## No Starch for Infants, by Herbert Shelton

Dr. Prospiro Sonsino, el Pisa, proved years ago, by a number of experiments, that there is a "physiological or normal dyspepsia to starchy food (absolute inability to digest) in the first portion of infant life." Certain it is that, since starch of all foods, requires thorough and complete mastication and insalivation, it should not be fed to infants before they have teeth. This view was supported by Dr. Routh, professors Huxley, Youmans, Dalton and perhaps by all who ever examined the subject.

Dr. Page was particularly bitter against the practice of feeding starches to infants. "Farina, corn-starch, fine flour, and refined sugar," he declared, "are the fashionable materials of the infant dietary; but a worse selection could hardly be made." He cautioned against the injury to the vital organs resulting from "prematurely feeding the infant on even the best selected articles of the general table," and added: "It is not uncommon for infants to be given cakes and candies and even pork, fried fish, cabbage, ham, potatoes, etc., while the teeth are blamed for the ensuing gastro-intestinal disorders."

It will not do to feed mashed potatoes, corn meal mush, farina, and the like to toothless infants, and imagine that because these things can be swallowed without chewing, the problem is solved. They are also swallowed without being insalivated and are eaten by one whose digestive juices are ill adapted to starch digestion. The fact that Nature makes no provisions for the digestion of starches before full dentition, should be sufficient evidence that she does not intend it to form any part of the infant's diet. Before the teeth are fully developed the saliva of the infant contains a mere trace of ptyalin, the digestive ferment or enzyme that converts starch into sugar. There is just enough of this ptyalin present in the saliva to convert milk sugar into dextrose. It is this almost total absence of starch-splitting enzymes from the digestive juices of the infant that accounts for the great amount of digestive disorders which result from feeding starch foods to infants. When ill starch digestion is impossible, starch fermentation is inevitable. This poisons the baby.

If we limit the following remarks of Page's to the milk from a healthy, well nourished mother, he is eternally right. He says: "Milk is the food for babies and contains all of the elements necessary to make teeth, and until they are made, it should continue to be the sole food. It is not enough that two or three or a half dozen teeth have come through, that they should be expected to do and part of a grown child's work." Dr. Densmore, who did not favor starches, even for adults, says of them for infants, How Nature Cures, p. 55; a diet of cereal or grain and all starch foods: "is especially unfavorable for children, and more especially for babies. The intestinal ferments which are required for the digestion of starch foods are not secreted until the baby is about a year old; and these ferments are not as vigorous for some time as in adults. All starch foods depend upon these intestinal ferments for digestion, whereas dates, figs, prunes, etc., are equally as nourishing as bread and cereals, and are easily digested - the larger proportion of the nourishment from such fruits

being ready for absorption and assimilation as soon as eaten."

Dr. Tilden is equally as strong for what he calls the no-starch-for-babies plan. He Says: "It is a mistake to feed starchy food too soon - before the end of the second year; for young children cannot take care of too much starch." "Children under two or three years of age have trouble in converting starch into sugar. They should get their sugar from fruits; fresh fruits in summer, and the dry sweet fruits in the winter - raisins, dates and figs."

In my own practice I make it a point never to prescribe starch food of any kind for babies under two years of age. In my own family I have never fed my children cereals. The cereals are the most difficult of all starches, unless it is beans and peas, to digest. There are strong reasons to think that cereals cause the production of poor bones and teeth.

Babies do not need starch foods and cannot utilize them to any advantage. Many of the troubles from which children suffer are due to the practice of feeding them starch. Cereals with sugar and cream or sugar and milk are especially bad - the cereals and sugars are usually denatured and the milk is pasteurized, to add to the evils.

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"Upon no consideration," says Dr. Page, "should any of the farinaceous or starchy articles be added until the mouth bristles with teeth; then it may be justly considered that he can handle something of the adult diet."

Macaroni is a "slippery, glutinous mass of starchy acid which is never chewed, and equally of course is never digested," and should never be eaten by child or adult. Cakes and cookies, breads and pastries, jellies, jams, custards and the like should never be fed to children or eaten by grown ups.

If cereals are fed to children only the whole-grain cereals should be given. It is a crime to feed denatured cereals to children. Doctors who advice them are either ignorant incompetents, or else knaves who have their eyes on the money they derive out of the sickness caused by these.

All starches should be served dry, to insure thorough chewing and Insalivation. They should be taken with green vegetables, raw or cooked, but never with acid fruits, proteins or milk. Jellies, jams, etc., should not be fed with them. Cream and sugar should never be served on cereals. Raw starches are easier to digest than cooked starches and require more chewing; this probably accounting for a part of their greater ease of digestion.