INDIGESTION-ITS CAUSES AND CURE.

BY A FAMILY DOCTOR.



MDIGESTION or dyspepsia is the commonest of all diseases, "the prevailing malady of civilised life." In itself the complaint is distressing enough, but this is not the worst, for I could fill columns in enumerating the ailments to which indigestion may give rise. Nor can we wonder at this, if we consider for a moment the pathology of the troublesome complaint, and the physiology of digestion.

The food, then, which is received into the stomach of an individual in health, so excites the inner or

mucous coat of the stomach, that it throws out in sufficient abundance a peculiar secretion called the gastric juice; but the food does more, for by its presence the outer or muscular coats of the stomach are roused to motion. Now the fibres of the muscular coat are not only circular, but transverse, and as muscles always contract in a direction parallel with their axis, it must be evident to even a tyro that the motion of the stomach is not a mere squeeze like the grip of one's hand, but a working, churning-like movement. And by this movement its contents are mixed, so that every portion of them is thoroughly mingled with the gastric juice. This secretion, chemically speaking, is composed of water, the salts that are found in the blood, the hydrochloric and lactic acids. and a highly important albuminous ferment termed "pepsine." But it is with the action, rather than the composition of gastric juice, that we have more to do at present. It is designed by Nature, then, to so act upon the food as to dissolve it thoroughly, and change it into what is called chyme. This chyme escaping through the lower opening of the stomach-namely, the pylorus-finds its way into the duodenum, or first portion of the gut. Here another important change takes place, for the chyme now receives further secretions, the most important of which are the bile from the liver, and the pancreatic juice. By the addition of these, the nutritive portion of the food is separated from the non-nutritive. The former is called chyle. The chyme becomes chyle. Now there are on the surface of the intestines a network or series of vessels called lacteals, and into these, by a process which need not be described, the chyle finds its way, and is carried by the vein-like lacteals onwards and onwards, each lacteal uniting and uniting, till but one large vessel is formed, and this runs upwards with its precious freight and opens-directly, mind you-into one of the largest veins of the body; hence it is carried, mingled with the blood into which it has been changed, to the heart itself, and thence along in the general circulation. The whole process of digestion is therefore simply a blood-making one. And this shows

us what a really important organ the much-abused stomach is. Nor, considering how intimately connected are heart and stomach, can we wonder if, the latter being out of order, the former shall sympathise, and a general feeling of wretchedness be the result.

Let me now endeavour to enumerate some of the more common causes of dyspepsia. The most frequent of these is undoubtedly eating or drinking inordinately. When I say drinking, I do not refer to spirit-taking, for the imbibition of large quantities of beer, tea, or even water itself, weakens the digestion both by diluting the gastric juice too much and by distending the stomach, and thus preventing to some degree the proper contraction of its muscular fibres. Spirituous liquors in excess are, I need hardly tell you. most pernicious to the coats of the stomach, and the appetite they induce is, in nine cases out of ten, a false one. Dram-drinkers frequently gorge-I can call it by no prettier name-and their bodies are thrown into a state of fever, to get rid of the encumbrance, and prostration, or rather depression, follows as a natural consequence. Eating at irregular hours is a fruitful cause of indigestion, so is the not allowing a sufficient interval to elapse between meals-keeping the stomach constantly at it, so to speak-for this organ needs rest occasionally as well as the limbs do. The heart keeps on both night and day, the only rest it gets is when the individual himself is tranquil, both in body and mind, then it can afford to move a little more easily than usual. It behoves us then, if we would enjoy long life, to supply the heart with the purest and best blood that can be made.

Hurry in eating prevents not simply the proper mastication of the food, but the mingling with it of the saliva, which latter is of great use in the economy of digestion. The eating of improper food will cause indigestion, so will the swallowing of improperly masticated or tough meat. Proper exercise greatly conduces to keep the stomach, as well as the body, in good working order, while, on the other hand, too hard labour, whether it be mental or physical, very often brings on dyspepsia. I need hardly do more than mention the ill effects of carrying to anything verging on excess, tea-drinking or the use of tobacco in any form. Both tea and tobacco are good servants, but very bad masters.

The symptoms of dyspepsia are both numerous and varied, the most common being loss of appetite, a sense of pain, weight, or uneasiness after eating, acidity of the stomach, flatulence—at times of a most distressing character—furred tongue, with more or less of foulness of breath. There may also be occasional costiveness alternating with attacks of diarrhæa.

Heartburn is another very painful and frequent accompaniment of indigestion, so too is what medical men term *pyrosis*, which means the eructation, or

even vomiting of thin fluid, which may be either acid or quite tasteless. Heartburn is generally associated with an irritable state of the stomach, and an overabundance of gastric juice; but there is still another form of indigestion, in which this juice is not secreted in proper quantity. The digestion of the food is in this case very slow, and the symptoms which this gives rise to are troublesome enough in all conscience, and invariably badly borne by the unhappy patient. "Unhappy" is just the right word to use, for few people are more miserable than those who suffer from this form of dyspepsia. They always take the very worst view of their own state of health, are dejected and melancholy, peevish and mayhap ill-humoured without a cause, and often cross and angry with themselves for being so. I have known the most amiable and good-tempered men turn sour-dispositioned and fretful through illness of this kind, and even confess to feeling so. Slowness of digestion gives rise to feelings of distension and uneasiness, probably even pain at the pit of the stomach, which may become so filled with gas as to press upon the diaphragm or midriff, and thus cause difficulty of breathing.

A man can never be either well or happy if his stomach is out of order; and dyspepsia, like hysteria, imitates the symptoms of innumerable disorders. But how, the reader may ask, can I tell whether the illness from which I think I am suffering be real or imaginary? At any rate, I should answer, attend to your stomach first, and pray just take a glance at your tongue. If ever I were so far left to myself as to meditate some rash act, I should, before going into the matter, have a look at my tongue; if it were not perfectly clean and moist, I should not consider myself perfectly healthy, nor perfectly sane, and would postpone my proceedings, in the hope that my worldly prospects would get brighter.

What does a medical man discover from looking at the tongue? Many things. The tongue sympathises with every trifling ailment of body or mind, and more especially with the state of the stomach. That thin whitish layer all over the surface most likely indicates indigestion. A patchy tongue shows that the stomach is very much out of order indeed. A yellow tongue points to biliousness. A creamy, shivering, thick indented tongue tells of previous excesses; and I do not like my friends to wear such tongues, for I sincerely believe that real comfort cannot be secured in this world, by any one who does not keep his feet warm, his head cool, and his tongue clean.

And now a few words on the treatment of indigestion. In cases then of chronic dyspepsia, the most important point is certainly the regulation of the diet. A dyspeptic patient ought to be informed that unless he pays particular attention to the kind and quantity of his diet, he need expect not the slightest relief from medicine. Good, wholesome, nutritious food best suits a weak stomach, and there should be no hurry or haste in eating; no getting up of an appetite by artificial means, and no more eaten than the patient can easily digest. I know that in this last sentence I have given orders which most dyspeptics

will find it hard to obey, for the simple reason that their wills are as weak as the walls of their stomachs. But they must bear the pain for sake of the profit, remembering meanwhile that as the "walls" get stronger, so do the "wills." "Things sweet to taste prove in digestion sour," those troubled with dyspepsia should therefore avoid pastry and confectionery. If possible, avoid alcoholic stimulants; a little good warm coffee on an empty stomach will often benefit the system, and prove a far better stimulant than spirits or wine, and it will not injure the coats of the stomach. Dyspeptics ought to live by rule, and in time regular habit will become second nature.

Before saying a word about the medicines required in the treatment of indigestion, there is one thing I should like, if possible, to impress on the mind of the reader, and it is this: do not forget that everything which tends to increase the general tone of the system, strengthens the power of healthy digestion, such as exercise, especially on horseback, regular hours, sufficient rest, the cold or tepid morning bath, an occasional holiday and sea-bathing.

From the pharmacopæia we try to find such medicines as will increase the digestive power. The nitro-hydrochloric acid is very valuable with this view. It is best administered in some well-diluted form, such as the following :- Take of the dilute acid three drams to six, tincture of chiretta about the same quantity, and mix with sixteen ounces of infusion of oranges. The dose to be an ounce three or four times a day, about one hour before meals. If any sluggish action of the liver is suspected, the infusion of senna should be used instead of orange, and one ounce and a half of dandelion-juice added to the mixture. Pepsine is a capital remedy in cases of difficult digestion. Pepsine wine is perhaps the most elegant form in which to use the medicine. The dose is a tea-spoonful with dinner and breakfast, and the acid mixture can be taken as usual. About the sixth of a grain of the hydrochlorate of morphia, taken in a little soda-water after dinner, often does away with the pains of indigestion.

In cases of irritable dyspepsia, with too great a flow of the gastric juice, a capital remedy will be found in the trisnitrate of bismuth, three to five grains twice a day. Or minute doses of nitrate of silver-prescribed only by a medical man-often do good. Alkalies are not beneficial, and often, although they afford relief at the time, do more harm than good. Vegetable tonics, such as quassia, calumba, bark, &c., are needed in case of weakness. And to complete the cure iron is an excellent tonic. Oftentimes aperients are needed, and only the very mildest should be chosen, such as rhubarb pills, or any well-known mild aperient medicines. I have in this short paper purposely avoided giving a long list of medicines, which would only serve to confuse the reader and perhaps do little good; but I cannot refrain from just mentioning one other, I mean charcoal; it is most useful for checking acidity, and in larger doses it forms a mild aperient. It can be obtained at the shop of any respectable chemist, and it has one great advantage-it is safe!