CHAPTER OVERVIEW

Section 9: Introduction to Toxicokinetics

Learning Objectives

After completing this lesson, you will be able to:

- Define toxicokinetics.
- Summarize the four inter-related processes of toxicokinetics.
- Identify examples of transporter proteins and their role in toxicokinetics.

In this section...

Topics include:

What We've Covered

This section made the following main points:

- Toxicokinetics is essentially the study of how a substance enters the body and what happens to it inside the body.
  - The term "disposition" is often used in place of toxicokinetics to describe how the body disposes of a xenobiotic over time.
- The four inter-related processes of toxicokinetics are:
  1. Absorption — the substance enters the body.
  2. Distribution — the substance moves from the site of entry to other areas of the body.
  3. Biotransformation — the substance is transformed into new chemicals (metabolites).
  4. Excretion — the substance or its metabolites leave the body.
- The disposition of a toxicant and its biological reactivity are the factors that determine the severity of toxicity when a xenobiotic enters the body.
