

are prepared in crystalline and in powder form. The dose is one teaspoonful taken either in hot or cold water the first thing in the morning.—*Ingram and Royle, London England.*

#### RELATIVE VALUE OF MALT EXTRACTS.

CHEMICAL analysis has shown that wheat and oats contain much larger proportions of albuminoids and nitrogenous elements than barley. Gluten, which is found very abundantly in wheat, is the most nutritious element obtained from the cereals, and the only vegetable substance that will support life indefinitely. Wheat contains from 15 to 35 per cent of gluten. Its proportion in other grains is insignificant (see *Flints Physiology of Man*) The nitrigenised principles of wheat and oats *when malted* are more soluble than they are in barley, and therefore dairymen will pay for the refuse grains from malted barley whereas they will not accept the refuse grains from malted wheat and oats as a gift.

It is for these reasons that "Maltine" (malted wheat, oats and barley) contains so much larger proportions of constructive nutritive properties than the best extracts prepared from barley alone. The reason "Maltine" contains so much larger proportions of the digestive principle, diastase, than the ordinary extracts is because the gluten and cerealine in the malted and wheat have sufficient power to convert all the starch of the three cereals into sugar leaving the unemployed diastase of the wheat oats and barley in the Maltine. Gluten and cerealine act as powerful ferments, transforming starch first into dextrine, and then into sugar (see *Flints Physiology of Man and Watts' Dictionary of Chemistry*)

Baron Von Liebig said: "wheat and oats stand first among our list of cereals in combining all the elements in proportions necessary to support animal life. They are especially rich in muscular and fat producing elements."

Prof. Austin Flint, Jun., held that "wheat must be considered as by far the most nutritious of all grains."

Prof. Thos. King Chambers, F.R.C.P. Lond., stated that "barley and rye are inferior in nutritive power to any of the other cereals."

John Attfield, F.C.S., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain, remarks that "maltine contains unimpaired, and in a highly concentrated form, the whole of the valuable soluble materials which it is possible to extract from either malted wheat, malted oats, or malted barley."

"It is unrivalled as a natural solvent of bread, pastry, and all other farinaceous food, and is, therefore, an invaluable aid to sound and healthy digestion. No better preparation of malt has ever yet been manufactured,"