liver, and may be the cause of the interstitial hepatitis which commonly accompanies diabetes. Loeb has recently expressed the opinion that in many cases sugar is present in the urine in small quantities for many years before its discovery, the quantity of urine finally increasing to such an extent as to lead the patient to consult a physician.

In the writer's opinion, cane-sugar is an unwholesome article of food, and should be discarded from our tables. used at all, it should be only in moderate quantities, as a means of rendering palatable excessively acid fruits. Its use, in such cases even, is decidedly doubtful, since the acidity of sour fruits may be equally well neutralized by the addition of sweet fruits. It should be remembered also that sugar, from a chemical standpoint, is an acid, and hence, when added to sour fruit, does not in the slightest degree neutralize or antidote the free acids present, but only hides them, or pre-

vents their recognition by the nerves of taste.

The love for sweets is doubtless a natural instinct. Sweet foods are, as a rule, wholesome, and the taste for them may be safely indulged without stint; but this rule applies only to those possessed of the sweet flavors found in nature. natural sugar, like that contained in Trommer's Malt, were substituted for the cane-sugar of commerce, a great gain would be made so far as the digestion is concerned, as this is a perfectly natural sugar, produced by the diastetic digestion of starch, and is precisely the same as that resulting from the action of saliva upon starch. - Modern Medicine.

## A CONTRIBUTION TO THE PHYSIOLOGY OF SLEEP, BASED UPON PLETHYSMO-GRAPHIC EXPERIMENTS.

W. H. Howell contributes a lengthy article on this subject in the May, 1897, number of The Journal of Experimental Medicine. The object of the numerous experiments was to determine the variation in volume of the arm during the entire period of sleep. The experiments were made upon himself. The plethysmograph is described in detail and the method of using it, and plates of two of the successful experiments are given. The curves began to fall from the moment the sleeper closed his eyes, which meant that the arm in the water plethysmograph increased in volume, and continues to do so for from an hour to one and a half hours after sleep appears. It remains the same for an hour or two, when the curves begin to rise slowly at first, more rapidly just before awaking, after which the arm has returned to the volume which existed previous to going to sleep, some 4 to 41/2 hours previously. Secondary variations in the curve occurred at more or less regular intervals of about an hour, other