

the process. Snyder* has shown that when a definite amount of two lots of oatmeal were cooked for periods of thirty minutes and four hours, respectively, and treated with an equal quantity of malt, 6.1 per cent. of the starch of the oatmeal cooked for the shorter period, and 20.3 per cent. of that cooked for the longer period, was found to be digested at the end of ten minutes. Gudeman,† working along the same lines as Snyder, excepting that he used saliva and pancreatin instead of diastase of malt as the digestion agents, "found that the raw cereals, if sufficiently cooked, were as quickly digested as the best malted cereals, more quickly than prepared (cooked) cereals and a large majority of the so-called malted cereals."

Ease and rapidity of digestion are probably closely associated; for it is natural to assume that if a food is rapidly digested it will be done with the expenditure of less energy than if it required a long time. This is a point of considerable importance, especially to those who are inclined to be dyspeptic. From the data presented, it is evident that the ready-to-serve foods are no more completely digested than the raw foods when properly cooked; and, if we may judge from the percentage amount of soluble matter in the different foods when ready to serve, they are no more easily or rapidly digested.

DIGESTIBILITY OF FOODS, AS INFLUENCED BY SHORT AND LONG PERIODS OF COOKING.

It is quite generally stated that when oat meals, farinas, etc., are cooked for a long time they are made "more digestible." Data has been presented in Table No. 5 which show that the solubility of these foods is increased by the longer periods of cooking. Consequently, as argued above, they would be, as commonly expressed, "more digestible" in the sense of *ease* and *rapidity* of digestion. To ascertain whether this would be accompanied by a greater absorption of the several nutrients, we cooked two samples of rolled oats and two samples of farinas for twenty minutes and for eight hours and carried through digestion experiments in the same manner as previously described. To overcome the influence of individuality in digestion, the same men were used as subjects of the experiments with both methods of cooking, and all the conditions were kept as uniform as possible. The only exception to this was in the case of Sample No. 45, where two men were unable to go on with the second part of the experiment. The results obtained in this work, calculated to percentage, are given in the following table:

*Minnesota Experiment Station Bulletin No. 74, p. 153.

†Journal American Chemical Society, Vol. 26, p. 321.