

**THE EFFECTS OF LIPOSOME COMPOSITION AND TEMPERATURE
ON THE STABILITY OF LIPOSOMES AND THE INTERACTION OF
THESE LIPOSOMES WITH HUMAN NEUTROPHILS**

OMAR MOH'D ATROUSE*

Mu'tah University, Department of Biological Sciences, Faculty of Science,
P.O.Box (7), Karak, Jordan

The effects of temperature and lipid composition on the liposome stability (fusion) in vitro were studied. It has been obscure that temperature affects phosphatidylcholine (PC) liposomes stability and the optical densities of these liposome were increased with time (days), while incorporation of cholesterol 25 mol % to the liposomes (PC: cholesterol) reduce the temperature's effects, and the optical densities show a very slight change with time (days) because cholesterol in high concentrations prevent the phospholipids packing and induce orientation and more rigidity to those phospholipids and therefore prevent liposome aggregation, even if the oxidation of these lipids takes place (diene production and formation of lyso compounds).

Interaction of these liposomes with human neutrophils was also studied. The liposomes containing cholesterol is more efficient in enhancing the activity of these cells than PC liposomes.

* E-mail: omihandd@yahoo.com