin{bmatrix} 25\\ 8.3\\ 1\end{bmatrix}$ ed him scellaneous 1 00.00 27		۱ H M	101	110	10.1	09.
ren's first attempt con-feeding: t him make a mess $21$ $87.5$ $25$ ed him scellaneous 1 4.2 1 24 100.00 $27$		.10		60		
ldren's first attempt spoon-feeding: Let him make a mess 21 87.5 25 Feed him Miscellaneous 1 4.2 1 Miscellaneous 24 100.00 27 al	51158888888888888888888888888888888888					82 84 84 84 84 84 84 84 88 88 88 88 88 88
Let him make a mess $21$ $87.5$ $25$ Feed him 2 $8.3$ 1 Miscellaneous 1 $4.2$ 1 al 24 100.00 27	Children's first attempt at spoon-feeding:					
scellaneous 1 4.2 1 24 100.00 27		21	87.5 8.3	2 Л	92.6 3.7	.19
24 100.00 27	Miscellaneous	Ч	4.2	Ч	3.7	· 00
	Total	24	100.00	27	100.00	

"allow their children to make a mess."

An interpretation of the question concerned with the child pushing solids from his mouth was statistically nonsignificant. The data indicate that the Anglo mothers would spoon the feeding back. The Spanish mothers tended to wait a few days and, secondly, spoon it back.

The responses to the question concerning the child's first attempt at spoon-feeding were interpreted as being statistically nonsignificant. The data seemed to indicate that both groups of mothers were permissive in their children's first attempts at spoon-feeding since they allowed their children to make a mess during feedings.

#### XIV. CHILDREN'S EATING HABITS

Toward the end of the first year of life children become increasingly more discriminating in their tastes. This discrimination may affect their eating habits. The attitude of the mother may lead to a variance of the usual feeding pattern. How are these changes in the child's feeding habits dealt with in a home situation? Presented in Table XIV are the practices that Anglo and Spanish mothers felt they would employ as the situation arose.

The CR and percentages for the two groups' answers to the question concerning "children's refusal to eat all of their dinner" were very similar. The Anglo mothers had

		TABLE XIV			
CRITICAL RATIO AND PERCE MOTHERS IN RE	PERCENTAGES 0 IN REGARD TO	OF PRACTICES EMPLC THEIR CHILDREN <sup>1</sup> S	EATI	ANGLO AND HABITS	PANISH
	Ang				
	No.	Per cent	No.	Per cent	GR
Children's refusal to eat a portion or all of their dinner: Eat amount desired Coax him Insist he eat Miscellaneous	8 MH M	117 84 127 0 24 17 0 24 0 27 0 20 0 20 0 20 0 20 0 20 0 2	0 N N N N N N N N N N N N N N N N N N N	74.0 7.4 11.2 7.4	.07 .60 .92 .11
Total	24	100.00	27	100.00	
	NFFF0N	8 3 16.7 16.7 8 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	10-4-10 -	40.7 333.0 140.7 7.98 .7.4	2.42 0.00 1.54 1.54 1.54 1.54 1.54
Total	24	100.00	27	100.00	

a 75 per cent representation as compared to 74 per cent for the Spanish mothers which allowed their children to "eat the amount of food desired." The tabulated miscellaneous item showed such responses as, "trying different foods," "putting him to bed," and "removing his plate."

In addition to the above question a comparison was also made between the practices the mothers would employ in regard to their children's dislike of certain foods. An 8.3 per cent representation of the Anglo mothers answered the item "insist he eat" as compared to 40.7 per cent of the Spanish mothers. The CR of 2.42 was significant at the .05 level. The miscellaneous item included two mothers from each group who gave such responses as, "prepare the food differently," "mix it with something he eats," and "don't feed it to him." Two Anglo mothers had "no idea" what practice they would employ as their children were "good eaters."

The responses to the question concerning children's refusal to eat all of their dinner were interpreted as being statistically nonsignificant. However, the data do indicate that both groups were permissive in allowing their children to eat the amount of food they desired.

The data related to the children's dislike for certain foods was significant in regard to the item "insist he eat it." The data indicated that the Spanish mothers

were more strict in their practice of insisting that their children eat certain foods.

XV. CHILDREN CRYING WHILE THEIR MOTHER IS COOKING

It was decided to introduce an aspect in the feeding situation which undoubtedly occurs frequently, namely, "the child crying while the mother is cooking." The mother's reaction to this situation could indicate her attitude toward meeting the needs of the child. The data presented in Table XV depict the various responses obtained from the Anglo and Spanish mothers.

An analysis of the figures showed no set pattern for either group. The practices employed were numerous and varied in actual act but similar in attitude behind the act. The practices varied according to the age of their children, the older children being "ignored," "spanked" or "pacified" with water or crackers. The miscellaneous item included such responses as, "spank him," "send him to bed," and "check his diapers."

The mothers' attitudes or practices could not be determined due to the variety of responses obtained from each group. The practice most frequently employed by the Anglo mothers was "picking the child up." The Spanish mothers most frequently "gave their child a toy." A statistical comparison of the figures indicated no signifi-

CRITTCAL RATIO AND BEDATM					
F=1 11	PERCENTAGES OF GARD TO THEIR C	ES OF THE PRACTICE HEIR CHILDREN CRYI	TICES EMPLOYE CRYING WHILE	D BY ANGLO THEY ARE CO	SP
	Anglo	8	Spanish	ish	
	No.	Per cent	No.	Per cent	CR
Children crying while cooking: Feed him Continue with cooking Give him a toy Pacify with a cracker Pick him up Miscellaneous	すいすいど	1100. 116. 20. 20. 20. 20. 20. 20. 20. 20. 20. 20	てしするとす	14.8 29.65 35.9 25.9 25.9	1.523 1.14 1.68 1.88 1.88
Total	24	100.00	27	100.00	
· · · · · · · · · · · · · · · · · · ·			85 88 89 89 89 89 88 88 88 88 88 88 88 88		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

# XVI. CHILDREN HAVING DIFFICULTY CHEWING TABLE FOOD

The normal infant's transition from baby foods to table foods introduces another new learning experience which he must master. This process will necessarily vary between individual infants. Some will go along smoothly adapting to this new experience without too much difficulty. Others may find it hard to adapt to this transition and perhaps will only succeed through the infant's efforts and the mother's patience. What would be the mother's practice in dealing with the child described in the latter situation? In order to find out, the mothers were asked, "What practice would you use if your child had difficulty in chewing table food?" The data presented in Table XVI indicated the responses obtained individually from the mothers represented from both groups.

The Anglo mothers had a 75 per cent response to the item pertaining to "mashing table food" as compared to 74 per cent for the Spanish mothers. The miscellaneous item included mothers of both groups who would give their children junior foods if they were having difficulty chewing table food. Two of the Anglo mothers and one Spanish mother interviewed had "no idea" what they would do if their children were unable to chew table foods. One of the Anglo mothers that was placed in this item responded, "I know nothing about children; I'm just experimenting."

		CULUNTAR MANULTIN	TITOOTJITO DULATO		
	Anglo	0	Spanish	ish	
	No.	Per cent	No.	Per cent	CR
Children had difficulty chewing table food: Mash the food Wait till older Continue with table food Miscellaneous No idea	80.140	125.0 12.5 8.3 8.3	00004	74- 2.54-0 3.54-0 3.64-0	. 07 . 60 . 448 . 67
Total	24	100.00	27	100.00	

A comparative analysis of the figures between the two groups indicated that the differences were statistically nonsignificant. However, it was noted that a great majority of the mothers from both groups would mash the table food if the transition from infant to table foods proved to be difficult for their children.

# XVII. MOTHERS' RESPONSES TO THEIR TWO YEAR OLD CHILD PLAYING WITH HIS FOOD

It has been noted with some regularity that the active infant is inclined to play with his food. Perhaps this is in sequence with maturational development and the infant is displaying a need to investigate and feel the food placed before him. Whatever the motivation, a continuum of acceptance to rejection may be displayed by the maternal figure.

A comparative analysis of the data in Table XVII concerning the mother's practices if her two year old child played with his food is shown. The Anglo mothers had a 12.5 per cent representation as compared to 40.7 per cent for the Spanish mothers who would "spank their children" if they played in their food. The CR of 2.25 was significant at the .05 level. One of the Anglo mothers that responded to this item stated, "my husband spanks her so I do too. I don't think it's good for one parent to do one

	ssessessessessessessessesses Anglo		Spanish	5 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	11 13 13 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15
	No.	Per cent	No.	Per cent	CR
Children plaving in food:					
Spank him	С	12.5	TT	40.7	2.25
Let him continue	3	12.5	Ч	3.7	1.16
Scold him	7	29.2	0	29.6	.03
Remove the plate	М.	20.8	4	14.8	.56
Miscellaneous	4	16.7	m	11.2	.57
No idea	0	8.3	•	•	1.54
	-0				
TELOI	47	T 00 . 00	1.2	100.00	

TABLE XVII

thing and the other something else." Of the five Anglo mothers and two Spanish mothers who responded to the item "remove the plate," one mother from each group had reasoned that "their child was not hungry." The miscellaneous item showed such responses as, "send him to bed," and "feed him."

The responses to the question asked may be interpreted as being insignificant except to the item, "spank him." The figures pertaining to this item indicated that there was a significant difference between the two groups. It appears that the Spanish mothers would more rigidly reprimand their children for the act of playing in their food.

#### SUMMARY

Data for this study was collected by interviews with twenty selected Anglo and twenty selected Spanish mothers known to the Child Health Conferences within metropolitan Denver. A total of fifty-one children were represented by both groups. The data was tallied, categorized into tables, and calculated into percentages. A level of statistical significance was computed from the percentages of each item. The critical ratio (or CR) of probability was compared to the arbitrarily chosen .05 level of significance statistically.

No real difference between the two groups was revealed by the data regarding the number of children per family, occupation of the father, and ages of the children.

The answers to six of the twenty-two questions asked of the mothers revealed a statistically significant difference between the two groups. Although there were seven items which revealed statistical significance, two of these items pertained to the same question and therefore were combined for analysis. The items of significant difference were: (1) although the ages of the children in both groups were essentially identical, the Spanish mothers were currently breast feeding their children while none of the Anglo mothers were: (2) the Anglo mothers nursed their children for a fairly short predetermined length of time at each feeding while Spanish mothers tended to allow longer and more frequently interrupted nursing periods; (3) the Anglo mothers were less able to anticipate the age at which their children would initially drink from a cup than were the Spanish mothers; (4) the Anglo mothers had started their children on solid food at a much younger age than the Spanish mothers; (5) more Spanish mothers would insist their children eat food they disliked than the Anglo mothers; (6) the Span-

ish mothers would reprimand their two year old children more than the Anglo mothers for playing in their food.

The level of significance was greater than .05 and hence the null hypothesis of equality would be rejected for the above items. Because the samples were limited to twenty cases each, the difference in percentages required for significance was large.

#### CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

I. SUMMARY

It would seem that the cultural pattern within which a child is born places certain demands for cultural conformity upon him. The attitudes and values of a culture play a meaningful part in a child's basic learning experiences. These experiences as they are managed by mothers are known to be a reflection of her cultural group. Thus, this study was undertaken to deal specifically with the child-rearing practice of methods of infant feeding as described by selected mothers of two cultural groups, that of the Anglo and Spanish people. For statistical purposes, a null hypothesis was constructed which stated that there was no significant difference between the two cultural groups in relation to specific infant-feeding practices. The basic assumption of the study was that the feeding practices as verbally described by selected mothers are indications of probable performance within the home.

The purposes of this study were as follows: (1) to examine maternal behavior of the lower socioeconomic groups in relation to infant-feeding practices through two well-established cultural groups of North

America, that of the Anglo and Spanish people, (2) to determine whether there were differences in feeding practices between two cultural groups so that the nurse may apply this knowledge to her professional practice; and (3) to provide data which might contribute to the expanding knowledge of nursing education.

Literature related to the study was reviewed. The literature was derived from numerous fields of study with the greater emphasis on psychology. The infant-feeding process was interpreted in the light of behavioral and personality traits. Cultural aspects of the feeding process appeared to be deeply embedded in the infancy period.

The normative-survey was the method employed in this study. The technique most applicable for the collection of the data was the interview-schedule. Literature related to infant feeding was reviewed in order to develop the interview-schedule. The interview-schedule was developed to be administered as open-end questions. Selected mothers were asked a total of twenty-two questions about the practices they employed or might employ pertaining to infant feeding. A preliminary test was made to test the interview-schedule and to further serve as a check upon the time needed for interviewing. Minor alterations were made in the interview-schedule prior to

final collection of the data.

Twenty Anglo and twenty Spanish mothers of infants under the age of two and a half years were selected according to pre-determined limitations. Mothers who had infants registered in Child Health Conferences within metropolitan Denver in the fall of 1959 were the source of data. Child Health Conferences which were designated by clinic supervisors as having the highest concentration of Anglo and Spanish children registered were used. A total of fifty-one children were represented by both groups interviewed.

The data was tallied and categorized according to the sequence of the interview-schedule and the nature of the question. The data was then calculated into percentages and presented in tabular form. A statistical level of significance was computed from the percentages of each item. The critical ratio (or CR) of probability was compared to the .05 level of significance statistically.

### II. CONCLUSIONS

The analysis and interpretation of the data between the two groups showed that the null hypothesis of equality could be rejected with the following six items:

- Spanish mothers were currently breast feeding their children whereas the Anglo mothers were not even though the ages of Anglo and Spanish children were very similar.
- 2. The Anglo mothers nursed their children for a fairly short pre-determined length of time while Spanish mothers tended to allow longer and more frequently interrupted nursing periods.
- 3. The Anglo mothers were less able to anticipate the age at which their children would initially drink from a cup than were the Spanish mothers.
- 4. The Anglo mothers had started their children on solid food at a younger age than the Spanish mothers.
- 5. The Spanish mothers would insist their children eat food they disliked more so than the Anglo mothers.
- 6. The Spanish mothers would reprimand their two year old children more than the Anglo mothers for playing in their food.

### III. RECOMMENDATIONS

As a result of this study the following recommendations were made:

1. That additional studies with larger samples be

done in other sections of the United States comparing the feeding patterns employed by Anglo and Spanish mothers in their childrearing practices, the study to include first generation Spanish mothers.

- 2. That similar studies be undertaken which would compare the Anglo groups with sub-cultural groups other than the Spanish.
- 3. That a study be undertaken to determine whether father's opinions influence the mother's attitudes and practices concerning the feeding habits of young children.
- 4. That further studies be undertaken to determine the influence of the mother's attitudes toward early infant-feeding practices on later personality development of the child.
- 5. That further anticipatory guidance should be made available for mothers attending Child Health Conferences. Perhaps the lack of previous experience in dealing specifically with childrearing or lack of educational opportunity increases the need for anticipatory guidance.

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## APPENDIX A

LETTERS WRITTEN AND RECEIVED

CONCERNING USE OF

CHILD HEALTH CONFERENCES

812 20th Street, Apt. 4B Boulder, Colorado October 15, 1959

Medical Director Maternal-Child Health Service 659 Cherokee Denver, Colorado

Dear Dr. -----

I am a student at the University of Colorado Graduate School, Department of Nursing in the Maternal-Child Nursing Program. I have selected as a thesis problem the comparative study of infant feeding practices as described by the mothers of two cultural groups, Anglo and Spanish.

The method of collecting data will consist of a questionnaire type interview which will entail approximately 15 minutes of selected mothers time. I would be exceedingly grateful for your permission to collect data from the Child Health Conferences within metropolitan Denver. Arrangements for specific conferences to be used will be made at a later date with the Visiting Nurse Association if this meets with your approval.

A copy of the abstract of the thesis will be sent to you upon your request.

Yours truly,

(Miss) Grace Halsema

Any assistance you can give Miss Halsema will be greatly appreciated.

(Miss) Betty L. Highley Chairman, Thesis Committee

(Miss) Maxine Berlinger Member, Thesis Committee

812 20th Street, Apt. 4B Boulder, Colorado October 22, 1959

Visiting Nurse Association

Denver, Colorado

Dear----

At the present time I am a graduate student nurse at the University of Colorado Department of Nursing in the Maternal-Child Nursing Program. I am gathering data for my thesis project which is a comparative study of infant feeding practices as described by the mothers of two cultural groups, Anglo and Spanish.

To complete my research it will be necessary to interview Anglo and Spanish mothers. Since there is an excellent representation of both of these cultures in your area, I would greatly appreciate the use of one or more of the Child Health Conferences under your jurisdiction. Individual interviews will entail approximately 15 minutes of selected mothers time while awaiting her appointment with the clinic doctor. My plans are indefinite as to an exact starting time, but would be in the very near future.

Yours truly,

(Miss) Grace Halsema

October 23, 1959

Miss Grace Halsema 812 20th Street, Apt. 4B Boulder, Colorado

Dear Miss Halsema:

In reply to your letter of October 19th, we will be happy to have you interview selected mothers in our well child conferences.

I am sure that an abstract of your thesis would be of interest to all of us.

Sincerely,

Director, Maternal and Child Health Service

Miss , Director-VNS Miss , Consultant-M&CH

November 10, 1959

Grace Halsema 812 20th Street, Apartment 4B Boulder, Colorado

Dear Miss Halsema:

We will be happy to participate in your study of infant feeding practices of angle and Spanish groups. Our clinic population seems to be predominately Spanish and Negro. However, if you could review our Child Health Conference appointments you might be better able to select the days and the clinics you wish to visit. If the desired number of Angle mothers are not available in our clinics, would it be possible to arrange for interviews with Angle mothers in another Child Health Conference?

Child Health Conferences which are available through the nurses assigned to me are:

(1)	Arapahoe Court	1184 26th St. Monday @ 12:30 p.m.
(2)	Christian Center	29th & Curtis
(3)	23rd Street	Monday @ 12:45 p.m. 119 23rd St. Tuesday @ 12:30 p.m.
(4)	Platte Valley	3050 Champa Wednesday @ 9:00 a.m.
(5)	Platte Valley	3050 Champa Wednesday @ 12:30 p.m.
(6)	Arapahoe Court	1184 26th St.
(7)	Christian Center	Thursday @ 9:00 a.m. 29th & Curtis Thursday @ 9:00 a.m.

We will make definite arrangements for your interviews when you desire them.

Yours truly

November 13, 1959

Miss Grace Halsema 812 20th Street, Apt. 4B Boulder, Colorado

Dear Miss Halsema:

Your letter was referred to me by , supervisor at branch office. She will be most happy to arrange for your visits to four of our child health conferences.

I will give you the names, addresses, and times of these conferences, and then you may contact directly as to the day and month that you can visit for your interview with mothers.

> Elyria, 48th & Race, every Friday @ 9:00 a.m. Stapleton, 10 E. 51st Ave., every Friday @ 12:00 noon Quigg Newton, 4427 Lipan, every Wednesday, @ 9:00 a.m. Asbury, W. 30th and Vallejo, every Tuesday @ 12:30 p.m.

I hope this will be helpful to you and fit your schedule. Please contact Miss , branch office of the Visiting Nurse Service, 2735 W. 32nd.

Yours sincerely,

(Miss) Associate Director Denver Visiting Nurse Service

# APPENDIX B

## INTERVIEW-SCHEDULE

# MATERNAL FEEDING PRACTICE INTERVIEW-SCHEDULE

Date	-
Nationality	ALC - CARLES

Mothers age\_\_\_\_

nusband's occupation	's occupation	
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Age of children\_\_\_\_\_

Number of children\_\_\_\_\_

1. Your child was breast fed:

A. Less than a month.

- B. One month to three months.
- C. Three months to six months.
- D. Six months to nine months.
- E. Nine months to twelve months.
- F. If none of these, specify other.
- 2. Your child was bottle fed:
  - A. Less than a month.
  - B. One month to three months.
  - C. Three months to six months.
  - D. Six months to nine months.
  - E. Nine months to twelve months.
  - F. If none of these, specify other.
- 3. Your child in addition to breast feeding was given a bottle feeding of milk:
  - A. Once a day. B. Twice a day.

  - C. Three times a day.
  - D. If none of these, specify other.
- 4. Your child began on breast feeding and was then put on bottle feeding at:
  - \_\_\_\_\_A. Less than a week.
  - B. Two weeks to one month.

  - C. One month to two months. D. Two months to three months.
  - E. Three months to four months.
  - F. If hone of these, specify other.

- 5. Your child was usually fed:
  - A. Everytime he cried.
  - B. On a schedule.
  - C. On a modified-demand schedule.

D. If none of these, specify other.

- 6. Your child was allowed to nurse from the breast or bottle for:
  - A. A indefinite length of time.
  - B. A limited length of time with consistent sucking. C. A limited length of time but not consistent sucking.
  - D. If none of these, specify other.
- 7. Your three month old child refused to drink from the bottle or nurse. I would:
  - A. Feed him later.
  - B. Try a cup.
  - C. Coax him to eat.
  - D. Play with him before feeding him.
  - E. If none of these, specify other.
- 8. Your child was weaned from the breast or bottle at:
  - A. Six months to nine months of age.
  - B. Nine months to twelve months of age.
  - C. Twelve months to fifteen months of age.
  - D. If none of these, specify other.
- 9. Your child cried for a bottle or to be nursed after he had been weaned. I would:
  - A. Scold him.
  - B. Let him nurse or drink.
  - C. Ignore him.
  - D. Spank him. E. Hold him.

  - F. If none of these, specify other.

- 10. Your child started drinking from a cup at: A. Six months to nine months of age. B. Nine months to twelve months of age. C. If none of these, specify other.
- 11. Your childs first solid food was: A. Meat. B. Cereal. C. Fruit. D. Vegetables.
- 12. Your child first started on food at: A. One month to two months of age. B. Two months to three months of age. C. Three months to four months of age. D. If none of these, specify other.
- 13. Your childs first type of food was:
  - A. Baby food.
  - B. Table food.
  - C. Mashed table food.
  - D. Pre-chewed table food.
  - E. Junior chopped food.
- 14. Your child pushed his first attempted solid feeding from his mouth. I would:
  - A. Hold his mouth open with my hand and feed him. B. Spoon it back in his mouth.

  - C. Wait a few days and try feeding solids again.
  - D. Put him back in bed until he will eat the food.
  - E. If none of these, specify other.
- 15. Your child who first began spoon-feeding himself made a mess. I would:
  - A. Let him continue eating.
  - B. Feed him.
  - C. Scold him.
  - D. If none of these, specify other.

16. Your child is fed:

Α.	With the family at the age of	
	By himself at the age of	
	Sometimes with the family at the age of	fe
D.	If none of these, specify other.	

- 17. Your child a year or older refused to eat a portion or all of his dinner. I would:
  - A. Begin with his favorite food which is \_\_\_\_\_. B. Punish him.
  - C. Remove his dinner plate and require him to stay at the table.
    - D. Let him eat as much as he wants.
  - E. Insist that he stay at the table until finished. F. Coax him to eat.
  - G. Let him leave the table.

H. If none of these, specify other.

18. Your child started crying while you were cooking dinner. I would:

A.	Feed	him	right	now.	
----	------	-----	-------	------	--

ale e presidente de la constituir de la const	Β.	Keep	on	with	my	cool	ring

- C. Give him a toy to play with.
- D. Pick him up.

E. If	none	of	these,	specify	other.
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- 19. Your child is allowed to have desert or sweets:
  A. When he eats all of his dinner.
  B. When he has been good.
  C. Whenever he seems to want it.
  D. If none of these, specify other.
- 20. Your 1 year old child had difficulty chewing table foods. I would:

Α.	Mash the	om for him.			
В.	Give jur	nior chopped	foods	for	awhile.
C.	Chew it	for him.			
D.	Let him	continue on	table	food	ls.
E	If none	of these, s	pecify	othe	er.

21. Your child did not seem to like a certain food. I would:

A. Insist that he eat it.	
B. Tell him its good for him.	
C. Remove the dishes.	
D. Replace it with something h	e does eat.
E. Reward him if he eats it.	
F. If none of these, specify o	ther.

- 22. Your two year old child was playing in his food. I would:
  - A. Tell him to leave the table.
  - B. Let him continue playing.
  - C. Scold him.
  - D. Feed him.
  - E. Spank him.
  - F. If none of these, specify other.