

Food Science and Technology Career Development Event
Food Product Development Practice Scenarios
Jan. 21, 2015

To: Research and Development Group, Anytime Snack Foods Company
From: Marketing and Sales
Subject: Adding value to soft pretzel product lines

Task: Using the materials, ingredients list, and nutritional information provided, design a new, unique line of soft pretzels

Over the past five years, sales of our soft pretzels have been falling 5% annually. Because traditional frozen microwavable soft pretzels have accounted for approximately 50% of Anytime Snack Foods sales and we are fully invested in the product line in terms of production and packaging equipment it is necessary that a solution be found to the decreased sales of Anytime Snack Foods soft pretzels.

Initial market screenings have demonstrated that the decrease in sales is primarily due to the lack of diversity in the product line. Analysis of market screening data shows that consumers would be more willing to purchase soft pretzel products if products could provide certain health benefits, more variety, and/or products that can provide “meal- on-the-go options.”

Your task is to develop a new line of soft pretzels that maintain their soft pretzel identity but provide one or more means to improve sales as determined by the market screening analysis. Possible options would be to change the pretzel dough formulation or maintain the current formulation and add or incorporate other products into the pretzels.

Your task will be to:

1. Design a new soft pretzel line that will better meet consumer demands
2. Come up with a product name
3. Generate a nutrition facts panel for the new product (on attached nutrition label sheet)
4. Make an ingredients list for your new product, and complete the ingredient table (on attached sheet)
5. Create a principle display panel for the containers that the pretzels will be sold in
6. Prepare an oral presentation to provide evidence as to how the new product meets the information provided (health benefits, more variety, and/or products that can provide “meal- on-the-go options”)

Current product line information:

Currently, pretzels are cooked and then frozen at the Anytime Snack Foods facility. The product is then shipped and sold to consumers. Consumers reheat the pretzels before eating.

Our soft pretzels weigh approximately 53 grams and one pretzel is equal to one serving. Current packaging allows for 10 pretzels per box. Pretzel dough formulation is as follows (per 10 pretzels):

510 grams of bread flour

295 grams of water

15 grams of salt

32 grams of butter

6 grams of yeast

A list of available ingredients at our Anytime Snack Foods facility is attached. The new product is limited to using these ingredients.

Nutrition Facts

Serving Size 1 (g)

Servings per Container 1

Amount per Serving

Calories

Calories from Fat

% Daily Value*

Total Fat g %

Saturated Fat g %

Trans Fat g

Cholesterol mg %

Sodium mg %

Total Carbohydrate g %

Dietary Fiber g %

Sugars g

Protein g

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrates		300g	375g
Dietary Fiber		25g	30g
Protein		50g	65g

Calories per gram:

Fat 9 • Carbohydrate 4 • Protein 4

Ingredient	Ingredients										
	Kcal	Protein	Carb	Fat	Sodium	Diet Fiber	Sugar	Sat Fat	Cholesterol	H2O	
	Kcal	g	g	g	mg	g	g	g	mg	g	
<i>Base formulation</i>											
100 g Bread flour (white)	361.0	12.0	73.0	1.5	2.0	2.5	0.3	0.3	0.0	13.5	
100 g Table salt (iodized)	0.0	0.0	0.0	0.0	5070.0	0.0	0.0	0.0	0.0	0.0	
100 g Butter	69.0	0.0	0.0	8.0	1.0	0.0	0.0	5.0	21.0	1.8	
100 g Active Dry yeast	333.0	39.0	43.0	5.0	259.0	23.0	0.0	1.0	0.0	8.0	
100 g Water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	
<i>Other ingredients</i>											
100 g Bread flour (whole wheat)	356.0	12.5	72.0	2.0	1.0	10.5	2.0	0.0	0.0	12.0	
100 g Sorghum flour	361.0	8.0	77.5	3.3	4.0	6.5	2.0	0.5	0.0	10.0	
Xanthan gum	50.0	0.0	81.0	0.0	2700.0	81.0	0.0	0.0	0.0	0.0	
100 g peanut butter	585.0	24.0	21.5	50.0	150.0	8.0	4.0	7.0	0.0	1.5	
100 g walnuts	654.0	15.0	14.0	65.0	2.0	6.5	2.5	6.0	0.0	4.0	
100 g cheddar cheese	403.0	25.0	1.3	33.1	621.0	0.0	0.6	21.0	105.0	37.0	
100 g mozzarella cheese	248.0	12.0	24.0	12.0	685.0	0.0	24.0	4.0	0.0	47.0	
100 g turkey	206.0	27.0	0.0	10.0	105.0	0.0	0.0	3.0	134.0	62.0	
100 g beef	291.0	26.5	0.0	20.0	63.0	0.0	0.0	8.0	87.0	53.0	
100 g Apples	52.0	0.3	14.0	0.2	1.0	2.5	10.5	0.0	0.0	85.5	
100 g corn syrup	312.0	0.0	78.0	0.0	2.0	0.0	12.5	0.0	0.0	22.0	
100 g sugar	400.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	
100 g rolled oats	421.0	14.0	74.0	7.0	4.5	12.0	0.0	1.5	0.0	3.0	
100 g olive oil	900.0	0.0	0.0	100.0	0.0	0.0	0.0	14.0	0.0	0.0	
100 g Dried instant potato powder	97.0	2.0	11.0	5.0	164.0	0.8	1.5	3.0	14.0	10.0	
100 g BBQ sauce	80.0	0.0	17.0	0.0	480.0	0.0	14.5	0.0	0.0	42.5	

Ingredients

Quantity (grams)	Ingredient	Kcal	Protein	Carb	Fat	Sodium	Diet Fiber	Sugar	Sat Fat	Cholesterol	H2O
		Kcal	g	g	g	mg	g	g	g	mg	g
	<i>Base formulation</i>										
	100 g Bread flour (white)										
	100 g Table salt (iodized)										
	100 g Butter										
	100 g Active Dry yeast										
	100 g Water										
	<i>Other ingredients</i>										
	100 g Bread flour (whole wheat)										
	100 g Sorghum flour										
	Xanthan gum										
	100 g peanut butter										
	100 g walnuts										
	100 g cheddar cheese										
	100 g mozzarella cheese										
	100 g turkey										
	100 g beef										
	100 g Apples										
	100 g corn syrup										
	100 g sugar										
	100 g rolled oats										
	100 g olive oil										
	100 g Dried instant potato powder										
	100 g BBQ sauce										

(only fill in amounts for the ingredients that your product uses)