

Week 3 Case Study: Metabolism and Nutrition

Required Resources

Read/review the following resources for this activity:

- 📖 Textbook
- 📖 Weekly Concepts
- 📖 Minimum of 1 scholarly source



Scenario/Summary

History:

BT is a 36-year-old female experiencing pain during urination over the course of two days and is urinating more frequently. She does not have a fever or any other symptoms. She states she has not been drinking as much water as usual.

Physical: abdomen is soft, with no signs of tenderness or masses

Labs: a urinalysis with a "dipstick" is performed and reveals leukocytes and nitrites which suggest infection. A surprising finding is that she also has ketones in her urine (ketonuria).

Assessment: Urinary tract infection and ketonuria

When the body produces excess ketones, they are eliminated by the lungs and kidney.

Further history will be needed to determine why she is producing excessive ketones!

Deliverables

Answer the following questions based on the scenario and article above and save your responses in a Microsoft Word document. Provide a scholarly resource in APA format to support your answers.

1. Identify 2 potential causes of ketonuria.

Two potential causes of ketonuria are as follows:

Glycogen storage disease is a condition in which the body stores excess glucose. As an energy source, your body stores glucose as glycogen. This metabolic disorder develops when glycogen cannot be stored adequately. It forces your liver to obtain energy from sources other than glycogen. Ketones are excreted through the urine as a result of this.

Glycuria in the kidneys. This is an uncommon medical disorder in which your body secretes glucose through your urine. It occurs when your kidney's tubules do not