

On the bacterial production of skatol and its occurrence in the human intestinal tract.By **C. A. HERTER.***[From the Laboratory of Dr. C. A. Herter, New York City.]*

Observations upon skatol produced in the course of putrefactive decomposition are at present few and imperfect. This is due largely to the difficulties incidental to the certain recognition of this substance when present in small amounts. By means of a method described by Herter and Foster it is possible to detect the presence of very small quantities of skatol in a putrefactive mixture, to separate skatol from indol and to estimate the quantity of skatol present. This method is based on the use of β -naphthoquinone sodium monosulphonate and para-dimethyl-amidobenzaldehyde (Ehrlich's aldehyde). By means of this method, studies have been made with a view of discovering what organisms are chiefly concerned with the production of skatol, and many observations have been made upon the presence of skatol in the human intestinal tract. A large number of facultative and strict anaerobic organisms have been studied with respect to their ability to form skatol. The anaerobes *B. putrificus* (strain isolated by Bienstock) and one strain of the bacillus of malignant edema (obtained from Prof. Theobald Smith) were found to produce skatol in peptone bouillon, although it was not possible to determine the conditions under which skatol could be regularly obtained through the action of these bacteria. It was found that skatol is rarely present in the intestinal tract except in conditions of disease associated with intestinal putrefaction. Usually skatol is associated with indol in such conditions, although there are instances in which the intestinal contents contain little or no indol, but, relatively speaking, considerable skatol. This has been observed heretofore only in putrefactive processes associated with pronounced clinical manifestations.