

further digestion represents action on amylocellulose and amylopectin and their products of hydrolysis.

6. By slow digestion almost the entire amount of amylose present was obtained in solution as erythro-dextrin at the end of 15 minutes. Hence under ordinary conditions the digestion of amylose must be almost instantaneous.

7. Rose-amylose, derived from amylopectin, digests completely in four hours. This has usually been regarded as the end of starch digestion, the rose-amylose being confused with erythro-dextrin.

8. The amylocellulose (cell walls) digests only after more than 24 hours.

9. The only differences observable in the rate of digestion of bread made from hard or soft wheat, and fermented more or less than usual, were due to the relative amounts of gluten present. When the gluten was broken down the rate of digestion was sensibly the same.

10. The cause of the greater palatability of home-baked bread was not discovered.

11. Various pronounced effects due to fermentation by spoiled yeast were noted.

12. The activity of amylases is not sensitive to small changes of temperature or of acidity produced by the organic acids found in bread; nor does their activity seem to be proportional to their concentrations.

13. It would seem that under physiological conditions most of the amylose must be changed to dextrins in the mouth, and that these dextrins as well as most of the amylopectin and its products of hydrolysis must be digested in the stomach; whereas the digestion of the amylocellulose must take place for the most part in the intestine.

14. Stale (air-dried) bread digests very slowly unless its gluten be completely broken down.

HAHNEMANN MEDICAL COLLEGE
AND HOSPITAL OF CHICAGO.

NEW BOOK.

Annuaire pour l'An 1916. Public par le Bureau des Longitudes. Price: 1.50 francs (30 cents). Paris: Gauthier-Villars & Cie.

For the even years this annual contains, besides astronomical information, physical and chemical tables. There are 212 pages of such tables. They are fairly satisfactory where concerned with ordinary tabulations, such as the specific gravity of sulfuric acid solutions, but both fragmentary and unreliable when concerned with the tabulation of the properties of various elements and compounds, such as boiling point, or latent heat of fusion. The book is possibly worth thirty cents; certainly not more.

J. W. RICHARDS.