# 2020 Iowa FFA Marketing Scenario Food Science CDE - Food Product Development 

Memorandum to: Product Development Team
From: Marketing Research and Development
Subject: Development of a convenience breakfast product
Task/Objective: Your team is to design a convenience breakfast product to meet the needs of the target market described below. It should include pricing and nutritional information. In addition, the targets for the product are (per serving): 400 to 600 calories, > 12 grams protein, < 20 grams total fat and < 80 grams carbohydrates.

The newly-issued Dietary Guidelines for Americans emphasizes choosing healthier, nutritionallybalanced foods for all meals and snacks, particularly breakfast. An important group of consumers is the teenage (13-17 years old) customer. According to the National Institute of Health, $62 \%$ of all teenagers begin the day without eating breakfast, or with a poor choice of high fat breakfast foods with little nutritional value. With the demands of schoolwork, extracurricular activities, and too little sleep, many teenagers cite being in a hurry or having too little time to eat as the reasons for failure to eat breakfast. One of the most serious consequences due to failure to eat breakfast is a decreased metabolism resulting in an inability to concentrate during the school day.

Since it is extremely unlikely that teenagers' schedules will become less demanding, a tremendous market potential exists for a highly convenient breakfast product that tastes good. Also, because teenagers tend to eat what is readily available, the successful product will appeal to the primary food purchaser of the household-typically adult women.

Since the typical teenager consumes over $\$ 1,300$ in "convenience foods" per year, a well developed highly appealing product presents excellent potential for an increase in total sales and profit for the company. Focus group research indicates show the ideal final price of such a product should be somewhere between $\$ 2.00-\$ 3.50$ per item. In addition to the cost of producing the breakfast product based on the ingredients of the product, there is a cost of $\$ .30$ per serving associated with packaging, labeling, marketing, and distributing the product. The company needs to make at least a $20 \%$ profit, on top of the cost of production, packaging, labeling, marketing, and distribution, to be competitive in this market. While accomplishing this, we expect the product to include a minimum of four main components. However, your team may choose to include more than four components.

Your team needs to develop a nutritious and delicious convenience breakfast product to improve the breakfast eating habits of teenagers. Remember, your team needs to address concerns such as: economics, nutrition, quality control, product safety, equipment, distribution, and formulations. In other words, explain why you chose to create the product you created and how such a product meets the needs described above. You also need to identify a catchy name for this product and design the front label so as to attract the target audience. This is a team event and it is very important for your group to equally present material and provide answers to the judge's questions.

Teams should also prepare a reasonably accurate nutritional analysis label for their product.

Nutritional and Price Information

| Food Item | Unit serving size (oz. mass) | Calories | Fat <br> (g) | Sodium (mg) | Carbs (g) | Potassium (mg) | Sugar <br> (g) | Protein (g) | Price (per serving) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bagel | 3.6 | 310 | 3 | 440 | 58 | 0 | 5 | 11 | \$0.72 |
| Waffle | 1.2 | 105 | 4.5 | 230 | 13 | 0 | 2 | 2 | \$0.12 |
| Pancake | 1 | 70 | 1.1 | 200 | 13 | 0 | 2.7 | 2 | \$0.14 |
| French Toast | 2 | 120 | 3 | 170 | 20 | 0 | 3 | 4 | \$0.32 |
| Tortilla | 1 | 140 | 3 | 450 | 24 | 0 | 0 | 4 | \$0.20 |
| Vegetable sausage | 1.75 | 135 | 6.5 | 310 | 6 | 0 | 1.5 | 15 | \$0.63 |
| Ham | 2 | 180 | 16 | 620 | 1 | 0 | 1 | 7 | \$0.36 |
| Sausage | 1.2 | 120 | 11 | 130 | 0 | 0 | 1 | 4.5 | \$0.37 |
| Bacon | 1.6 | 55 | 4.5 | 230 | 0 | 0 | 0 | 3.5 | \$0.50 |
| Egg | 2.4 | 70 | 4.5 | 65 | 1 | 0 | 0 | 6 | \$0.12 |
| Cheddar Cheese | 1 | 110 | 9 | 180 | 1 | 0 | 0 | 7 | \$0.21 |
| Mozzarella cheese | 1 | 80 | 6 | 170 | 1 | 0 | 0 | 8 | \$0.21 |
| Hummus | 1.5 | 70 | 0 | 20 | 23 | 0 | 0 | 9 | \$0.15 |
| Red Pepper Strips | 1 | 6 | 0 | 0 | 1 | 55 | 1 | 0 | \$0.13 |
| Jalapeno Pepper | 1 | 5 | 0 | 410 | 0 | 0 | 0 | 0 | \$0.25 |
| Green Onion | 1 | 10 | 0 | 5 | 2 | 70 | 1 | 0 | \$0.13 |
| Black Olives | . 5 | 25 | 2.5 | 125 | 1 | 0 | 0 | 0 | \$0.17 |
| Salsa | 1 | 10 | 0 | 250 | 2 | 0 | 2 | 0 | \$0.19 |
| Syrup | 2 | 210 | 0 | 140 | 52 | 0 | 31 | 0 | \$0.22 |

Conversion factors: 16 oz . (mass) $=1 \mathrm{lb}=454$ gram

## 2020 Iowa FFA Food Science Product Development Information

Chapter name: $\qquad$

| Criterion | Points <br> Possible | Points <br> Earned |
| :--- | :---: | :---: |
| Objective met - to develop a convenience breakfast product | 50 |  |
| All required parts of the principle display panel (PDP) are <br> present. | 50 |  |
| All required elements are on the Information Panel. | 50 |  |
| Relatively correct placement of PDP and Information Panel. | 50 |  |
| Reasonability close nutritional panel. | 50 |  |
| Communication skills/oral presentation (clear, logical, easy <br> to understand, confidence in presentation and of the <br> information presented). | 50 |  |
| Ability to answer questions about the product. | 50 |  |
| Did all team members contribute? | 400 |  |
| Overall Score | 50 |  |

