A SUGGESTION AS TO THE CAUSE OF THE LESSENED PRODUCTION OF INDOL IN MEDIA CONTAINING GLUCOSE.

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(F m the Laboratories of the University of Toronto.)

In the Bruish Medical Journal, Dec. 18, 1915, there is a letter by Mr Benians, in which he refers to the Toxic Bodies of the Bacillus of Malignant Oedema, and discusses the production of aromatic bodies by the action of bacteria on proteins. He also speculates as to the cause of the lessened production of indol in peptone culture media containing glucose, glycerine and other similar bodies. As the metabolic activities of some bacteria decompose these substances with the production of acid, Mr Benians wonders whether it is this acidity which so modifies the action of the proteolytic ferment that cultures, which, in the ordinary course of events are very foul remain sweet when glucose is present.

In this connection the following observations may be of interest even though, owing to unforeseen difficulties, the work as originally

planned is not yet completed.

The experimental work detailed in this communication was undertaken with the object of ascertaining to what extent tryptophane is decomposed by various organisms into indolpropionic and indolacetic acids and into indol and skatol. The organisms were grown on a synthetic medium containing tryptophane and the production of the decomposition products of tryptophane was detected colorimetrically by means of the nitrite and the p. dimethyl amidobenzaldehyde tests.

In a previous communication I have shown that, in order to apply these colorimetric tests for the presence of indol, skatol, indolacetic and indolpropionic acids, it is necessary to subject the liquids containing them to a preliminary process of separation. Extraction of the solutions