

Chapter One

1. Introduction

1.1 Pharmacokinetics

Pharmacokinetics (PK) provides a mathematical basis to study the rate of a drug or a dosage form and its concentration-time course within the body along with drug disposition to quantify the processes of absorption, distribution, metabolism and excretion. These pharmacokinetic processes, that are often referred to as ADME; determine drug concentration in the body when drugs are prescribed (Caldwell *et al.* 1995; Hedaya 2012; Kubinyi *et al.* 1993) (**Figure 1.1**).

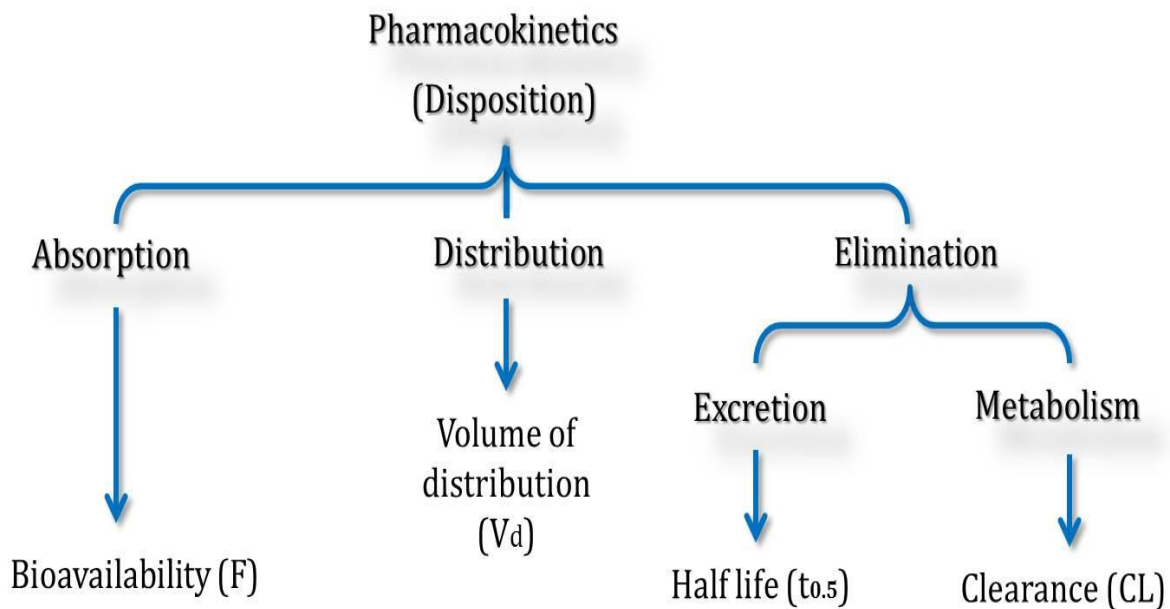


Figure 1.1 Illustration of the pharmacokinetic processes (ADME).