

mucus of alkaline reaction. The introduction of food causes a deepening of color from an increased flow of blood, the secretion of the gastric juice which trickles down the sides of the stomach, and gentled peristalsis. This continues during the digestion of a meal, one to four or five hours, after which the condition of quiescence is resumed.

Instead of the mucous membrane of the stomach being of a pink color, it may be pale and flabby, so that the introduction of food into it is not followed by a due increase in the blood supply, and the gastric juice is both deficient in quantity and defective in quality. There is no feeling of hunger but a fair quantity of food may be taken, which, not being digested soon lies heavily in the stomach, and ferments with formation of gas and often acidity. Such is the condition in atonic dyspepsia.

Much has been done lately in determining the defects in the gastric juice in the various diseases of the stomach. To obtain gastric juice for examination it is best to give two or three ounces of toast and a little water on an empty stomach; the water soon absorbs, and the toast while promoting a flow of gastric juice does not alter it. As soon as the gastric secretion shall have attained its maximum a small stomach tube is passed, to it is attached a syringe, by which suction is slowly made. As soon as sufficient juice is obtained the tube is withdrawn, its contents filtered and examined. The HCl. is the ingredient that is found to vary most, and it is abundantly proved that it is the most important one. In true acid dyspepsia it is in excess but this is not a common condition. The HCl. is much more frequently deficient or even absent as in atonic dyspepsia and many cases of gastric catarrh. In atonic dyspepsia there is debility of the system generally so that the circulation is feeble and the nerve centres depressed; therefore, the nerve centre does not respond to the stimulus of the food, with the result that the flow of blood to the stomach is not increased, and without the required blood supply, the gastric glands cannot secrete either good or plentiful gastric juice; its HCl. will be scant, if present at all. Hence the decomposition of the food, the flatulence, the acidity, the heartburn, and the distress: It has been fairly well established that gastric peristalsis is due to the presence of HCl., hence absence of this acid will be followed by greater or less dilatation of the stomach from retention of its contents.

In the treatment of atonic dyspepsia we have many things to consider. The stomach, if loaded with offending material, must be relieved by an emetic, or by washing. Then we may seek to promote secretion by giving alkalis, which act locally on the glands, stimulating their acid secretion. Bitters, as columba, or gentian, are given to irritate the stomach more powerfully than the food does; they act on the nerve fibres in the mucous membrane, and thus stimulate an increased flow of blood. Nux vomica locally has the same effect, and, after its absorption, it stimulates the nerve centres, rendering them more susceptible to stomach impressions. If there is anæmia, iron should be given, to improve the quality of the blood.

In the matter of diet, nothing more than general principles can be laid down. Intelligently used, perhaps the late Austin Flint's rule should be sufficient: "The diet should be regulated by the appetite, the palate and by common sense." Food eaten with a relish is usually wholesome, even though it is sometimes contrary to our preconceived notions. Experience must needs be the guide to our common sense, and where people have no experience, as in recovering from typhoid fever, for example, they had better be guided by that of others. It is not so often *what* we eat, as *how* we eat, that "upsets" our stomachs. Not a few people unnecessarily eliminate many articles of food from their diet, under the impression that they cannot digest them. Such an one presented herself to me not long ago for advice; she could not take meat, eggs or milk. An alkaline stomachic was prescribed; she was assured it would enable her to digest all these articles of diet, and she was requested to take them in moderation, and without worry. On returning a few days afterwards, she gleefully reported that they all agreed with her from the first, and that she now felt well.

In cases of distress, notwithstanding such treatment, five to ten minims of dilute HCl. may be given with advantage, during or after the meal, to supplement the deficiency in the gastric juice. As improvement takes place, the need of it will disappear. Pepsin may be added, but its use in my experience has been disappointing. For the relief of acidity and pain occurring an hour or two after meals, Sir William Roberts, in his address before the late meeting of the British Medi-