SYMPOSIUM: BEHAVIOR OF LIPIDS AT INTERFACES AND IN BIOLOGICAL MEMBRANES

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F. A. KUMMEROW, Program Chairman

CHAIRMAN'S INTRODUCTION

The orientation of lipids in biological membranes represents a frontier in lipid chemistry that must be explored in order to gain a more complete understanding of life as well as of technological processes. Much of the biochemical research today is carried out in simple in vitro system. To understand the complex biochemistry that is going on in living cells, the biochemist works with isolated cell components and purified enzyme systems.

It is possible that one may also gain some insight into biological systems through a study of such simple technological processes as baking bread. The subtle changes that are produced by shortenings at the protein lipid interface in a baked loaf of bread or at silica gel interfaces may seem to represent a crude system. However, such systems may possibly serve as a means of gaining a little knowledge on the complicated problem of the metabolic role of lipids in living cells.

Symposiums on membranes have become popular. In one symposium (Circulation 26, 985, 1962) that was sponsored by the New York Heart Association in 1961, Dr. Fishman quoted Darwin from an essay on the Descent of Man. "Many of the views which have been advanced are highly speculative, and some no doubt will prove erroneous; but I have in every case given the reasons which have led me to one view rather than to another . . . False facts are highly injurious to the progress of science, for they often endure long, but false views, if supported by some evidence, do little harm, for everyone takes a salutory pleasure in proving their falseness; and when this is done, one path toward error is closed and the road to truth is often at the same time opened." The symposium on "The Behavior of Lipids at Interfaces and in Biological Membranes" may help to open the road to truth.

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