This paper reviews data related to the role of complement in endotoxin action. Newer information on the interaction of antigen and antibody complexes, and their relationship to the pathophysiology of endotoxin-induced inflammatory reactions. [The SFC indicates that this paper has been cited in over 120 publications since 1969].

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"In the late 1960s, two young physicians, Henry Gewurz and Ralph Snyderman, joined my laboratory at the National Institute of Dental Research as research associates in the US Public Health Service. Gewurz had significant training in immunology and considerable expertise in complement research because of his prior associations with Robert A. Good and Manfred Mayer. Snyderman, fresh out of an internship and residency program at Duke University, expressed an interest in investigating fundamental aspects of the inflammatory response and, more specifically, in studying the role of complement in leucocyte locomotion (chemotaxis). Because of a long-standing involvement in research on bacterial endotoxin, I was particularly interested in learning how inflammatory cells migrate into and become activated in inflammatory foci induced with gram-negative bacteria or their endotoxic lipopolysaccharide. In one of his first experiments, Snyderman showed that lipopolysaccharide, unlike other bacterial products, was not directly chemotactic for polymorphonuclear leucocytes when evaluated in vitro in a modified Boyden chamber. However, he found that a low molecular weight (15,000) chemotactic factor could be generated in serum by lipopolysaccharide. This factor could not be produced in heated (56°C for 30') serum or in serum deficient in the fifth component of complement. Earlier work by Peter Ward suggested that complement in endotoxin action. Newer information on the interaction of antigen and antibody complexes, and their relationship to the pathophysiology of endotoxin-induced inflammatory reactions. [The SFC indicates that this paper has been cited in over 120 publications since 1969].