

CHAPTER IV

CONCLUSIONS

The study of effect of various enhancers on diclofenac sodium flux through human amnion, human placental membrane and newborn pig skin were determined.

The conclusion of this study can be summarized as follows:

1. The major enhancing effect of steady state flux across pig skin and human placental membrane is by the increment of partition coefficient.
2. The major enhancement of steady state flux across human amnion is by the increment of the diffusion coefficient.
3. Except from the effect by 1 % brij 35 in water, isopropanol and 1 % orange oil in ethanol, other enhancement or retardation effect on the three membranes are similar.
4. The enhancing effect of the enhancers studied on human amnion and human placental membrane is less than that on newborn pig skin.
5. The enhancing effect of the enhancers studied on human placental membrane is the least among the three membranes studied.

Significance of this study.

1. This research can be applied for studying and developing a formulation to increase permeation rate by using an appropriate enhancers.
2. The *in vitro* diffusion experiments can be used for investigating the percutaneous absorption of drug from pharmaceutical dosage forms and transdermal products.