

fibers pass close to the utero-vaginal junction and then dip more or less deeply into the parametrium as they pass toward the upper end of the uterus. Along their whole course they give off fibers to the uterus, innervating rather restricted regions, and do not contribute to a widespread, diffuse plexus within the uterine walls. This holds for the highly nervous utero-vaginal junction as well as for the uterus proper, which is virtually devoid of nerve cells.

8010 P

A Complex Polysaccharide Fraction from the Cells of the Human Type of Tubercle Bacillus, H 37.* †

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The recent work of Avery and Goebel¹ has shown the importance of omitting the use of alkali in the purification of the specific polysaccharide of Type I pneumococcus. It was accordingly deemed advisable to repeat the isolation of the tubercle bacillus fractions described in a recent note,² omitting the steps involving precipitation from alkaline solution, and keeping all solutions at least at a slight acidity. While the difficulties of the fractionation were increased, the B₁ and B₂ (low rotating) fractions were ultimately isolated in the same form as before. However, the C fraction (high rotating, insoluble in 75% methyl alcohol) differed markedly in its chemical properties. Aqueous solutions of the substance were opalescent, even after passage through a Berkefeld filter, and, on treatment with alkali, slowly deposited a bulky precipitate consisting mainly of magnesium palmitate. Magnesium was identified as the double ammonium phosphate, while the palmitic acid, crystallized from 60% methyl alcohol, melted at 53-57° and gave C = 75.18%, H = 12.73% (calculated, C = 74.92%, H = 12.59%), neutral

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† Supplied through the courtesy of the H. K. Mulford Biological Laboratories of Sharpe & Dohme, Glenolden, Pa.

¹ Avery, O. T., and Goebel, W. F., *J. Exp. Med.*, 1933, **58**, 731.

² Heidelberg, M., and Menzel, A. E. O., *PROC. SOC. EXP. BIOL. AND MED.*, 1932, **29**, 631.

equivalent = 257, calculated 256. A portion of the acid was recrystallized, after which it melted at 56-59°. A mixture with highly purified palmitic acid melting at 60.5-61.5° fused at 57-59°. The polysaccharide recovered from the alkaline solution (CI) resembled the C fraction isolated by the usual process. The properties of the C and CI fractions are summarized in Table I, the data being calculated to the ash-free basis.

TABLE I.

Preparation No.	$[\alpha_D]$	Neutral equivalent	N %	P %	Acetyl %	Basic ash† %	Reducing sugars on hydrolysis‡ %
520 C	+85°		0.15	0.39	2.7	1.0	93.3
520 CI	+84°	10000	0.05	0.10	1.7	0.0	

† As magnesium.

‡ Hagedorn-Jensen method, giving 98.3%, calculated as glucose, with an earlier preparation corresponding to CI.

Both fractions reacted at a dilution of 1:2,000,000 with anti-H37 horse serum.²

While it is of course possible that the magnesium palmitate originates in substances accompanying the original polysaccharide, rather than as an integral portion of the polysaccharide complex, it is interesting to note that Boivin and his collaborators³ have reported the isolation of a complex polysaccharide from *B. aertrycke* yielding an unidentified crystalline fatty acid on degradation. Landsteiner and Levene⁴ also noted the occurrence of water-insoluble acids in the lipo-polysaccharide Forssman hapten.

8011 C

Bacteriological and Immunological Studies of Acute Glomerulonephritis in New Orleans.

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Previous work¹ has shown that the reported hospital medical admission rate for acute glomerulonephritis is similar in 4 latitude regions of the United States and southern Canada. In contrast,

³ Boivin *et al.*, *Compt. rend. acad. sci.*, 1934, **198**, 2124.

⁴ Landsteiner, K., and Levene, P. A., *J. Immunol.*, 1925, **10**, 731.

¹ Seegal, D., Seegal, B. C., and Jost, E. L., in press, *Am. J. Med. Sc.*