**Subject area/course**: Math/Science

**Grade level/band**: 7

**Task source**: Summit Public Schools

**Creating the Ultimate Health Smoothie**

**STUDENT INSTRUCTIONS**

1. **Task context**:

What we eat plays a big part in determining how healthy we are. In this project, you have been hired by a major restaurant chain that is trying to get more healthy foods into their restaurants. They want you to design a new smoothie for their menu, as well as the steps required for making the smoothie.

You’ll start the project by doing some analysis of your own eating habits. You will gather data about the food you eat, then practice the skill of modeling by creating graphs that show information about the food you eat. You will also do calculations with this information. It is important that you are precise in these calculations, showing the details of your work.

Following this, you will read articles about recommended “balanced diets” and analyze the point of view of the author in order to gain an idea of what a balanced diet is. You will practice the skill of discussion/contribution by having a group discussion about what makes a healthy diet. This discussion should be based on the information you gained from reading the articles.

Next it will be time to design your smoothie. You will need to choose foods to put in your smoothie that will meet the nutritional requirements given to you by the restaurant company. You will need to decide how much of each of the foods you choose to include, along with the procedure for making it (the recipe). This step will focus on the skill of precision, because you will need to show exact calculations that prove that your smoothie meets the requirements. You will also work on Designing Processes and Procedures, and you’ll need to create a procedure that is detailed and logical.

Finally, you will write a brochure explaining how your Ultimate Smoothing meets the requirements from the company and why/how it provides the daily nutrients your body needs to maintain good health. Your brochure will include writing that explains the math work, and includes a strong informational thesis with a clear main idea and supporting ideas. It will also include a model that shows the nutritional content of your smoothie.

1. **Final product**:

As a mathematician and scientist, write a recipe and create an essential-nutrients shake that has the right proportion of all the major nutrients needed to live a healthy life using real food. You will unveil your concoction with a sample of your shake and a model showing the proportions of foods, beverages, and nutrients in your shake. You will also create a brochure about your shake explaining why/how it creates a healthy “balanced diet” connecting the nutrients of your shake to the daily nutrients your body needs to maintain good health.

**Additional Information**

1. **Knowledge and skills you will need to demonstrate on this task:**
* Ability to research nutrition information about ingredients
* Ability to graph data
* Ability to analyze data
* Ability to explain your work to others in writing
1. **Materials needed:**
* Internet access
* Ingredients for your sample smoothie
* Your teacher will provide you with additional handouts throughout the project.
1. **Time requirements:**

This task will take approximately ten school days to complete. Your teacher will provide details regarding timelines and due dates.

1. **Scoring:**

Your work will be scored using the Summit Public Schools Ultimate Health Smoothie Rubric. You should make sure you are familiar with the language that describes the expectations for proficient performance.