Name: Date:

Period: Partners:

**Outline**:

Since we are studying nutrition and energy pathways, you will be creating a nutritional aide/supplement from the “ground up.” Your product will have actual nutritional value as a nutritional aide, although your marketing can be as crazy as some of the stuff that’s out there now. The only thing you **may not** do is claim that your product can cure disease! This is your opportunity to show your creativity and have some fun along the way. The steps involved in your project will include:

1. Product Development (in class)
	1. **Name of product**
	2. **Type of product (drink, energy bar, etc.)**
	3. **What is your product’s purpose?**
		1. Pre-workout
		2. During workout
		3. Post workout
		4. Other?
* **Why did you choose this purpose? What was your group’s influence?**
* **Provide a brief description of your product idea and describe how it will be unique or different from any other product currently on the market.**
	1. Advertising – EXTRA CREDIT OPPORTUNITY!!!! (5 points)
		1. Commercial
		2. Magazine
		3. Pamphlet
		4. PowerPoint, etc.
* **Are you going to complete the extra credit? Why?**

Your product may not contain and “pre-made” products like protein powder, Gatorade or energy bars. All ingredients must be in their most basic form. Your product should be unique and may not plagiarize another recipe. (Previously questioned ingredients that are allowed include: peanut butter, milk, butter, honey

1. Production
	1. You will develop the actual product. This includes making the product, tasting it for palatability and being able to reproduce the product for presentation, among other things.
	2. Ingredients are to be measured & carefully **recorded**. (grams, calories ,etc)
	3. Packaging is to be determined
* **Market research – Research optimal nutritional ratios online to ensure your product satisfies the basic requirements for your purpose (grams of fat/protein/carbs). Start by looking at successful products that serve a similar purpose and describe the ratios of lipids/fats, proteins and carbohydrates. Describe which products you research and discuss your findings.**
* **Create your ingredients list with the metric quantities of each *for four serving sizes* of your product:**
* **Create step-by-step instructions on how to produce your product.**
1. Chemical analysis (in class)
	1. A sample of your product will be chemically analyzed in class for
		1. Crude protein
		2. Crude carbohydrates (simple and complex)
		3. Crude fats
	2. Based upon your product
2. Test for energy in your product
	* 1. **Based on the metric quantities of each of your ingredients in your product, calculate the calories per serving. Research calories per gram of proteins, carbs and fats.**
3. Presentation/Taste testing (in class)
	1. Your group will present your product to the class as though you are the marketing department and they are the board of directors (me included!)
	2. An official tasting of your product will be made during the presentation
		1. Make sure you have enough for the entire class
		2. Voting will be made on a 0 to 3 scale with three being the best and zero being horrible.

**Due Dates:**

1. Product Development & Clinical Trial (20 points):
	1. This paper due 2/12
	2. Bring product to be tested to class on 2/12
2. Chemical Analysis (5 points)
	1. Product sample should be ready for the week of 2/12.
	2. Chemical analysis will take place during lab on 2/12.
3. Calorie Measurement (5 points)
	1. Calorie Measurement will take place during lab on 2/13.
4. Presentation (10 points)
	1. Includes actual presentation by group and advertising
	2. Peer taste test feedback incorporated into presentation score.
	3. February 14th/15th

Total Points: 40

Extra Credit points possible: 5