

Poster Presentation Guidelines, Instructions

This document contains two parts: 1) Suggested Guidelines For a Poster Presentation, 2) Using PowerPoint™ to Create Your Poster

Part 1: Suggested Guidelines For A Poster Presentation

The goal of your scientific poster is to have an organized and attractive presentation of your research findings. Posters should be self-explanatory and readable within about five minutes. In addition, when fabricating your poster, you must comply with the following guidelines.

Guidelines

- **Title:** At the top of your poster you should have a title that is both short and very descriptive of your project.
 - For empirical studies, the title should also mention the organism(s) studied.
 - As a rule, the title should be easily readable at a distance of about 4 – 5 feet away (words are approximately 1.5 – 2.5 cm in height).
- **Name Affiliation:** Directly under the title, you should have your name, your faculty sponsor's name, and your school's name. The name and affiliation section is usually about 20-30% smaller than the title.
- **The body of the poster:**
 - **The Abstract:** This is a brief synopsis of the entire work, described in the poster. Most abstracts are one or two paragraphs in length. The abstract should be understandable without reading the entire poster and the reader should be able to decide if s/he would like to read the entire poster based on what they read in the abstract. The abstract should contain the following elements: (1) the purpose of the study, (2) a brief statement of what you did, (3) a concise statement of the major findings, and (4) the major conclusions. Do not include details of the methods.
 - **Introduction:** The purpose of the introduction is to present the question being explored by your research and to place it in the context of current knowledge about the topic. It often works well to start with the general context and work your way down to the specifics, ending with a precise statement of the question or hypothesis being addressed by your study. The introduction should convince the reader of the significance of your study. To do this well in a poster is a challenging requirement. Be brief, but include the important points to be sure the reader sees the relevance of your work.
 - **Methods:** In this section you should describe all procedures that you performed. Describe your methods in sufficient detail to allow a reader who works in your field to understand what you did to collect your data. Illustrations are appropriate for complex experimental design, etc.
 - **Results:** The purpose of this section is to summarize the data. Report the results of any statistical tests here. Present all of your results, whether positive or negative. A table or figure may substitute for a written summary as long as each table or figure has a legend that explains the graphic clearly.
 - **Discussion:** In this section you should interpret the meaning of your results with respect to the original question. You should interpret your results without repeating them. The discussion must include your conclusions about the answers to the questions that motivated your research that you described in the introduction. If appropriate, mention explanations for unexpected results.

- **Literature Cited:** This section is optional in the poster, unless citations are used in the text. Include only those papers cited in the text. Do not cite a paper unless you have read it yourself. Cite all your references in the text and list them in the literature-cited section using a format from a major journal within your discipline.
- **Graphics, Tables, Photos and Others**
 - Illustrations, tables, figures, photographs, and diagrams need to have unique identification numbers and legends. In the text, use the numbers to refer to specific graphics or pictures. In your legends, include a full explanation and where appropriate, include color keys, scale, etc.
- **Sample Layouts**
 - There are an endless number of ways to put a poster together. Remember try to create a strong visual but, avoid making the poster look crowded. It is important to provide some indication of the flow of the poster (top to bottom, left to right). Some posters have numbered sections (units) to indicate the reading order.
- **Specific Guidelines:**
 - One entire poster should take up a space no larger than 36" by 48", in landscape format. Be imaginative and creative, so long as you follow the guidelines in this document. Remember that the purpose of the poster is to convey information from your research. Use care that the display does not overpower the scientific content. Also, check your text and legends for accuracy. Be sure to italicize Latin words, label graphs, tables and have several people proofread your poster.

Part 2: Using PowerPoint™ to Create Your Poster

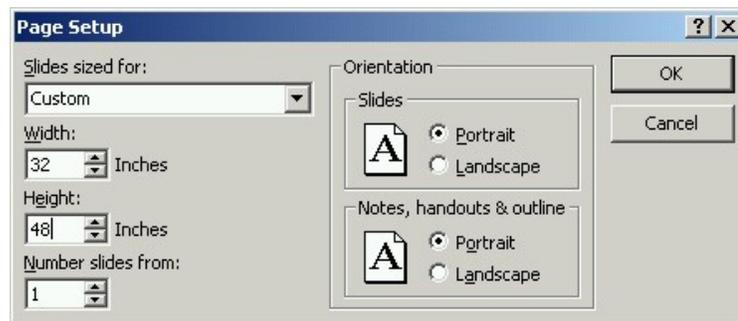
PowerPoint™ is one of the best poster producing software programs there is for our needs. With PowerPoint we can create a slide the exact size we want our poster to be and add text, pictures, and clipart as needed. This short lesson will show you how to create a poster in PowerPoint that will be professional looking and convey your ideas about your subject. Of course, you will have to supply your own data.

Step One

- First decide what size your poster will be. A suggestion of no larger than 36" by 48" should be followed. From my experience make it the maximum allowed. You want people to see your poster and to make an impression you want to be in-their-face. Note: In-their-face does not mean gaudy. You want to pleasantly focus their attention to your poster.
- Get your data together. I will assume you are done with your research so this shouldn't be a problem. Also gather any images, charts, or tables that you want to add to the poster.

Step Two

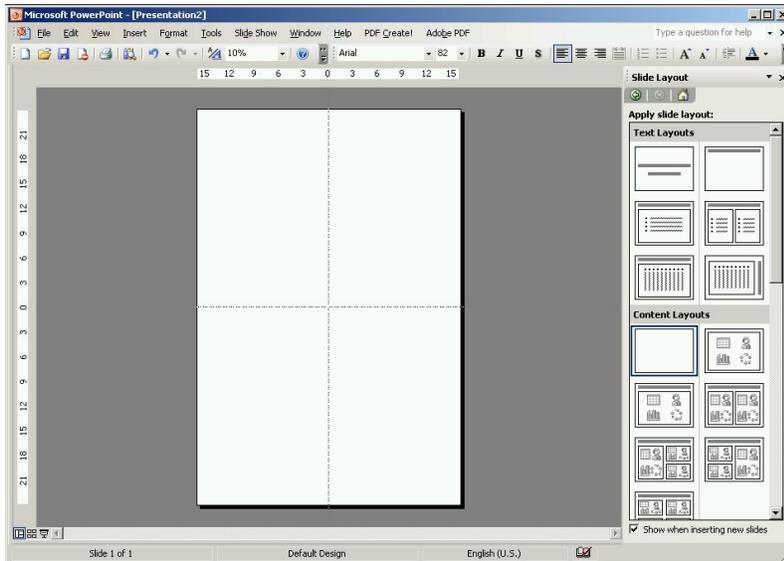
- Start PowerPoint. PowerPoint is in the Microsoft Office® Suite of programs.
- We need to specify a presentation and a slide layout. I would choose a blank presentation and a blank layout.
- Specify what size to make your poster.
- Go to *File* in the menu bar and click on *Page Setup*.



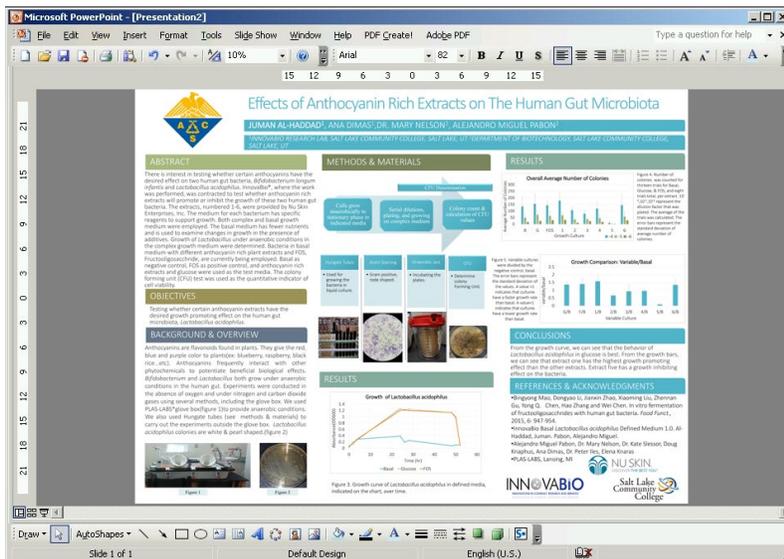
- Choose *Custom* in the Slides sized for: and then enter the width and the height of your poster.

Step Three

- Add your data to the slide.
- To add text go to Insert then choose Text Box and then orientation of the text. You can change the font, font size, color of the font, a fill color for the box as well as a border line.
- Right click on a text box and choose Format Text box to add fill or borders. Right click on any object to get to the format menu.
- To add Pictures, Word Art, Charts, and Diagrams go to Insert and then choose what you want.
- Before:



- After:





Effects of Anthocyanin Rich Extracts on The Human Gut Microbiota

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ABSTRACT

There is interest in testing whether certain anthocyanins have the desired effect on two human gut bacteria, *Bifidobacterium longum infantis* and *Lactobacillus acidophilus*. InnovaBio®, where the work was performed, was contracted to test whether anthocyanin rich extracts will promote or inhibit the growth of these two human gut bacteria. The extracts, numbered 1-6, were provided by Nu Skin Enterprises, Inc. The medium for each bacterium has specific reagents to support growth. Both complex and basal growth medium were employed. The basal medium has fewer nutrients and is used to examine changes in growth in the presence of additives. Growth of *Lactobacillus* under anaerobic conditions in the complex growth medium were determined. Bacteria in basal medium with different anthocyanin rich plant extracts and FOS, Fructooligosaccharide, are currently being employed. Basal as negative control, FOS as positive control, and anthocyanin rich extracts and glucose were used as the test media. The colony forming unit (CFU) test was used as the quantitative indicator of cell viability.

OBJECTIVES

Testing whether certain anthocyanin extracts have the desired growth promoting effect on the human gut microbiota, *Lactobacillus acidophilus*.

BACKGROUND & OVERVIEW

Anthocyanins are flavonoids found in plants. They give the red, blue and purple color to plants(ex: blueberry, raspberry, black rice...etc). Anthocyanins frequently interact with other phytochemicals to potentiate beneficial biological effects. *Bifidobacterium* and *Lactobacillus* both grow under anaerobic conditions in the human gut. Experiments were conducted in the absence of oxygen and under nitrogen and carbon dioxide gases using several methods, including the glove box. We used PLAS-LABS® glove box (figure 1) to provide anaerobic conditions. We also used Hungate tubes (see methods & materials) to carry out the experiments outside the glove box. *Lactobacillus acidophilus* colonies are white & pearl shaped.(figure 2)

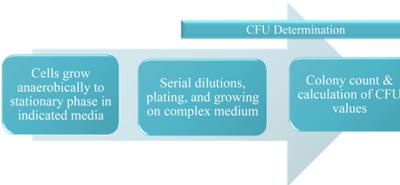


Figure 1



Figure 2

METHODS & MATERIALS



RESULTS

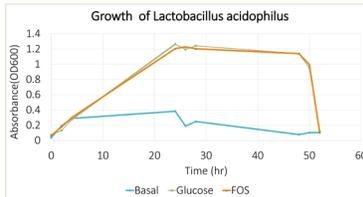


Figure 3. Growth curve of *Lactobacillus acidophilus* in defined media, indicated on the chart, over time.

RESULTS

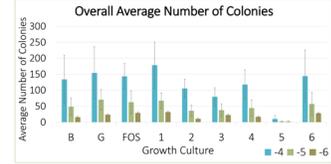
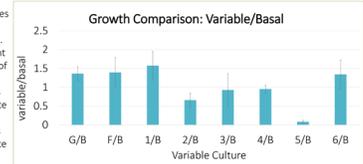


Figure 4. Number of colonies was counted for thirteen trials for Basal, Glucose, & FOS, and eight trials total, per extract. 10^{-4} to 10^{-6} represent the dilution factor that was plated. The average of the trials was calculated. The error bars represent the standard deviation of average number of colonies.

Figure 5. Variable cultures were divided by the negative control, basal. The error bars represent the standard deviation of the values. A value >1 indicates that cultures have a faster growth rate than basal. A value <1 indicates that cultures have a lower growth rate than basal.



CONCLUSIONS

From the growth curve, we can see that the behavior of *Lactobacillus acidophilus* in glucose is best. From the growth bars, we can see that extract one has the highest growth promoting effect than the other extracts. Extract five has a growth inhibiting effect on the bacteria.

REFERENCES & ACKNOWLEDGMENTS

- Bingyong Mao, Dongyao Li, Jianxin Zhao, Xiaoming Liu, Zhennan Gu, Yong Q. Chen, Hao Zhang and Wei Chen. In vitro fermentation of fructooligosaccharides with human gut bacteria. *Food Funct.*, 2015, 6: 947-954.
- InnovaBio Basal *Lactobacillus acidophilus* Defined Medium 1.0. Al-Haddad, Juman. Pabon, Alejandro Miguel.
- Alejandro Miguel Pabon, Dr. Mary Nelson, Dr. Kate Slessor, Doug Knaphus, Ana Dimas, Dr. Peter Iles, Elena Knaras
- PLAS-LABS, Lansing, MI

