Class Project Supported by STEM Disciplines

Education:

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Goal: Increase Awareness of a Healthy Lifestyle.

General Project Outline:

Students will read label, use scales, keep a daily log of food intake, and an exercise log.

Activities:

Use Internet to perform a nutritional analysis for a variety of foods, such as fats, carbohydrates, proteins, etc.

Read food labels to determine the nutritional content of the food, and how many calories per serving.

Determine how many calories come from fat, protein, and carbohydrates.

Students will be given access to computer lab to set up data tables, in Excel, and to perform calculations and to write reports and then to present their findings and recommendations for improvement.

Use the Internet to determine the amount of calories needed to support basic metabolic processes based on the kinds of activities a person performs on a daily basis.

Determine any excess calories consumed per day and the amount of exercise required to utilize those calories. Also different activities burn various amounts of calories.

Possible Assessments:

Submit a written report

Powerpoint presentations and share to with lower grades, communication.

Self-Assessment and also members of groups.

Reflection after all the presentations to determine how they would change their lifestyle.

College Level:

Same as above but incorporate more chemical analysis such as:

Use chemical indicators for the presence of proteins, starch, sugars, amino acids, fats.

Use bomb calorimeters to determine the total caloric content of the food and also determine the caloric content of fat, sugar, protein, etc. .