

of the second dentition; or even if it be proper to fix any limit other than the necessities and indications for treatment of each individual case.

Finally we are all familiar with the excessive formation of acid, especially uric, in the system of the strumous. The sour perspiration, the acid secretions, especially seen in the destruction of the teeth caused by the acid secretions flowing into the mouth, the acid urine, with its grains of uric acid, all unite to point to a condition where there is either imperfect oxidation or faulty assimilation, often both combined. Older writers, as Brändish, Brodie, and Lugol, found out empirically the value of alkalies in the treatment of the maladies of scrofulous children, and especially the value of potash. The alkaline plan of treatment gave great relief to the symptoms, without, however, exercising any direct influence over the diathesis, as Logul observes. Its beneficial action we can comprehend from what has just gone before: it neutralises the excessive acidity, whether due to lactic or uric acid, and so relieves the system from the effects of the excessive acidity at least. It is useful not only as a temporary means of relief, but is even indicated in moderate quantities as a permanent addition to the dietary, and as an habitual corrective of the excess of acid formed in the faulty organism. Alkalies may be agreeably added to the ordinary food in the form of alkaline mineral waters, Seltzer, Vichy, or Carlsbad, either with milk or alone, as a beverage, or, in older children, along with vegetable bitters.

In regard to the causation of the excessive formation of acid in the organism, it seems probable that it has its origin mainly in an imperfect oxidation together with a faulty assimilation. We are all familiar with the effects produced in such cases by sending them away to the seaside to breathe the pure air wafted from the surface of the ocean, where the pining child usually quickly improves in health and nutrition. In most cases the improvement in the respired air and the larger supply of free oxygen are followed by the happiest results. Where exercise is forbidden by some local affection of a joint, the child is benefitted by being kept for hours out in the open air every day. Such was the experience of the empirical past. Lugol found that strumous children were always improved in harvest, when they were much out in the open air gleanings; and Baudelocque found that in the *Hopital des Enfants Malades*, there was always an increase in the amount of strumous ophthalmia when the weather was such as to cause the children to remain indoors. This is in full agreement with the recent observations of Voigt and others as to the storing-up of oxygen in the system, and the important part played by such stored-up oxygen in the maintenance of the integrity and the functional activity of the system. But the imperfect oxidation is only a part of the question. An equally important factor is the imperfect action of the nutritive and assimilative processes; this is very clearly put by Dr. Broadbent, who says: "When, therefore, we examine the excretions for the products of combustion, and thence draw conclusions as to the completeness of the process, it

must be remembered that the more or less perfect oxidation may depend upon the more or less perfect antecedent nutrition, and not merely on the supply of oxygen or any immediate influence on destructive metamorphosis. Thus, the uric acid which forms urinary excretion of birds whose habits are active and temperature high, and whose blood is highly oxygenated, cannot arise from insufficient supply of oxygen, but must depend on some peculiarity in their tissues; so also in man uric acid may be the effect of defective nutrition or primary assimilation, and not merely of imperfect metamorphosis or oxidation. The clinical history of the so-called uric acid diathesis supports this view, and shows that the remedy in many cases must be sought not in the promotion of oxidation but in modification of the nutritive processes."

From this view it is impossible to dissent, and it is highly probable that in persons who are strumous much of the food converted by digestion into peptones never becomes tissue nor is utilized for structural purposes; but may be at once partially oxidised and being thus unfitted for the purpose of histogenesis it at once passes onwards in retrograde metamorphosis. It is also possible that there may be a splitting-up of sugar into lactic acid in excess of the oxidising power of the respired air, and that these two combined have much to do with the production of these conditions of excessive acidity which are so common in the strumous. The practical outcome of all this is that in the treatment of the ailments of strumous children it is not only necessary to procure more perfect oxidation, and with it the removal of the excessive amount of acid, or to aid that process by neutralisation of the acid, but also to combine with these procedures measures for the improvement of the nutritive and assimilative processes in order to ensure success; and for this last end tonics, readily digestible food, and especially cod-liver oil, are suitable. The treatment, indeed, to be successful, must be as complex as is the condition with which we have to deal or which we are essaying to remedy.—*Dublin Medical Press.*

THE DIARRHŒA OF CHILDREN.

The following observations by Dr. S. HENRY DESSAN are contributed to the *Southern Medical Record*:—

In cases of simple diarrhœa occurring in teething children, where there is no fever present, and absence of pain on pressure over the abdomen, where the stools are more frequent, thinner and copious than usual, when the cause is presumed to be nothing more than the highly irritable state of the nervous system, the effect of the transitional process of teething, and reflecting its action on the alimentary canal, if the gums should be found swollen, red and tender, they would be lanced; but since my term of service at the dispensary, I have never found occasion to lance a gum. I generally, in such cases, administer a sedative, such as the bromide of potassium, in doses of two to four grs. every three hours,