

## Underfeeding and Fat Indigestion in Infants

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Infants that are bottle fed are prone to acute digestive disturbances because their food is different chemically and biologically from what nature intended them to have, and because the substituted food has a greater bacterial content than their normal food. Their acute digestive disturbances are not due to diseased digestive apparatuses, but are due to the food.

In considering the disturbances caused by food we must distinguish between the chronic cases and those that are acute and we must also observe what constituent of the food is causing an unfavourable influence on the human economy. The food is made up of sugar, fat, starch and protein and each one of these may cause its own special trouble. Not only may an individual element in the food start serious disturbance but the quantitative relationship of the elements may be such as to cause the disturbance.

Bacteria are an ever present element in the digestive ailments of infants, and are of such importance that they often furnish the key note for the successful treatment of these cases. The bacteria that are a causative factor in these cases may be those that normally inhabit the intestinal canal or they may have been introduced by means of the food.

Acute disturbances, if checked, cause no serious change to the general economy; chronic digestive disturbances cause profound changes as serious as those of constitutional disease. Chronic digestive perversions result in far reaching bodily damage.

Normally the infant never has indigestion, and when it does occur, it is due to mismanagement. The causes of indigestion fall under two classifications; either there is a decrease in the powers of digestion, or there is more required of a perfectly good digestive apparatus than it can accomplish.

Of the causes that lead to impaired digestive powers are diseases of the digestive tract, diseases other than those of the stomach and intestines, physical and mental over-fatigue and bad feeding habits.

It is not uncommon to find the cause of indigestion outside of the digestive apparatus, as in tuberculous troubles, chronic disease of the tonsils, or pyelitis. These cases of indigestion can not be cured except by the proper treatment of the diseases causing them.

Chronic indigestion in childhood and infancy, due to a diseased stomach primarily, is so rare that we do not need to consider it at this time.

Over-fatigue is a very common cause of chronic indigestion and is due to over-play, over-excitement, or too late hours. The correction of these causes will result in a normal digestion and increase in weight.

Irregularity of meals, lunching between meals, washing unchewed food down with water, are all easily remedied causes of chronic indigestion.

The other indigestions may be classified as :

- Under-feeding,
- Acute and chronic fat indigestion,
- Acute and chronic sugar indigestion,
- Acute and chronic starch indigestion, and
- Acute and chronic proteid indigestion.

*Under-feeding.* This is usually the result of what we are not feeding and because we are not weighing the baby every week. Sometimes a physician has prescribed a

diet that was correct the day he prescribed it and the infant did so well under it that the mother did not change the formula as the infant grew older and its needs were greater. Then some mothers after having trouble with cow's milk try to raise their babies on barley water and the diet has not sufficient calories to supply the infant's needs. Then again some patent food is to blame for the under-feeding.

The diagnosis of under-feeding is made by noting that there has been an insufficient calories fed, the baby is under-weight, his flesh is flabby, color poor, may or may not have signs of rickets. Mild cases do not have an impaired digestion but severe cases have a low digestive capacity.

*Treatment.* In milder cases all that is needed is to bring the caloric value of the feeding up to normal. It must be done gradually for it takes time to educate the digestive apparatus to do normal work. If the infant is eight months old, toast, cereals and beef juice may be added to the diet.

In severe cases the problem is difficult. The food-tolerance is low and as soon as the diet is increased indigestion results. The strength and amount of the diet can not both be increased at the same time. More than one food element at a time should not be increased. First the proteid may be gradually increased until sufficient, then the sugar and finally the fat. Fat tolerance is usually low in these cases and can not be brought back entirely to a normal percentage for a baby of the same age.

There is no homœopathic remedy for under-feeding cases; they are strictly diet cases. If one feels that a potentized remedy should be given it should be chosen for its constitutional effect rather than for any hopes for result on the digestion.

*Acute fat indigestion.* Acute fat indigestion is caused by feeding too much fat, either too high a percentage or too much fat in 24 hours. There are few babies that can take over a 4% fat mixture and most young babies can not take that much. The percentage of fat in human and cow's milk is about 4%. The percentage varies considerably in different cows as well as in the human being. Fat in the milk is desirable but an excess of fat is very harmful as it is not absorbed but lies in the intestine and forms irritating compounds and soaps. In the process of forming soap alkalies are extracted from the body causing acidosis. A high fat diet does not always cause an acidosis syndrome but it often does. An attack of fat indigestion is ushered in with vomiting of a sour creamy material and loose greenish yellow stools, acid in smell and reaction, containing undigested fat curds both large and small. The stools will number about six a day. They usually excoriate the buttock. Tenesmus is common. The vomiting is caused by irritating free fatty acids; the bowel disturbance by free fat plus bacterial decomposition in the intestine. When the stool has fatty acid or soap in it, the stool is greenish yellow; when it has neutral fat from over-feeding it is bright yellow and oily.

On account of the great dangers of fat over-feeding, it is highly important that we know just how much fat we are adding to milk when we add cream to it. Bottle milk standing five hours will produce a cream of 16 to 20% butter fat; therefore one dram of this cream added to one ounce of skimmed milk will bring the milk up to 4% fat.

It was quite customary many years ago to feed the new born babe a cream and water solution that was very high in butter fat and seemingly the baby survived.

The same percentage of butter fat in milk instead of water would have brought on serious trouble. Any physician who with the present sources of knowledge at his command feeds his infants on high fat mixtures is inviting severe condemnation.

One must learn to recognize this fat intolerance in infants by its symptoms, for there is no percentage of fat that will be suitable to all infants. The usual history is that the infant after a period of rapid progress, ceases growth and becomes ill, exhibiting either the loose greenish yellow fat stools or the constipated dry hard light colored stool that does not adhere to the napkins. The baby is an acid baby and the urine smells of ammonia. The abdomen is tympanitic and eructations are common. Regurgitation of the curds is common. The infant is usually fat, flabby and fair.

Fat is the great disturber of digestion in infants and when the baby is going into a digestive upset we should look first to the fats for here the greatest danger lies.

*Chronic fat indigestion* seldom comes on before the fifth month. It is caused by prolonged feeding of a diet high in fat, high in protein, and low in sugar over a long period of time. It comes on slowly, following a long period of good gain in weight. Without any decline in amount of food given the increase of weight ceases. Any increase in the amount of the diet only leads to a decrease in weight. Baby becomes pale and flabby. Signs of rickets appear, such as profuse sweating of head rachitic rosary, and too open fontanelles. Spasms may appear.

If there is little or no fermentative bacteria in the intestine the peristalsis will be slow and calcium and magnesium soaps will be formed in the intestine producing convulsions and a constipated stool which is large, very light grayish white color, rather foul smelling and

of an alkaline reaction. The more colorless the stools the more severe the process. There is increased ammonia in the urine. If there is bacterial fermentation in the intestine, peristalsis will be increased and potassium and sodium soaps will be formed which are readily absorbed. The stools are oily, loose, greenish yellow, acid in reaction, with many undigested curds. Vomiting is common. The intestine in the diarrhœic type of chronic fat indigestion is acid while in the constipated it is alkaline. The baby loses weight, appetite and strength. Fat intolerance long continued may result in marasmus.

( To be Continued ).

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### Editorial Notes and Comments.

**Dr. Guy Beckley Stearns, M. D. and ourselves**—The readers of the Hahnemannian Gleanings will be exceedingly glad to learn that Dr. G. B. Stearns has, at last, volunteered his services to act as a *Foreign contributing Editor* of our Journal. Dr. Stearns occupies an unequalled place in the domain of homœopathic research for which he has already won an international name and fame all over the world. He is also the Head of the Department of Materia Medica in the New York Homœopathic Medical College and Flower Hospital. Our Journal was, no doubt, enriched with several original articles from his pen in the past. But as he has now actively identified himself with us, we can naturally expect to get larger number of original contributions from him in near future. For the edification of our readers and with pardonable pride we quote the following few lines from his last letter written to us:—