

Healthy Food from Oatmeal

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Abstract

This cooperative education project is based on the issue of food waste and at Big Sky Resort in the kitchen that I worked, there are a lot of oatmeal was wasted every day, Moreover oatmeal is a whole-grain food, meaning it is minimally processed and contains more vitamins, minerals, fiber and phytonutrients than most refined, or processed, grains. Eating oatmeal also supplies you with energy, protein and healthy fats. So I decided to make an oatmeal tart to be a dessert for health lover. And the study found that 71.43% of oatmeal and 28.57% of granola are suitable for an oatmeal tart. I was taken a random selection 20 persons (45% of men and 55% of women). The result revealed that an assessor like extremely Overall of an oatmeal tart by give 8.45 point average and like very much on Appearance, Texture, Flavour and Smell by give a point average at 8.25, 8.15, 8.05 and 7.70 respectively.

1. Introduction

Oatmeal is a carbohydrate and protein-rich source that provides energy. Moreover, oatmeal is rich in soluble fiber, which can help anyone feel fuller for longer. There are two types of fiber, Soluble fiber absorbs water and becomes a viscous gel as it moves through the gastrointestinal(GI tract) Insoluble fiber does not absorb water, acts as a bulking agent. Oatmeal contains both types and has the largest proportion of soluble fiber of any grain in the form of beta-glucan. The soluble fiber in oatmeal has been shown to decrease low density lipoprotein (LDL) cholesterol by 10-15%, particularly when consumed as part of a low-fat diet. Studies show fiber can also decrease risk of high blood pressure. The water soluble properties of beta-glucan help control blood sugar by slowing down digestion time, which can help diabetics achieve better glycemic control and prevent insulin resistance. A high fiber diet has also been shown to reduce the risk of colon cancer. In addition to fiber, oatmeal is rich in thiamin, magnesium, phosphorus, zinc, manganese, selenium, and iron.

2. Principle

In breakfast time at Huntley dining room (Big Sky Resort), there's always left a lot of oatmeal when breakfast time is over. So I solved that problem by put some creative in oatmeal and change it to be a healthy tart. More than that the customer have an alternative dessert.

3. Procedure

3.1 Recipe Modification

Finding recipes on the internet, then choose one recipe to modify.

Ingredients

Oatmeal	350 g.
Granola	100 g.

Directions

Preheat oven to 350°F (Fan mode)
↓
Mix oatmeal and granola together then leave for 15 minutes.
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Using finger tips, gently press and mould into the tart tin.
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Bake the tarts at 350°F for 15-20 minutes.
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Once baked, remove from oven and place on wire rack to cool.

3.2 Satisfaction Evaluation

Study about assessor satisfaction to healthy food from oatmeal by lets 20 employees at Big Sky Resort (Target group) taste an oatmeal tart with sensory evaluation papers. Using 9 point hedonic scale to consider about an overall, appearance, smell, flavor and texture.

3.3 Nutritional evaluation

Study about the nutrition of oatmeal and granola in healthy food from oatmeal and calculate nutrition of oatmeal tart by using Nutrient composition tables of Thai foods.

Table 1 Nutrition of healthy food from oatmeal.

Nutrition	Quantity
Energy	1,443.5 Kcal
Fat	37.5 g
Protein	52.5 g
Carbohydrate	229 g
Fiber	32.5 g
Calcium	196 mg

Source: Bureau of Nutrition. Department of Health, 2530. Nutrient composition tables of Thai foods.

4. Overall operation

By lets 20 employees at Big Sky Resort taste an oatmeal tart with papers of sensory evaluation. Using 9 point hedonic scale to consider about an overall, appearance, smell, flavor and texture. The study found that

Table 2 Assessor satisfaction score of healthy food from oatmeal.

Attribute	Score
Appearance	8.25
Smell	7.70
Flavour	8.05
Texture	8.15
Overall	8.45

5. Conclusion

The result of healthy food from oatmeal revealed that an assessor like extremely Overall of an oatmeal tart by give 8.45 point average and like very much on Appearance, Texture, Flavour and Smell by give a point average at 8.25, 8.15, 8.05 and 7.70 respectively.

6. Acknowledgement

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7. Reference

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