

The cheapness of sugar and its various products, and the consequent increase of the use of sweets of various sorts, including confections, jellies, syrups, etc., must be held largely accountable for the enormous increase in frequency of this disorder within the last two decades.

Especially to be deprecated is the custom of adding syrups sugar, and other sweets to farinaceous articles of foods, such as oatmeal, breakfast cakes, etc. The absurdity of such a practise is apparent when one recalls the fact that farinaceous foods are fully one-half starch, and that this starch is all converted into sugar in the process of digestion; hence to add syrup or sugar to oatmeal is simply adding sugar to sugar, or sweetening syrup with honey. It should be remembered also that cane-sugar is not an alimentary principle which is naturally adapted to the human digestive apparatus.

Considered from a zoological stand-point, man is unquestionably dietetically related to the gorilla, the chimpanzee, and the orang-outang, his nearest relatives in the animal kingdom. These animals subsist, when in their natural state, exclusively upon fruits and nuts, the chief saccharine element of which is levulose, a sugar which is much sweeter than cane sugar, and which is closely allied to, if not identical with, the final product of starch digestion in the alimentary canal.

Starch, when cooked, begins to undergo digestion as soon as it is received into the mouth. The conversion of this element continues for half to three quarters of an hour after the food enters the stomach, and may extend so far as to convert almost the entire amount of starch taken, when conditions are favorable. The writer has found as high as fourteen per cent. of sugar after a test meal consisting of water and one and one-half ounces of dried bread which contained no sugar. Cane-sugar is not acted upon by the saliva, and undergoes no change until the intestines are reached, when, coming in contact with the intestinal fluid, it is transformed into a sugar which is capable of assimilation. Cane-sugar is, however, capable of fermentation while remaining in the stomach, on account of the presence of microbes, which first transform it into a more highly hydrated form of sugar than when converted into alcohol, and later, into acetic and other fatty acids.

It is thus apparent that cane-sugar, while not itself readily digested, also interferes with the digestion of other foods. When taken in large quantities, it must impose an enormous amount of extra labor upon the liver by leading to the absorption of large quantities of imperfectly converted starch and an excess of saccharine material. In addition to this, the products of fermentation resulting from the presence of sugar must exercise a most damaging influence upon the