A Milky Approach to Enzymes

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A hands-on wet-lab approach will be used in this mini workshop. The focus is on enzyme action which is an important topic in both the majors and non-majors biology courses. This particular lab has been piloted in the non-majors biology course. It uses common grocery store materials and focuses on the enzyme, Lactase. Enzyme labs can be difficult due to measurement challenges. The proposed workshop will demonstrate the use of urine test strips to address this. We have designed a simple procedure that uses different types of milk and soy products. A lactase solution will be added to the solutions. Using the urine test strips we will check for glucose levels. Proper reading of nutritional labels and graphing is also a focus for this lab. This lab also lays the foundation for a discussion of lactose intolerance and the impact of enzymatic controls in the body. A complete procedure along with discussion questions will be provided.

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1