THE CANADIAN Antual of Achical Science

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

To Correspondents.—We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.

TORONTO, FEBRUARY, 1880.

MALT EXTRACT, MALTINE, DRY EXTRACT OF MALT.

In our last issue we stated that we would discuss the merits of the various preparations of malt and its combinations. So many good preparations and combinations are before the public that we have concluded to do better than to attempt to give anything original, but in place thereof to republish an address by Dr. Wm. Roberts, of Manchester, which appeared in *The British Medical Journal* of November 1 and 8, 1879.—

THE DIGESTIVE FERMENTS, AND THEIR THERA-PEUTICAL USES.

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You all know that before food can be absorbed into the blood and made available for the nutrition of the body it must first be digested. By digestion, the albuminous and collagenous constituents of our food are liquefied and converted into diffusible peptones; the starchy matters are converted into sugar, and the fats are emulsified and partly saponified. Cane sugar is also changed into glucose. Native glucose, which exists in abundance in all our sweet fruits, is absorbed unchanged, and may be regarded as a ready-made digested food, or rather as a starchy food predigested for us by the agency of plants. The digestive processes are all of a purely chemical and mechanical nature; and they can be imitated successfully in the laboratory, and even in the sick room and nursery.

The agents concerned in these processes are the several digestive juices; saliva, gastric juice, pancreatic juice, bile, and the intestinal secretions. These juices owe their activity to a very remarkable group of bodies, called soluble (or unorganized) ferments; and it is to these ferments—to certain points in their modes of action and mutual relation—that I propose to direct your attention.

In the annexed table I have arranged, in the first column, the digestive juices in their natural order of succession; in the second column are indicated the ferments proper to each of them; in the third column, the nature of the action of each ferment on food-stuffs; and in the fourth column are placed the various medicinal preparations, which are the equivalents or substitutes available for administration to patients in whom this or that digestive juice may be supposed to require artificial assistance.

Table of the Digestive Juices and their Ferments.

Digestive Juices.	Ferments con- tained in them.	Action on Food- Stuffs.	Medicinal Substitutes.
Saliva.	Diastase.	Amylolytic, changes starch into sugar.	Various pre- parations of malt, ex- tracts of malt, malt flour, ex- tract of pancreas.
Gastric juice.	(a. Pepsin.	(Proteolytic, changes proteids into pep- tones in an scid medium.	Various pre- parations of pepsin, pep- ≼ in-wine, liquor pep- siniæ, lacto- peptin, etc.
	b. Curdling ferment.	Curdles the casein of Milk.	Rennet.
Pancreatic juice.	(a. Trypsin.	Proteolytic, changes proteids into peptones in an alkaline medium.	(Pancreatine.
	b. Curdling ferment.	Curdles the casein of milk.	Glycerine ex-
	c. Diastase.	{ Amylolytic, changes } starch into sugar.	pancreas. Liquor pan- creaticus.
	ing fer-	Emulsifies and sapo- nifies fats.	Pancreatic rennet.
Bile and intestinal juice.	?	7	o

An examination of the table shows that a complicated series of ferment-actions is required to complete the digestion of our food; and it is certain that our information is still imperfect on several points, especially in regard to the uses of the bile and the intestinal secretions. It is no part of my purpose to attempt a