

Food Poisoning Probably Caused by Orange Colored *Staphylococcus* from Udders of Apparently Healthy Cows.

R. J. RAMSEY AND P. H. TRACY. (Introduced by F. W. Tanner.)

From the Dairy Department, University of Illinois, Urbana, Ill.

While studying the cause of a malt flavor in raw milk, one of the authors, (R. J. R.) became ill with a severe gastroenteritis. He was prostrate for 2 days with severe symptoms of food poisoning, which included cramping in abdominal regions, weakness of legs, violent diarrhoea, and absolute loss of appetite.

The suspected food was raw milk which had been inoculated with a pure culture of an orange colored staphylococcus, isolated from a sample of raw milk delivered to a commercial milk plant. The authors did not suspect that this organism might be harmful, because of its common occurrence in raw milk delivered to the milk plant.¹ Small portions of the inoculated milk were consumed each day for 5 days by (R. J. R.) before his illness. This orange colored staphylococcus has been found to attack the casein of milk with the formation of a malt-like flavor and odor. In order to check the symptoms reported above, 4 kittens were fed milk cultures of this organism. In less than one week, 2 of the kittens had bloody stools, one having diarrhoea and the other having considerable mucous in the stool. The 2 remaining kittens had constant diarrhoeal stools until the cultured milk was omitted from the diet.

Our data seem to be in accord with many which have been recently reported. Barber² found a toxin-producing staphylococcus to be responsible for many attacks of gastroenteritis. This organism occurred in the udder of an apparently normal cow. Dack³ traced an epidemic of food poisoning to a similar organism. The incriminated food was a Christmas cake in this case. Jordon⁴ has recently published data showing intestinal disturbances to be due to a yellow, toxin-producing staphylococcus.

In order to establish the identity of the orange colored staphylococcus in question, it was compared with pure cultures of *Staphylococcus aureus*. Since the pure cultures of *Staphylococcus aureus* were found to produce a malt flavor in milk, and since they were

¹ Unpublished data, University of Illinois Dairy Department.

² Barber, *Phil. J. Science*, **9**, 515.

³ Dack, Cary, Woolpert, and Wiggers, *J. Prev. Med.*, 1930, **4**, 167.

⁴ Jordon, E. O., *J. Am. Med. Assn.*, 1930, **94**, 1648.

very similar in physiological characteristics to the incriminated organism, it is believed that the organism in question is also *Staphylococcus aureus*. Further work is in progress on the heat resistance of the toxic agent.