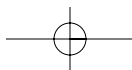
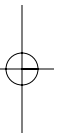
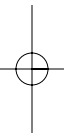
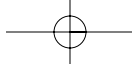
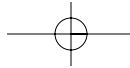


Part One



Before any great movie goes to production, we first must write the script. In this section, we'll focus on the basics—from pharmacokinetics and pharmacodynamics to some essential drug calculations. Once we've introduced the main characters of our plot, drug interactions will take center stage.





Chapter 1

Lights, camera, drug interaction

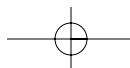
When the director yells “lights, camera, action,” all the key people involved—producers, directors, actors, and crew members—begin shooting the movie. Setting the story into motion starts the film.

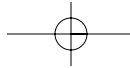
When a drug enters the body, a similar call to action occurs. Drugs and other chemicals such as hormones, enzymes, proteins, and ions are called to action to interact with cell membranes that switch cellular functions on or off, causing an effect within the body. This effect may or may not be beneficial. A therapeutic effect causes a beneficial response, whereas an adverse effect causes a response that may be more serious and even detrimental to the body. Once a drug enters the body, many key processes are set into motion.

Pharmacokinetics and pharmacodynamics: Let the action begin

Looking through the lens of the camera, the cameraman views the action of the movie. Similarly, studying pharmacokinetic and pharmacodynamic action of drugs facilitates your view of how the body responds to drugs and how drugs affect the body. Pharmacokinetics refers to the processes by which drugs are absorbed, distributed, metabolized, and eliminated by the body. The activity is dynamic and for this reason pharmacodynamics must be considered in exploring the effects drugs have on the body.

The actor masters the craft of acting and becomes a professional performer with accolades and promise for future artistic endeavors. Mastering these





pharmacological concepts will afford you, the nurse, accolades in your performance of client care related to drug administration. Let your future endeavors, and your award-winning performance, begin.

The study of drug interactions requires critical thought. Elements of critical thinking include

- problem recognition
- analyzing
- synthesizing
- evidence
- problem solving
- evaluation



Ask: How do you think your point of view will change as you grow in your understanding and knowledge of drug actions? As you read this book, observe how your point of view about drug interactions changes concerning the care of your clients.

"To learn, and from time to time to apply what one has learned, isn't that a pleasure?"

—Confucius

