

# Enzyme Lab KEY

## Lab Report: Enzyme lab

Scheduled for 2-23, due 3-1-23. May be done as groups. 13 pts

1. Write out the reaction we're using to study enzyme reactions as a chemical equation. (1)  
 $\text{pyrocatechol} + \text{oxygen} \rightarrow \text{hydroxyquinone}$

- a. Is tyrosinase a **reactant**, a **product**, or **neither** for this reaction? (½)

Neither (it's a catalyst, neither used up nor produced)

- b. How will we measure how much product of this reaction is made per unit time? (½)

Absorbance/ how much yellow-brown color is produced

- c. Why does this reaction make a cut apple turn brown? Your answer should include the source of the reactants in the apple scenario. (½)

The pyrocatechol in the apple reacts with the oxygen in the air (catalyzed by the tyrosinase also in the apple)

- d. If the reactants were all present but there was no enzyme present, would any product be formed? How do you know? (1)

Yes (½)

Enzymes don't make reactions happen that wouldn't otherwise/ enzymes only speed things up (½)

2. What is your experimental question? (½)

Must relate to how temp or pH affects the rate of the tyrosinase-catalyzed reaction.

3. What is your hypothesis? Tell what biological rationale supports your hypothesis. (1)

Hypothesis must directly answer question (such as, rate will be fastest at pH 7) (½)

Check for reasonableness (the most obvious rationales are about the environments potatoes normally experience being best for enzyme reactions) (½)

4. Describe your protocol, with as much brevity and clarity as possible. (2)

Should use about a dozen tubes.

All have 6 ml buffer

All have 10 drops pyrocatechol/substrate

All but control have 10 drops potato juice/enzyme/tyrosinase

Experimental tubes should be at different, recorded pH

Should describe mixing the solutions, waiting 6 min, reading the color with the spectrophotometer.

5. What is your prediction? Remember to state this in terms of the data from this particular experiment will be. (½)

Check reasonableness. Needs to be in terms of more color or higher absorbance in the tubes predicted to have the higher enzyme action. (Many groups will probably go with "warmer causes more reaction/has more color/higher absorbance" or "pH 7 will have more color/higher absorbance"; that's a good first estimation before one discovers that enzymes each have a favored temperature and pH optima.)

# Enzyme Activity Lab Report Results

**N Colangelo**



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**Writing Undergraduate Lab Reports** Christopher S. Lobban, María Schefter, 2017-07-27 A practical guide to writing impactful lab reports for science undergraduates through the use of model outlines and annotated publications [Web Writing](#)

Jack Dougherty, Tennyson O'Donnell, 2015-04-21 Teaching writing across the curriculum with online tools

[Anatomy and physiology laboratory manual](#) Gerard J. Tortora, Nicholas Peter Anagnostakos, 1990 [Biology](#) Warren D. Dolphin, 1991 *Annual Report of the Agricultural Experiment Station of the State Agricultural College of Michigan for the Year Ending June 30* State Agricultural College (Mich.). Agricultural Experiment Station, 1905 **Endocrine and**

**Metabolic Effects on Maternal-fetal and Neonatal Outcomes** Huixia Yang, Moshe Hod, Jie Yan, Cuilin Zhang, 2024-07-10 Pregnancy is a complex state with many endocrine and metabolic challenges to a woman's physiology. Inappropriate maternal endocrine and metabolic changes such as obesity, hyperglycemia, hyperlipidemia, and hypothyroidism may lead to short-term and long-term complications in the mother and offspring. This not only affects population health but also imposes a huge social and economic burden accompanied by significant direct and indirect public health costs. Therefore, the study of endocrine and metabolic effects on maternal, fetal, and neonatal outcomes is an especially important research field. These studies will lead to new approaches to predicting metabolic diseases in pregnancy and provide new solutions and effective interventions to prevent or delay those related diseases. Furthermore, they will reveal unknown pathophysiological mechanisms of inappropriate maternal endocrine and metabolic changes during pregnancy and their implications on short-term and long-term complications in the mother and offspring. This could lead to updated diagnosis and treatment strategies for women with endocrine and metabolic diseases during pregnancy. The proposed Research Topic intends to evaluate the pathophysiological mechanisms of inappropriate maternal endocrine and metabolic changes during pregnancy and their implications on short-term and long-term complications in the mother and offspring. The evolving trends in prediction, diagnosis, prevention, and treatment strategies of endocrine and metabolic diseases during pregnancy are also encouraged. In addition, the goal of this research topic is to uncover the characteristics of maternal endocrine and metabolic changes in special populations like twins, women with obesity, gestational diabetes mellitus, pregnancy hypothyroidism, etc. **Pest**

**Infestation Control Laboratory Report** Pest Infestation Control Laboratory, 1974 *Annual Report of the Agricultural Experiment Station, Michigan State University* Michigan State University. Agricultural Experiment Station, 1905 [Nelson](#)

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**MEDINFO 2015: eHealth-enabled Health** Andrew Georgiou, Paulo Mazzoncini de Azevedo Marques, 2015-09-15. Health and Biomedical Informatics is a rapidly evolving multidisciplinary field, one in which new developments may prove crucial in meeting the challenge of providing cost-effective, patient-centered healthcare worldwide. This book presents the proceedings of MEDINFO 2015 held in São Paulo, Brazil, in August 2015. The theme of this conference is eHealth-enabled Health, and the broad spectrum of topics covered ranges from emerging methodologies to successful implementations of innovative applications, integration and evaluation of eHealth systems and solutions. Included here are 178 full papers and 248 poster abstracts selected after a rigorous review process from nearly 800 submissions by 2,500 authors from 59 countries. The conference brings together researchers, clinicians, technologists, and managers from all over the world to share their experiences on the use of information methods, systems, and technologies to promote patient-centered care, improve patient safety, enhance care outcomes, facilitate translational research, and enable precision medicine, as well as advancing education and skills in Health and Biomedical Informatics. This comprehensive overview of Health and Biomedical Informatics will be of interest to all those involved in designing, commissioning, and providing healthcare wherever they may be.

*Hygienic Laboratory bulletin. no. 84, 1912, 1912*

**Government Reports, Announcements & Index**, 1988

**Anatomy and Physiology** Jay Marvin Templin, 1989-06. This manual is designed for the student to use in the laboratory portion of an anatomy and physiology course. It has a number of features that will help the student learn about the structure and function of the human body. Pref.

*Lab World*, 1979

**Annual Report of the Secretary of the State Board of Agriculture ... and ... Annual Report of the Experimental Station ...** Michigan. State Department of Agriculture, 1906

**Life in the Lab** Humphrey, 1997-11

**Biological Abstracts** Jacob Richard Schramm, 1929

**Proceedings**, 1930

**Merck's Report** Theodore Weicker, 1924

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### Table of Contents Enzyme Activity Lab Report Results

1. Understanding the eBook Enzyme Activity Lab Report Results
  - The Rise of Digital Reading Enzyme Activity Lab Report Results
  - Advantages of eBooks Over Traditional Books
2. Identifying Enzyme Activity Lab Report Results
  - Exploring Different Genres
  - Considering Fiction vs. Non-Fiction
  - Determining Your Reading Goals
3. Choosing the Right eBook Platform
  - Popular eBook Platforms
  - Features to Look for in an Enzyme Activity Lab Report Results
  - User-Friendly Interface
4. Exploring eBook Recommendations from Enzyme Activity Lab Report Results
  - Personalized Recommendations
  - Enzyme Activity Lab Report Results User Reviews and Ratings
  - Enzyme Activity Lab Report Results and Bestseller Lists
5. Accessing Enzyme Activity Lab Report Results Free and Paid eBooks
  - Enzyme Activity Lab Report Results Public Domain eBooks
  - Enzyme Activity Lab Report Results eBook Subscription Services
  - Enzyme Activity Lab Report Results Budget-Friendly Options
6. Navigating Enzyme Activity Lab Report Results eBook Formats
  - ePub, PDF, MOBI, and More
  - Enzyme Activity Lab Report Results Compatibility with Devices
  - Enzyme Activity Lab Report Results Enhanced eBook Features
7. Enhancing Your Reading Experience
  - Adjustable Fonts and Text Sizes of Enzyme Activity Lab Report Results
  - Highlighting and Note-Taking Enzyme Activity Lab Report Results
  - Interactive Elements Enzyme Activity Lab Report Results
8. Staying Engaged with Enzyme Activity Lab Report Results

- Joining Online Reading Communities
  - Participating in Virtual Book Clubs
  - Following Authors and Publishers Enzyme Activity Lab Report Results
9. Balancing eBooks and Physical Books Enzyme Activity Lab Report Results
- Benefits of a Digital Library
  - Creating a Diverse Reading Collection Enzyme Activity Lab Report Results
10. Overcoming Reading Challenges
- Dealing with Digital Eye Strain
  - Minimizing Distractions
  - Managing Screen Time
11. Cultivating a Reading Routine Enzyme Activity Lab Report Results
- Setting Reading Goals Enzyme Activity Lab Report Results
  - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Enzyme Activity Lab Report Results
- Fact-Checking eBook Content of Enzyme Activity Lab Report Results
  - Distinguishing Credible Sources
13. Promoting Lifelong Learning
- Utilizing eBooks for Skill Development
  - Exploring Educational eBooks
14. Embracing eBook Trends
- Integration of Multimedia Elements
  - Interactive and Gamified eBooks

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