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A New *Salmonella* Type with Hitherto Undescribed Somatic Antigens.*

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Salmonella invernness, the type to be described, was isolated from the stool of a normal food handler by Mrs. Mildred Galton and Mr. M. S. Quan of the Florida State Department of Health. After classification as a member of the *Salmonella* group it was forwarded to the writers for identification.

The organism exhibited the usual morphological and cultural characteristics of the *Salmonella* group. It produced hydrogen sulfide but failed to liquefy gelatin or produce indol. Glucose, rhamnose, arabinose, xylose, maltose, trehalose, dulcitol, sorbitol, and inositol were fermented with the production of acid and gas. Lactose, sucrose, and salicin were not attacked. Dextro-tartrate, levo-tartrate, mucate, and citrate were decomposed but meso-tartrate was not utilized.

On serological examination it was found that *S. invernness* was not agglutinated by serums representative of the various somatic antigens of the Kauffmann-White classification. Likewise, a serum derived from a heated culture of *S. invernness* failed to react in significant degree with any of the known somatic

antigens. It was obvious that *S. invernness* had a distinct somatic complex and to it the symbol XXXVIII was assigned.

Examination of the flagellar antigens of the new type revealed that it was diphasic. Phase 1 was flocculated to the titer of serum derived from phase 1 of *S. thompson* (k) and in absorption tests *S. invernness* removed all flagellar agglutinins from *S. thompson* serum. Phase 1 of *S. invernness* may be designated as k.

Phase 2 of *S. invernness* was agglutinated by serums for all the nonspecific phases of Kauffmann-White classification. When tested with single factor serums for antigens 2, 3, 5, 6, and 7, it was agglutinated only by 6 serum. In absorption tests phase 2 of *S. invernness* removed all agglutinins for phase 2 of *S. poona* (1,6...) and phase 2 of *S. amherstiana* (1,6...) from serum derived from phase 2 of *S. anatum* (1,6...). A slight residue of agglutinins amounting to less than 2% of the original titer was left for the homologous strain. Phase 2 of *S. invernness* may be designated as 1,6...

Summary. *S. invernness*, a new *Salmonella* type isolated from a normal food handler, was described. It possessed a hitherto undescribed somatic antigen and was assigned the antigenic formula XXXVIII:k-1,6...

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