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Rotation of Lactic Acid Produced by L. acidophilus.

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L. acidophilus has been found to produce dextro-rotary lactic acid from lactose when grown in pure culture in casein-digest broth. After an acidity equivalent to 0.6 cc. of tenth normal sodium hydroxide per cc. had developed, it was neutralized by calcium oxide, evaporated under reduced pressure (not heating over 60° C.) to a syrupy consistency, strongly acidulated with concentrated sulfuric acid, filtered and extracted with ether in a continuous extractor. The ether was evaporated under reduced pressure and the syrup neutralized with zinc carbonate to form zinc lactate. This was precipitated with alcohol, filtered, dissolved in water and subjected to fractional crystallization.

Using a 5 per cent solution, a polariscope examination of three different fermentations, independently determined by each of us, gave a specific rotation of —2.5° for the second crop of zinc lactate. Therefore the lactic acid, which bears the opposite sign from its zinc salt, is dextro-rotary.

The work is still in progress.

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Influence of Peptic Digestion on Protective Colloid Value of Gelatin.

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Occasional allusion is made to the rôle of "protective colloids" in physiological processes. Commonly these are evaluated according to their "gold number", on which basis gelatins are conceded to be particularly powerful protective colloids (gold number 0.005 to 0.01).[1]

In connection with a series of digestion experiments we have had an opportunity to observe the influence of peptic digestion on the protective power of gelatin, as measured by gold number. These included both *in vitro* peptic digestion experiments, and observations