

بسم الله الرحمن الرحيم









شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم قسم

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A BIOPHARMACEUTICAL STUDY OF THE TRANSPORT OF CERTAIN DRUGS THROUGH SYNTHETIC AND BIOLOGICAL MEMBRANES

THESIS PRESENTED BY

ABEER AHMED MOHAMED KASSEM

{B. Pharm. Sci.1990}

University of Alexandria

In Partial Fulfilment for the Degree of

Master of Pharmaceutical Sciences

{Pharmaceutics}

Department of Pharmaceutics

Faculty of Pharmacy

University of Alexandria

Egypt

1998



Under the supervision of

Prof. Dr. Youssef E. Hammouda

Professor of Pharmaceutics

Faculty of Pharmacy

University of Alexandria

Prof. Dr. Hosney F. Mohamed

Professor of Biochemistry

Faculty of Pharmacy

University of Alexandria

DEDICATION

To Allah, the creator, for granting me life, health and ability to learn.

To my parents, my first two teachers, and to my sister and brother, my special friends, for their kindness, sacrifice and unlimited supply of love and bounty.

To my dear husband, for his kind help, continuous encouragement, sacrifice and patience.

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rrejace

The logistic way of creation of every thing and specially human beings presents to us an existing outstanding model of how to think and how to plan in an objective manner before getting into execution of any work.

Every infinite detail in the creation of human beings is in it self a miracle. I believe that God has created mankind in such a way to defend himself against any endogenous or exogenous invasive factors i.e. God has provided the human being with all the means to overcome any organic disorder or disease in the form of proteins and peptides genetically produced in the body. On the other hand, immunoglobulins or antibodies are produced, when necessary, on invasion of the human body by any pathogenic microorganism and its toxins.

Moreover, of these mirculous deeds of mighty God in creating mankind is that tight and highly selective system of protective barriers defending the human body. The skin, for example, covering the whole body, its structure and functions, among which protection and thermoregulation, is really fabulous.

Inside the body and specially around and through the natural orifices of the human body e.g. mouth, nose, ear, rectumetc., one can trace a series of barriers ascending in selectivity, not only membranes, but other protective factors including cilia, mucus, enzymes, pH hindered pathways and many others; all this to ensure safety of the core of the body with its vital organs.

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