

Nick Thompson: Hypoglycemia in Type 1 Diabetes: 17yo Male - Hypoglycemic Episode

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ABSTRACT

The case of Nick Thompson, a 17-year-old male with Type 1 diabetes, is designed for health professions learners to explore the management of acute hypoglycemia and the role of patient education. The learning objectives focus on enabling students to recognize and manage acute hypoglycemia, understand the importance of patient education in diabetes management, identify social determinants of health affecting diabetes care, and describe the relationship between insulin administration and hypoglycemia. The clinical scenario presents Nick, who experiences a hypoglycemic episode during band practice, characterized by light-headedness, diaphoresis, and slurred speech, after not eating all day. Learners are tasked with assessing and managing his condition, including measuring blood glucose levels and administering rapid-acting carbohydrates. The simulation also involves addressing Nick's concerns about missing band practice and his apprehension about medical procedures. This case is useful for integrating into a curriculum focused on endocrinology, patient communication, and the impact of social factors on health outcomes.

Keywords endocrinology; hypoglycemia; type 1 diabetes; patient education

CASE OVERVIEW

Nick, a recently diagnosed Type 1 diabetic, experienced a hypoglycemic episode during band practice. This case examines the management of acute hypoglycemia and patient education.

LEARNING OBJECTIVES

1. Recognize and manage acute hypoglycemia in patients with Type 1 diabetes.
2. Understand the importance of patient education in diabetes management.
3. Identify social determinants of health that affect diabetes care.
4. Describe the relationship between insulin administration and hypoglycemia.

CLINICAL PRESENTATION

Name	Nick Thompson
Age	17
Sex	Male
Race / ethnicity	White Non-Hispanic
Height	5ft 11in
Weight	150 lbs

Chief complaint. I feel light-headed and need to lie down.

History of present illness. Nick is a 17-year-old male who was diagnosed with Type 1 diabetes 3 weeks ago. Today, while playing in the marching band, he felt light-headed and needed to lie down. He hasn't eaten all day. He appeared diaphoretic and drowsy with slurred speech. His friend called 911.

Past medical history. Type 1 Diabetes Mellitus, diagnosed 3 weeks ago

Past surgical history. None

Past psychiatric history. None reported

Social history. Nick is a high school student who plays in the school marching band. Lives with parents and 2 younger siblings. The family is unfamiliar with diabetes management.

Family history. Great-grandfather has Type 1 diabetes.

Medications. - Insulin glargine 20 units subcutaneously at bedtime
- Insulin lispro 5 units with meals

Allergies. NKDA

SIMULATED CHARACTER

Name. Nick Thompson

Demographics. 17-year-old White male student

Personality and mood. Curious, slightly anxious, cooperative but somewhat apprehensive about medical procedures.

Identity, purpose and background. Nick is a high school student still adjusting to his recent diabetes diagnosis. He is unsure about managing his condition and is concerned about how it affects his daily activities.

Simulation behaviour. Only discuss diabetes management if asked directly. Express concern about not wanting to miss band practice.

Opening line

Hi, I'm feeling kinda weird and light-headed.

Procedures and actions available to the learner

Action	Result added to the chart	How the character responds
Blood Glucose Meter	Blood glucose: 42 mg/dL (hypoglycemic -- normal fasting level is 70-100 mg/dL)	Is that number bad? My mom said it shouldn't be low.
Stethoscope	Heart rate: 110 bpm (tachycardia - expected during hypoglycemia)	Does my heart sound okay?
Oxygen Saturation Monitor	Oxygen saturation: 98% on room air (normal)	Is the oxygen level normal?
Intravenous Access	IV access established for potential dextrose administration	Why do I need an IV? Is this serious?

ASSESSMENT ITEMS

Item 1. What is the immediate treatment for hypoglycemia in a conscious patient? *(multiple choice, 1 point)*

- A. Administer glucagon intramuscularly
- B. Consume 15g of rapid-acting carbohydrates
- C. Administer insulin
- D. Encourage the patient to rest

Answer and rubric. Consume 15g of rapid-acting carbohydrates

Item 2. True or False: Missing meals can lead to hypoglycemia in individuals taking insulin. *(true false, 1 point)*

Answer and rubric. True

Item 3. How can social determinants of health impact diabetes management? *(free text, 1 point)*

Answer and rubric. Social determinants such as socioeconomic status and education can affect access to healthcare resources, understanding of the disease, and adherence to treatment.

Item 4. What are common symptoms of hypoglycemia? *(multiple choice, 1 point)*

- A. Tachycardia, sweating, confusion
- B. Bradycardia, dry skin, hunger
- C. Fever, headache, rash
- D. Hypertension, insomnia, nausea

Answer and rubric. Tachycardia, sweating, confusion

DEBRIEFING DIMENSIONS

Clinical Knowledge (narrative)	Understanding of hypoglycemia and diabetes management.
Patient Interaction (narrative)	Ability to communicate effectively and empathetically with the patient.
Problem Solving (narrative)	Demonstration of critical thinking in acute management scenarios.
Application of Social Context (narrative)	Incorporating social determinants of health into patient care discussions.

SIMULATION FORMAT

Platform	Figment Clinic
Format	Clinical encounter simulation with a full patient record
Synthesised voice	echo
Case first authored	June 2026

The interactive version of this case runs on the Figment Clinic platform. This article is the archival record of its content at the time of publication.

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