A NEW SALMONELLA SEROTYPE
(SALMONELLA DEVERSOIR)
ISOLATED FROM HUMAN FAECES

J.F. Watkins, M.B., B.Ch.,
War Office Enteric Investigation Team,
Fayid, Egypt
and
S. Hilda Douglas, M.Sc., and Joan Taylor, M.B., D.P.H.
Salmonella Reference Laboratory,
Colindale, London, England

During the examination of Egyptian food-handlers, an organism which had the colonial appearance of a Salmonella was isolated from the faeces of a healthy adult. This organism produced acid and gas in glucose, maltose, mannitol, dulcitol, sorbitol, arabinose, rhamnose, xylose, trehalose, but failed to ferment lactose, sucrose, salicin, adonitol, inulin, raffinose, and inositol. Indole and urease were not formed nor was gelatin liquefied. It was VP-negative, MR-positive, utilized citrate, and produced H₂S. Mucate was utilized promptly and d-tartrate was fermented.

Investigation of the antigenic structure showed that the organism was not agglutinated by any of the 'O' sera against antigens 1 to 44. A serum made with the new strain, which had a homologous titre of 1:3200, failed to agglutinate any Salmonella 'O' suspensions. After consultation with Dr. Kauffmann, this organism was given a new 'O' symbol - 45.

The organism was diphasic, flagellar phase 1 being c, and flagellar phase 2 being e, n, x. Reciprocal absorption tests using S. paratyphi C and S. abortus-equii gave practically complete absorption, only 1 per cent of the homologous titre remaining in any absorption.

A second strain, with identical biochemical reactions and similar antigenic structure, was received from Dr. J. Boycott. This organism had been isolated from the faeces of a healthy tortoise, Testudo graeca, which has been imported from North Africa.
SUMMARY

A new *Salmonella* serotype (45 : c : e, n, x) is described, having a somatic structure not previously reported in the genus *Salmonella*. Two strains have been encountered, the first in a healthy Egyptian, the second in tortoise faeces. The name is *Salmonella deversion*. 