Bamboo Fiber Muffins

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Bamboo Fiber

International Fiber Corporation (IFC)

Brand Name- JustFiber Bamboo Fiber (BF 200

FCC)

- 99% Dietary Fiber

- Insoluble
- Non Caloric



Control

• Standard Muffin



Experiment #1

- Added Bamboo Fiber
- Increased Milk



Muffin #1

- Dry
- Dense







Increased Milk



Muffin #2

- Gummy
- Uneven Texture



Experiment #3

- Decreased Milk
- Increased Oil



Muffin #3

- Bitter Aftertaste
- Dense







*Hydrated Fiber



Muffin #4

- Airy
- Tender



Experiment #5

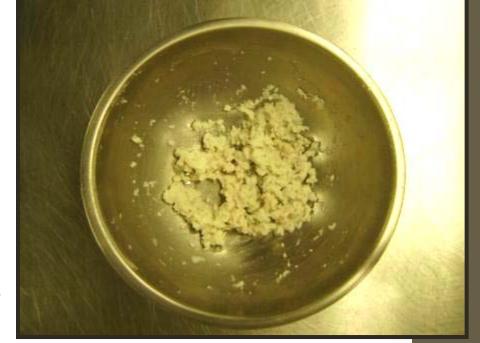
Increased Baking Powder



Muffin #5

- Airiness
- Increased Tenderness
- Golden Brown





- Decreased Oil
- Increased Egg
- Incorporated Flourishes



Muffin #6

- Less bitter
- Even texture



Experiment #7

 Decreased Flour/Baking Powder



Increased Sugar

Muffin #7

No bitter aftertaste







Increased sugar

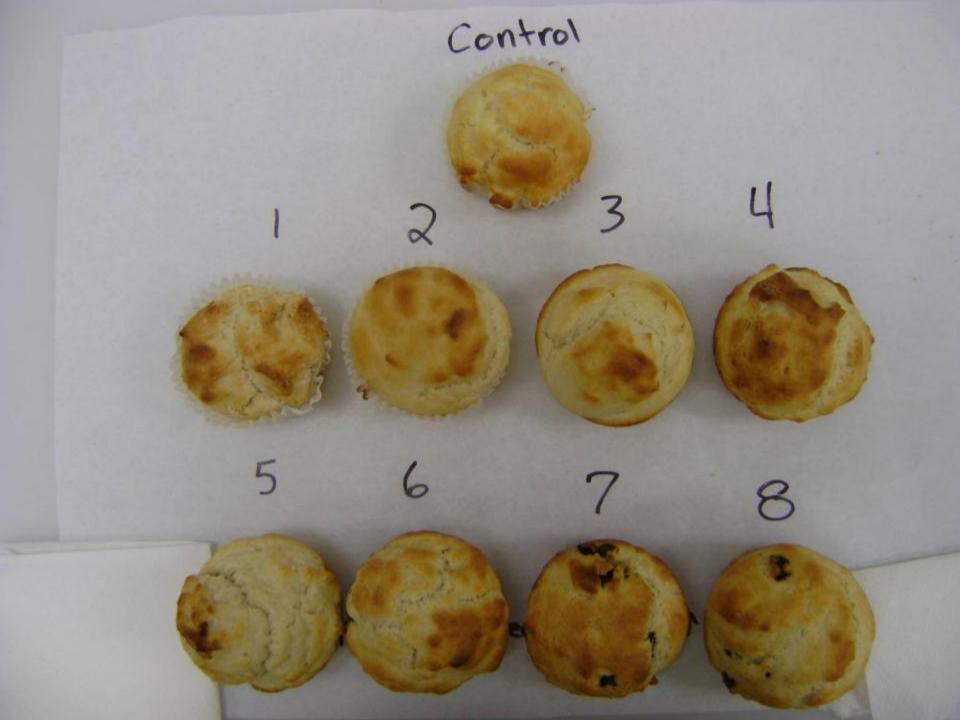


Muffin #8

Acceptable Muffin







Challenges

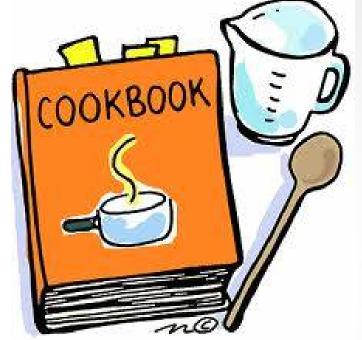
- Adjusting the muffin recipe to incorporate the bamboo fiber
- Trying to meet the criteria of a Standard (55 gram/2 ounce) muffin
- Control all human variables
- Maintain proper oven temperature
- Time restrictions
- Mistakes in calculations



Recipe

(makes 6 2 ounce muffins)

- ½ cup All Purpose Flour
- 4 tablespoons Sugar
- 1½ teaspoon Baking Powder
- ¼ teaspoon Salt
- 2 tablespoons Egg
- 2 tablespoons Canola Oil
- ¼ cup + 2 tablespoons Skim Milk
- Hydrated Bamboo Fiber
 - 2 tablespoons Bamboo Fiber Powder
 - ¼ cup + 3 tablespoons of Skim Milk
- 3 tablespoons Chopped Dried Cherries
- 1 teaspoon Almond Extract



Nutrition Label

High in fiber!



Nutrition Facts

Serving Size (55g) Servings Per Container

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Amount Per Serving						
Calories 130	Calc	ries froi	m Fat 40			
Calones 100	Odic					
		% D:	aily Value*			
Total Fat 4g			6%			
Saturated Fat 0	g		0%			
Cholesterol 15m	g		5%			
Sodium 150mg			6%			
Total Carbohydi	rate 25g		8%			
Dietary Fiber 5g			20%			
Sugars 8g						
Protein 3g						
Vitamin A 4%	•	Vitam	nin C 0%			
Calcium 8%	•	Iron 6	5%			
*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 Saturated Fat Cholesterol	Less than Less than	20g	80g 25g 300mg			
Cholesterol Sodium Total Carbohydrate Dietary Fiber	Less than Less than	_	300mg 2,400mg 375g 30g			
Calories per gram:						

Fat 9 • Carbohydrate 4 • Protein 4

Sensory Evaluation of a Bamboo Fiber Muffin

<u>Directions:</u> You are presented with a sample of a high fiber muffin. Please rate each attribute with #1 being unacceptable and #5 being highly acceptable. Please provide comments to explain your answer.

<u>Ingredients</u>: All-purpose flour, skim milk, egg, canola oil, dried cherries, sugar, bamboo fiber, baking powder, Salt, almond extract.

Sensory Attribute	Acceptability					Comments
Color	1	2	3	4	5	
Denseness	1	2	3	4	5	
Aroma	1	2	3	4	5	
Taste	1	2	3	4	5	
Flavor	1	2	3	4	5	
Aftertaste	1	2	3	4	5	
Texture	1	2	3	4	5	
Moistness	1	2	3	4	5	

Would you eat this muffin again?

I would never eat this muffin	I would eat this muffin sometimes	I would eat this muffin often	
Comments:			