

BREAST FED BABIES WHO CRY AT NIGHT*

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The breast fed baby who habitually cries at night is a problem in every home. He is hungry and uncomfortable, but he is said to have "three months colic." Every layman and every doctor with experience knows about "three months colic." It has happened in nearly every household. But if the young practitioner wants to read up on the subject, he must wade through various text-book chapters on breast feeding, on protein indigestion, sugar indigestion, and on fat indigestion and then draw his own conclusions as to what is the matter with his patient.

Because it is a common human experience our humorists have pictured it in story and our artists have painted it on canvas. The picture, "Three A. M.—Asleep at Last," with the baby crosswise in the middle of the bed, mother curled in a chair and father sprawled on the floor, has touched a chord of sympathy, and provoked a smile of understanding from us all.

"Three months colic" might well be granted a place in the quiz blank of the efficiency expert. It deserves a chapter in every medical text-book. Carlyle said: "At forty every man is either a fool or a doctor," meaning that by the time they reached 40 years of age, all men, not fools, considered themselves competent to advise their fellowman as to the cure of diseases.

So imbued is the human race with this obsession that it is one of the problems confronting the doctor in the management of most of his medical cases. And among the mass of misinformation concerning medical matters that has been handed down from the days of superstition and empiricism, none is more widespread than the belief that every time a baby cries his stomach hurts him. If not the most frequent class of ailment for which the pediatricist is consulted, this is the first case he

usually sees in each particular family.

The breast fed baby who habitually cries at night is the first big problem which confronts the new mother. She feels that her poor helpless infant is in agony. She has been told by grandmother and by neighbors and friends that his stomach hurts him, that he has "three months colic." She valiantly doses him with all the recommended mixtures of teas and carminatives, with enemata and hot applications. She sends for the family doctor and he usually prescribes calomel, a dose of oil, Dewees' carminative, a hot enema and an ounce of warm water before each nursing period. He also limits the nursing time to five or ten minutes. The baby eagerly drinks the oil, the Dewees and the hot water, gnaws at his fists, his mother's face or anything else that comes in reach, and continues to cry. He screams until he is hoarse. He gets red, he kicks and doubles up and he straightens out and rears back. He may fall asleep from exhaustion after a hot enema, but the whole family has to be "hushed" to keep from waking him. He soon wakes up and resumes where he left off. He is a wide awake baby and a smart looking baby. He appears as mentally alert as a baby six months old. He handles himself well and his back seems strong and he tries to hold his head up. He is usually constipated, though after a while his bowels may become loose and green and watery, or may contain curds and much gas.

When he is comfortably full of teas and medicine, he goes to sleep, waking the "morning after," and when he has nursed, behaving as if there had never been a "night before." But he starts another party late that afternoon.

Such is the history as the pediatricist finds it. The diagnosis is already made for him and he is given to understand that it is absolute and unmistakable. He is told he must examine the mother's milk and find why it causes the baby colic.

I see probably as many of these babies in a year as I see cases of diarrhea. And in not one of them is there ever one single member of the family who is using his eyes to see or his mind to deduce the plainest of conclusions. Instead they have accepted the superstition of some old granny.

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Occasionally a young father, untrammelled by old women's tales, will have a lucid idea and say, "If that was a puppy I'd say it was hungry and feed it." And there is no better appeal to their understanding than the illustration of the hungry puppy. The signs of hunger in other animals are usually recognized because they are not hedged about with a mass of superstition and empirical nonsense.

The hungry puppy is wakeful. He wakes with the slightest scrape of a foot on the floor. He gets up every few minutes and hunts for a softer place to lie. He is the smart dog who handles himself well and in begging for food is all awiggle, as if his muscles were of rubber. He is preternaturally smart and bright. Usually he is the runt who is crowded away from the breast by the stronger puppies, and because he appears smarter, he is considered the pick of the litter. The full puppy is lazy and stupid and relaxed.

The full baby is a stupid little animal. One who is easily waked, who is preternaturally smart and intelligent looking, one who handles himself too well for his age—he is a hungry baby. And a large majority of breast fed babies are hungry toward evening, when the cares of the day, conflicting advice, old women's tales and irregular nursings have lessened their mother's milk supply. The symptoms of hunger in the breast fed are:

(a) The baby who habitually cries at a certain time each day, usually the late afternoon and at bed time.

(b) The wide awake small baby.

(c) The preternaturally smart looking baby.

(d) The active baby with a strong back.

(e) The baby whose cry is persistent and sustained, but who hushes when he thinks he is going to eat.

(f) The baby who rears backward in his paroxysms of screaming. This can't be done with a stomach ache.

(g) The baby who gnaws his fists and his mother's face.

(h) The, as a rule, constipated baby.

The most important of these is the habitual crying at night. I can see no possible cause for a baby's stomach aching at a particular time each day, except, perhaps, an increase in the protein of the

mother's milk due to the worry incident to the day's duties. However, some of our accepted authorities have this to say:

"The breast fed infant may gain in weight, have good color and still have inordinate colic. Many infants who suffered colic at first will, as the second month approaches, cease to have colic as soon as the milk has definitely assumed a uniformly normal composition. Infants who thus have suffered colic at the second and third month after birth, will cease to be inconvenienced and will thrive from this time forward." Also: "Infants who have colic habitually will more often have it late in the day than at any other time."

And again,

"Many young infants suffer from colic a large part of the time; others have only occasional attacks which are often repeated at a certain time in the day, usually toward evening."

Even if true colic does in time result from the unbalanced milk, is not the hungry, crying baby the primary cause; the colic but a complication? And we must make sure this is not the pain of hunger itself or of the starvation indigestion that we see in bottle babies whose food is too weak.

Colic is produced by an excess of irritating by-products of fermentation which cause congestion and increased action of the intestinal musculature. This localized spasm of the intestinal wall incarcerates gas within a segment of the intestine and produces the pain.

Bahrdr has shown that the substances produced by fermentation which are most active in irritating the mucosa are the volatile fatty acids. Gas and acidity are produced by all fermentative processes and following typical attacks of colic, an acid stool which excoriates the buttocks is usually passed. In these breast fed babies who cry at night and who are usually constipated, by what mysterious process could the fermenting mass of food be changed to non-irritating waste that nature permits to lie in the colon? Is not constipation a guarantee of good digestion, a guarantee of perfect, non-irritating waste material? In these babies are we not still using the diagnosis of empiricism? Does true colic really occur at a certain time in the day?

The old story of the cow seeing a circus parade and her calf having a fit contains a modicum of truth. Milk production is milk production whether in women or in the lower animals and the same general laws

apply to both. Mothers' milk cannot definitely assume a uniformly normal composition so long as she is worried by a crying baby. Examination of the breast milk at this time is, I believe, a mistake. It can lead only to erroneous conclusions. The knowledge that her milk is abnormal in either fat or protein content but adds to her mental distress. It is therefore a thing to be avoided. Suppose her milk is at variance with a standard of average content? It is still the particular food nature provided for the particular baby and is superior to any artificial substitute. Adaptability is what makes man the "heir of all the ages," and the infant will become adapted to its food if sufficient time is given it.

Perseverance, to allow the infant time to adapt itself to its food and supplemental and complemental feeding to satisfy its hunger and stop its crying, are the best therapeutic measures. Even if true digestive disturbances have supervened due to starvation indigestion, or to fat or protein excess, the best method of treatment is to feed the baby. Mothers' milk has no incompatibles. It mixes with any food and aids in the digestion thereof. A supplemental feeding late in the afternoon, at that time when the weakened mother is tired out, is the first thing we should prescribe. If the mother is still not able to provide sufficient nourishment with this helpful period of rest, complemental feeding should be given at such other nursing periods as it is found the baby requires. The baby should be put to the breast at nursing intervals sufficiently long to insure a hungry baby who will be a good milker and who will strip the breast. Then the complemental feeding should be completed, using a cup and spoon. A baby is born with the instinct to suck. If this sucking instinct is satisfied with a bottle and nipple, the infant soon will learn to wait for the easy flowing bottle and will become a poor milker and thereby ruin his mother's milk supply. Then, too, the cup and spoon is more trouble to the nurse and will sooner discourage half hearted compliance with the rigid regime of breast-stripping that must be adhered to if we would increase the milk supply. Of course, a small hole in a stiff nipple will give the

same results, but such a concession is fraught with the very real danger of having the family inform us several weeks later that the mother's milk failed her entirely and they put the baby on the bottle.

Nothing in pediatric practice is so disheartening, and it is then too late to quote the mortality statistics of the bottle fed. The cup and spoon should be made a recognized procedure in complemental feeding from which we deviate neither one jot nor one tittle. It is a specific procedure and as such deserves recognition. Of course, regular nursing intervals should be insisted upon and care should be taken to explain that this is not alone for the sake of the baby, but that regular milking time is necessary to insure the right kind of milk. It is easy to explain that the nursing mother should be given the same consideration as a fine cow. Everyone of them understands that if stripped every little while throughout the day, a cow will give only strippings, or cream. This is fatty food and is bad for an upset baby. It is like feeding a sick husband on pork chops. Grandmother will back us up in this explanation, and grandmother on our side is worth a host. The intervals should be suited to the individual baby, but should be as far apart as possible. A hungry baby is a good milker and a good milker is the best of all milk makers. For the preservation of the milk supply we need, then:

- (1) Sufficiently long intervals to insure a hungry baby who will be a good milker.

- (2) Regular milking time.

- (3) The cup and spoon if complemental feedings are used so as to preserve unimpaired the nursing instinct.

- (4) A contented mother who feels that her baby is comfortable and thriving; one who gets plenty of sleep, three good meals daily and who lives as nearly as possible her normal life.

- (5) Perseverance.

I am often asked the question, "Doctor, why have I not sufficient milk to nurse my baby? There were five or six of us and my mother nursed us all. I am a stronger woman than my mother was." I have had this question asked hundreds of times and in every instance in which I am able to question the grandmother, I find that all her babies had "three months colic" and

cried at night. Grandmother successfully nursed her babies because she knew nothing else to do and because she persevered. After two or three months she regained her strength, she grew used to a crying baby and ceased to worry, she resumed her normal life, and the persistent demand of a hungry baby and a good milker induced nature to supply more food. Perseverance, the continued demand on nature to "give me more food," is the best of all milk makers. Every farmer knows that a lazy milker will ruin a five-gallon Jersey cow, but a good milker who strips her dry, will bring her up to her full capacity. The insistent demand on nature to provide more food—this is the greatest of all stimuli. This is the secret of adequate milk production. This is the reason grandmother nursed her babies.

It is a mistake to assume that the modern mother doesn't want to nurse her baby. I have never run across one who considered it unfashionable or too much trouble. But I have often felt that there is undoubtedly an increasing disability, especially among Southern women, to do so. The enervating influence of a warm climate, less physical exercise, less responsibilities, more servants and less admixture of the races, are the probable explanation, if the observation is correct. I should hesitate to present such a subject to this society but for the fact that our pediatric literature is filled with reports of such cases diagnosed as severe and persistent colic, and treated always with varying methods of supplemental feedings, varying from powdered casein to condensed milk, intended to diminish or to increase fermentative or putrefactive action in the intestine, without mention of hunger as the underlying cause.

CONCLUSIONS

(1) Habitual crying in breast fed babies at a particular time each day, usually the late afternoon and at night, is a pathognomonic symptom of hunger.

(2) The preternaturally smart, wide awake baby is hungry.

(3) Three months colic is primarily hunger. Starvation indigestion and milk imbalance due to mothers' worry, may cause true colic to supervene, but these right themselves if the baby's cries are hushed.

(4) Supplemental and complemental feeding is the remedy.

(5) Complemental feeding should be given only with a cup and spoon.
Central Bank Building.

DISCUSSION

Dr. William Weston, Columbia, S. C.—Dr. Rosamond has pictured to us a very interesting situation and I must agree in his conclusions. There are just two or three matters in regard to those conclusions that I think we should consider and I wish to say that it seems to me that many of these cases occur among neurotic women. I do not wish to cast any reflection on the sex for which I have so much admiration, but I do not think these cases are irremediable nor do I feel that we should ever let it be an excuse to encourage even partial weaning of the baby. I think Dr. Jacobi years ago in his inaugural address at Atlantic City struck the keynote of one of our fundamental principles when he said that 95 per cent of women can and should nurse their babies. He said: "This applies to the very flower of our womanhood, even those who are fond of afternoon teas and who are distracted by exciting and interesting bridge games at which there are interesting stakes." I think those are the things we have to look for in these cases.

What is the origin in most cases? Fat indigestion, which may be remedied in a number of different ways with which we are familiar, but the most important factor in treating those cases is the psychological factor. We should try many ways of correcting these conditions, such as dieting the mother. We should even consent to one complemental feeding. You will find that one of the cases which he described was making a very rapid gain in weight. If that is the case, certainly there is no excuse for complemental feeding.

The trouble usually starts with the woman who is in bed for longer than ten days or two weeks. She feels as if she must stay in bed, that her strength will not permit her to get up and go around, take a full bath or get out in the fresh air or take exercise. It is that individual that we must be extremely firm with and then we get results. I am trying to make it a rule in my work that unless there is inhibition of strength I do not advise supplemental feeding. What has been the keynote of the work of the Section on Diseases of Children? Breast feeding. Certainly if their grandmothers could nurse their babies, the granddaughters can nurse theirs. Of course, we live in a different environment and we are apt to believe those things that come within our experience. We should try to change that environment.

Dr. L. W. Elias, Asheville, N. C.—Dr. Weston says that some of these babies are getting more milk than they need and are gaining. If we weigh the baby before and after nursing we can see whether it is gaining, or is being disturbed by lack of food. In no case should a baby be taken from the breast. If the baby is hungry from lack of food then you must increase the

stimulation of the breast. Therefore it seems most unwise to give supplemental feeding in place of a breast nursing. If you insist on doing that, because you feel the milk is causing too much trouble, then express the milk from the breast and feed it in the proper quantity and convince yourself that it is all right; but by all means continue stimulating the breasts. That is a point I want to emphasize. The breasts should be nursed to the limit and then, when you do not get all the breast milk out, add expression, afterwards, until you get every drop from the breast, and you can greatly increase the amount as has been widely demonstrated by Dr. Sedgwick's work in Minneapolis. If you start out with the belief, yourself that every mother can nurse her baby, it is then a much simpler matter to get enough milk. You will get results very much more quickly by encouraging the mother to go on nursing the baby, eat and exercise and stop worrying. Dr. Sedgwick's rule regarding the mother's food is, "give the mother whatever agrees with the husband."

Dr. B. Lammers, Louisville, Ky.—The Doctor said that the well fed baby does not cry. I differ from that for this reason. I had a case which every time he was nursed, cried harder than ever. We tried nursing the baby every hour and we tried supplemental feeding. Finally the patient came to the office. The mother said, "Doctor, you must do something for this baby. We gave it a little bromide and it does not stop crying." I said, "You have plenty of milk?" "Yes. I nurse," it freely and the baby cries worse than ever. "Have you got a baby buggy?" "Why, yes." "Put the baby out in the fresh air." She came back some time later and said that as long as she kept the baby out in the fresh air it did not cry. What that baby needed was fresh air. That is the trouble with babies that cry at 3 in the morning. They are too warm, and what they need is a cold room.

Another instance I will give you. I was called in to see a baby about 9 o'clock in the morning. The baby had cried all night and it was crying when I got there. The baby was in front of a red hot stove. I said, "Take that baby out on the sidewalk." It was in February. That baby slept all day after being taken out. I told them afterwards that what they wanted to do was to let the fire out and let the baby have some fresh air.

I have charge of an orphan home in which there are about 200 children, 40 of whom are babies. There was one little baby there about 10 or 12 months old who cried continuously. I said to the Sister, "You have no porch, so put this baby out on the fire escape." The next day the Sister said to me, "Why, Doctor, that baby slept all day." Finally, when they brought it out, the little infant would point to the window. It was not a question of feeding, but of fresh air. This is the trouble with the first-born baby. The mother smothered it with covering.

I was called in to see a baby three months old. The room was warm and the baby was bundled up. I said, "That baby needs a little more comfort." I laid a blanket on the table undressed the baby and laid it on the table. In two minutes he was kicking and crowing. That was the trouble with the baby, he was not comfortable.

We all enjoy a nice cool room to sleep in. If you overheat your room you cannot sleep. If your room is open with plenty of fresh air, you go to sleep much more rapidly. The same thing is true of our babies.

Dr. P. F. Barbour, Louisville, Ky.—I think when a crying baby comes to you the first thing to determine is whether the baby is getting enough milk from the breast. The only way to tell is to weigh the baby before and after feeding. The next thing to determine is, if it is getting enough milk, is it of the proper quality? Then you have the milk analyzed. At the same time a mother's milk that runs over 3 per cent fat may be too fat for the child's digestion and there will be fat granules in the stool. If the milk is too strong in protein or too rich in fat, change the mother's diet as far as possible, rearrange the feeding intervals so as to take care of that factor.

I think one of the explanations of a baby crying in the afternoon is this: The mother nurses the baby in the morning and she has more milk than the baby can take. The strippings remain in the breast. This is the fattest part of the milk and consequently at the next feeding the baby gets all the fat. Then your troubles are going to come in the afternoon, for the child is going to be in pain and discomfort and with this you will find that the stools will show fat granules. The point Dr. Elias brought out that the breast must be emptied each time is very important. See that the breast is emptied perfectly and if so, the milk the baby gets next time is going to be fairly normal in its consistency.

Dr. J. Ross Snyder, Birmingham, Ala.—It does not make much difference whether we agree in full with Dr. Rosamond or not. We owe him a debt of gratitude for calling our attention to this hungry baby. There are hungry babies and it seems to me that we ought to study the subject of baby feeding a little more if we want to make southern pediatrics a howling success. We want to devote a little more attention to the study of breast milk problems. It does not do to say that breast milk is a panacea for all ills. We ought to recognize that breast feeding has its problems and that they ought to be studied. We owe that to the mothers of the country. It has occurred to me, in fact I know it to be true, that there are a number of these mothers who are neurotic and who have a deficient supply of milk from their lack of obstetric care. The obstetricians give too much care or not enough. They keep them in bed either too long or not long enough. They never seem to strike a happy medium. In investigating a good many of these cases I find mothers with more or less persistent subinvolution and it is a fact that the obstetricians frequently do not check over their cases after they dismiss them from the hospital. They neglect them in too many instances. I have almost arrived at the point where I am willing to engage in combat with these obstetricians about taking their cases to the hospital for confinement. In the first place they spoil the babies there. They get a bad start in many instances. In the second place, the obstetrician does not take the mother there for her protection. He takes her there for his convenience.

Dr. L. R. DeBuys, New Orleans, La.—I want to make a remark about the function of the breast. Most mothers will give less milk at the late afternoon and evening nursings than at the morning nursings. It is also worthy of note that sometimes we find that the breasts do not function alike, one giving much more than the other. In a case recently seen one breast gave five ounces and the other one ounce at the same time of the day. There was also a decided difference in the size of the breasts.

Dr. Oliver W. Hill, Knoxville, Tenn.—There is one element which Dr. Rosamond did not mention which should be taken into consideration; the feeling on the part of the mother that she cannot nurse her baby. We all know of these mothers who have been taking cocoa, tea, coffee and anything because they have a morbid feeling that they have not enough milk. You can overcome this by telling the mother that you have a great many cards to play yet. If this one does not work, come around and you will try something else. Try Sedgwick's method. The psychological element enters into this as much as any other element. If the baby cries we should be sure that its disturbance is digestive. I recall one baby who had a band made with a selvage edge. He was all right except that he was being hurt. I have seen one or two little fellows who cried because they had an earache. We should be sure that the crying is due to digestive disturbances. The rules to be followed are as varied as the patients we have and the results are as varied.

I have to endorse Dr. Snyder's views about the hospital. When a mother tells me, "I just came from the hospital," I know what to expect. They feed the baby every little while. One nurse rocks him, then the other nurse, and the doctor says, "Just turn him over to Nurse Jane, she will fix him up," and the baby comes away spoiled.

Dr. C. E. Boynton, Atlanta, Ga.—There is just one point that I want to stress. There is some difference of opinion about the baby who stays awake at night. I believe that sometimes this baby is hungry. This is true with the very young baby. I had the fact that hunger will prevent sleep brought home to me not long ago. I was extremely busy and had no lunch and no supper and got home at 3 a. m. I knew my dinner was in the refrigerator, but I went to bed without eating. I could not sleep, so at 4 o'clock I went down and ate the cold supper, came back and went to sleep.

Dr. L. T. Royster, Norfolk, Va.—When we get a good many opinions we sooner or later arrive at a common sense basis. I know nothing about Dr. Lammer's medical ability, but he is a very keen observer. We cannot handle children from Norfolk, New Orleans, St. Louis and Louisville all alike. We cannot handle the child that comes from the rural section of the country where the houses are stove-heated and which cool down at night, as we handle the children who are brought up in flats. Unfortunately my city is cursed with apartment houses. Most apartment houses range in heat from 70 to 80 and not from 60 to 70.

Most of these mothers have been taught by mothers of the old school that every baby must

wear an abdominal binder. The abdominal binder is a relic of swaddling clothes of the prehistoric age. As soon as the cord falls off and needs no further dressing the abdominal binder is useless. No one was ever mechanical enough to put on an abdominal binder the proper way. Why should we dress a child in a house with a temperature of 70 to 75 degrees the same way that we would in a house with a temperature of only 40 or 50? Why do we see babies coming to us in the middle of winter broken out with prickly heat, especially under the abdominal binder? I instruct the mothers in my own town to use cotton shirts all through the winter and when the children go outdoors to put on heavier outside clothing. That is one solution of the restless crying baby.

Dr. J. G. DePuis, Lemon City, Fla.—I want to lay a stress on one point that is, on the reception of the little one into the world, because we have to attend them afterwards. When they come we usually take them in regardless of surrounding temperature. When these little fellows are born they are immediately placed with a hot water bottle, prepared before the baby arrived, with a good warm towel or some soft linen over them. When the cord is cut the process is carried out and that baby is not bathed and scrubbed in a temperature that would chill an adult. The baby instead of getting a water bath gets an olive oil bath. We prevent a great many of these so-called colic cases by doing this. I saw a baby recently which was quiet when it came. The mother sent for me in five or six days to know why the baby would not cry. That same mother sent for me in a week or ten days to stop the baby from crying from colicky pains. Something had happened. That baby had developed colic and an acidosis from carelessness of its surrounding temperature.

Dr. S. A. Visanska, Atlanta, Ga.—Colic is something that gives us all discomfort. I think a good bit of the colic is brought about at first by giving the usual dose of castor oil and binding the baby too tightly with a binder and diaper, causing what you might call a stasis probably of the stomach and intestine, both large and small; and finally by the neurosis of the mother. Nervous breast milk is not good milk for an infant. Milk from a nervous mother produces some effect on the infant. I agree with one of the speakers that the average mother of today in high society belongs to one or two bridge clubs and she goes out, often eating very little lunch. They sit and play and nibble chocolates and pastry dishes. These women work harder than they do at home. If they worked hard at home, took the proper exercise in the home and on the street, they would produce better milk and healthier milk and there would be less colic. The effect of the mind and nervous system on the mammary glands is considerable and plays an important part in the colic of infants.

I do not say that is all of it, because I do believe sometimes that there is what you might call a stasis of the stomach. The stomach does not empty itself even with breast milk at the proper times. Too frequent feeding will cause it. If you practised lavage more than you do, emptied out

the stomach to see if the breast milk is sent through the stomach into the intestine when you are feeding at two-hour intervals, I believe you would have less colic.

Dr. McGuire Newton, Richmond, Va.—There are a number of causes for the crying baby. I wish to call your attention to one potent cause, which I have recognized frequently, that is, the proportion of babies that are brought to me that have been changed from one patent food to another, crying constantly on this food and that food. I find that the digestion is at fault and that it improves on fruit juices, and cereals and when the digestion is restored the most remarkable results follow.

Dr. Rosamond (closing).—I wish to agree with what Dr. Lammers and Dr. Royster said except this: a baby that is too hot does not cry at a particular time of the day. If the baby sleeps on a thin mattress and in a well ventilated room, the baby may be too cold. Then he does cry at a particular time each day. In eighteen years of practice cases of true colic where the baby is distended with gas and screaming with pain can be counted on the fingers of two hands. I do not know whether I have been particularly fortunate or not. I mean that the severe cases of true colic are few and far between, while it is a daily occurrence to be called in by a new mother who says, "Doctor, my baby has three months colic; we have called you in consultation simply because we have done everything that everybody has suggested." This baby is hungry and when I suggest to the family doctor that the baby is hungry, the mother says, "Dr. Rosamond, I want to disagree with you; I have enough milk to float a battleship." As Dr. Wilson said, there is nothing so uncertain as a mother's statement of the amount of milk she has.

There is nothing that is so much trouble as weighing a baby before and after eating. That means a balanced scale and hauling one out in your automobile. You have got to weigh after every single nursing period, because as Dr. DeBuys said, one nursing does not represent at all what the baby gets. He may get 2 ounces and be perfectly satisfied and he may get 8 ounces and not be satisfied. The individual breast varies in quantity with the time of the day. I believe that with cases where there is a mistaken diagnosis of colic, when the underlying cause is really hunger and when the mother's worry has upset her milk, if you simply shut that infant up by filling his stomach full, the mother's milk will become well balanced and the baby will go on and get rid of the digestive disturbance. The original cause of the trouble is hunger. Colic is simply the result of the unbalanced milk. The best way to balance that milk is to continue to preserve the regular nursing intervals and to hush the baby's cries so the mother's mind will become easy. We cannot have an adequate milk production unless we have contented mothers. Milk production is associated in all of our minds with kind-faced cows, green pastures and contentment. The man that said much in a few words was the man who wrote the advertisement for Carnation milk—"milk from contented cows." I believe he practiced medicine before he went into advertising.

THE NUTRITION CLASS: ITS VALUE TO THE PEDIATRIST*

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Probably no one movement has appeared in the last fifty years more pregnant with possibilities for the betterment of the children of this country than what I have called, for want of a better term, the "Nutrition Class Idea." This whole movement has occupied such an important part in the pediatric literature of yesterday and today, and is so familiar to every worker along child health lines, that I shall not attempt here to go into details with regard to the running of a nutrition class. In order, however, to bring the matter clearly before our minds, I shall briefly sketch the underlying principles on which the work is based.

The first of these principles is the recognition of the existence of a clinical entity, malnutrition, with well understood etiology and pathology, and definite signs and symptoms, some of them pathognomic of the condition. Chief among these is marked deficiency in the weight, in relation to the age and height. The second principle is the recognition of a twofold etiology. That is, malnutrition is due either to some physical defect, often to be discovered only after a complete, exhaustive physical examination; or to some faulty habit of life, to be discovered only by the aid of an equally exhaustive history-taking, and skilled home visiting by a trained social service nurse, known technically as a "nutrition worker." The third principle consists in the application of the old familiar class method to the therapy of this comparatively recent arrival among the known disease entities.

The recognition of the existence of this condition of malnutrition goes back to time out of mind, when prehistoric grandmothers called youngsters "puny," "peaked," "sickly," "failing," "pining," "declining," or any one of a dozen other descriptive adjectives. The earliest scientific recogni-

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