Preface

Preparing dietetic students for practice demands that academic and practice-based educators use transformative strategies to develop clinical reasoning skills. Simulation has been increasingly adopted as a teaching methodology in healthcare professions. Dietetic simulation is valued for its ability to provide realistic, context-rich experiential learning in a safe environment. From standardized patients, to low- and high-fidelity mannequins, or virtual patients using decision trees, each context provides a unique perspective and can facilitate the learning and evaluation of patient care situations along the continuum of care.

Medical Nutrition Therapy Simulations guides students through clinical experiences where they practice critical thinking skills. This toolkit is designed to enhance learning content delivered in classroom lectures with activities based on "visiting" the patients in the hospital, providing a perfect environment for students to practice what they learn. By immersing students in a realistic yet safe, clinical environment, students get acclimated to the routine and rigors of the average clinical rotation where they can:

- Conduct a complete nutrition assessment of a patient
- Collect, analyze, and interpret data
- Set priorities for nutrition care plans
- Document conclusions about complex problems

Each lesson should be accompanied by a reading assignment, completion of the decision-tree module available online, and then simulation activities based on "visiting" the patients in the hospital. The toolkit provides a perfect environment to practice and prepare for clinical rotations.

The Contents

The toolkit includes the following components:

Chapter 1: Introduction to Dietetic Simulation

This chapter introduces the teaching method of clinical simulations. Simulation is defined and explained through theory and pedagogy. The debriefing and evaluation process is thoroughly explained so that students understand the expectations of the methodology.

Chapter 2: Nutrition Assessment

This chapter introduces the process of nutrition screening and assessment, and the dietitian's role in preventing malnutrition and improving patient outcomes. Components of each are outlined to prepare students for their decision tree exercises and simulation scenarios.

Simulation Scenarios

The simulation scenarios included in this text are documents outlining the various details of a simulation. Each simulation includes the following sections:

- *Learning Objectives* establishing the measurable outcomes

- *Student and Instructor Preparation* outlining what students and instructors should do prior to initiating the simulation
- *Lab Set Up* describing the patient's characteristics, environment, needed lab staff, and equipment
- *Clinical Case Information* presenting the results of the objective and subjective evaluation, medication orders, progress notes, and lab results
- *Resources* indicating where students and instructors can find additional information
- *Key Words* highlighting terminology with which the student should be familiar

This text includes 10 simulations in total, covering the following topics:

- Celiac disease
- Congestive heart failure
- Chronic obstructive pulmonary disease
- Type 1 diabetes mellitus
- Type 2 diabetes mellitus
- Liver disease
- Lung cancer
- Pancreatitis
- Renal failure
- Wound care

The simulation scenarios are nonsequential and can be taught in any order.

Online Decision-tree Modules

Each new copy of this text includes access to 10 decision-tree modules focused on the same topics as the in-text simulation scenarios. Decision trees are a teaching method in which choices or outcomes of treatment are uncertain and are determined by choices that the student makes. In medical nutrition therapy decision making, there are many situations in which decisions must be made effectively and reliably. The 10 decision trees in this resource are designed as conceptual, simple, decision-making models with the possibility of automatic learning. Like the in-text simulation scenarios, the decision-tree modules are nonsequential and can be used in any order.

How to Use This Product

Ideally, students will complete the decision-tree module for each topic prior to their clinical simulation experience for that condition. This will help them prepare for the simulation scenarios. The decision trees help students collect information, make decisions, and set priorities in a digital manner without direct interaction with their patient. They are given immediate and direct feedback upon completion. The decision trees may be used for practice, or the instructor may incorporate them into the student performance evaluation. Each decision tree has the functionality of automatic grading as pass or fail.

The ten simulation scenarios found in this text have been designed for use in a number of settings, including hospitals, clinics, classrooms, and simulation labs. The simulations can be used with high- or low-fidelity simulation robots or in role-play activities with preceptors or with actors.

Instructor Resources

In order to assist instructors with the 10 simulation scenarios found in this text, an Instructor Manual is available with the following components for each scenario:

- Actor roles and behavior overview
- Scenario events and expected actions
- Debriefing points
- ACEND Competencies
- ADIME note example
- Simulation evaluation instrument