Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

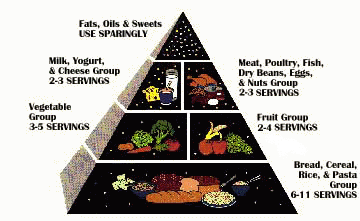
Biology I

Nutrition

FOOD and PHYSICAL FITNESS

Does eating healthy really have an effect on physical fitness?

David Beckham, Michael Phelps, and several more athletes gain great success with training and determination, but does eating right play an important role in this success, too?

[](http://www.nal.usda.gov/fnic/Fpyr/pmap.map)

There are several food groups and it is important to eat balanced meals every day. What are the five main food groups? We have grains, vegetables, fruits, proteins, and dairy. How much of each food type should you eat if you will take part in a physical activity that requires a lot of energy?

Good nutrition also depends on when and how you eat them. What’s the most important meal of the day? BREAKFAST! I’m sure you have all heard of that. Why is breakfast so important? It’s important because it gives you energy for the activities you have planned for the day, whether that includes school, sports, or if you just have a busy day. What does lunch allow you to do? Lunch helps you re-energize for the afternoon and then dinner allows your body to recover from your days worth of activities. In order to keep you energy level high during the day, you need to have snacks, as well.

Your task is to explore the connection between eating healthy foods and improving sports performance. You will choose your group, and in this group you will then have two test groups. Each group’s physical fitness will be measured at the very beginning of this experiment. Group one will eat as healthy as possible and follow the food pyramid recommendations while the second group will continue to eat their normal diet. This experiment will last for four weeks. After the four weeks, group one and two will measure their fitness once again.

Your goal is to figure out if eating healthy can change physical fitness levels. Will the physical fitness level of the first group change? What will happen to the fitness levels of group two? With this project you will find out if picking the right foods along with the right amounts will help you become a better athlete.

I would like you to have some background knowledge on the following terms, concepts, and questions.

Cholesterol

Quantify

Fats

Proteins

Dairy

Nutrition

Sodium

Portion size

Trend

Calories

RDA

Oil

Carbohydrates

Hydration

1. What is the recommended amount of each food group that someone your age should eat? How many calories does your body need?
2. What types of foods do you see people eating that are unhealthy?
   1. Can you come up with a healthy alternative for those unhealthy foods?
3. How do read a nutrition label?
   1. What things do you avoid on a nutrition label if you are trying to eat healthy?
4. What is the difference between “good fats” and “bad fats?”
5. Provide a daily nutritional diary.