



INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY

ISSN: 2454-132X

Impact factor: 6.078

(Volume 6, Issue 2)

Available online at: www.ijariit.com

Estimation of chemical and sensory aspect of oats and dates chocolate

Sarvesha Dendavey

sarveshadendavey189@gmail.com

Sau Vasudhatai Deshmukh College of Food Technology,
Amravati, Maharashtra

Nikhil Deshmukh

deshmukhnikhil190101@gmail.com

Sau Vasudhatai Deshmukh College of Food Technology,
Amravati, Maharashtra

ABSTRACT

Cereal grains are more beneficial in our life. Whole grains as a part of healthy diet have reduce risk of some chronic diseases. Oats and Dates contain high amount of nutrients, fiber, vitamins, minerals and disease fighting antioxidants. At present the food product are high in cost and not much as nutritive. So comparingly cereal grain product are easily available and low in cost and highly nutritive. One of the parts of this product oats and dates are more beneficial for children. Dark chocolate contains magnesium, iron & powerful source of antioxidants and it maintain blood flow. Due to this Oats and dates with chocolates are more effective and energetic for child's growth and development.

Keywords— Oats, Dates, Dark Chocolate, CHD, Diseases, High Nutrient

1. INTRODUCTION

The FDA and Drugs Administration (FDA) had announced its decision on 1997 to authorize the health claims on the association between soluble fiber from whole oats and a reduce risk of coronary heart disease (CHD). Cereal grains like oats are rich in Fibers, minerals, Vitamins & Antinutrients. Fibers such as Beta-Glucan & hemicelluloses and because of the Dark chocolates present in product it gets more tastier & also Dark-chocolate has its own nutritive value; and it also increases Appetite. Developing newer oats recipes with (regional & National) traditional diet choices as an attempt against fast food eating habits. As per Recommended dietary allowance, the estimated amount of nutrient (or calories) per day considered necessary for maintain good health by food & nutrition board of the nation.

Research social / national academy science according to this the about men require 2,300 kcal/day about women require 1,900 Kcal/day. But in our daily life the food we are eating is not much nutritive & contain low calorific & protein also the lack of sufficient amount of mineral, vitamin & carbohydrate due to this disease like over nutrition malnutrition are rising day by day. Due to like malnutrition risk of coronary heart disease some type of cancer & other major diseases is rising due to increasing in the population. the quality of food is getting lower due to this various types of disease are rising & people not getting proper nutrient from this food and the nutritive food is an need of a while the price of high nutritive food is in higher because of this the middle class people cannot afford this food the food which contain high nutritive value (are higher in cost). contain good nutritive value & low in cost to that any people can afford this type of food.

1.1 Oats

- Oats reduce the risk of coronary heart disease because of presence of soluble fiber & other nutrient present in oats.
- Oatmeal is very filling & may help you lose weight.
- Oats is full of vitamins & minerals.
- Oats improve digestion.
- Oats contain range of molecule that act as antioxidant this include Avenanthramide which are Polyphenol oats improve blood sugar control.

1.2 Dates

- Dates are very nutritious high in fiber from dates human can get enough fiber is important for your overall health.
- It is high in disease –fighting antioxidant it may promote natural labor it is excellent Natural sweetener it is one of the sources of protein that help to keep our muscles strong.
- Dates contain vitamins such as B 1, B2, B3, & B5 as well as A1, & C dates are rich in selenium managerial, copper & magnesium

- Dates can be good for blood sugar balance and also help in reduce blood pressure

1.3 Dark chocolate

- Dark chocolate is very nutritious it is powerful source of antioxidants it can improve blood flow & low blood pressure.
- It improves brain function
- It will reduce heart disease risk, dark chocolate also be growing for your skin

2. PRODUCT PREPARATION

- Selection of raw material:** select the plain oats & select the dark and wet dates (seedless or with seed) and required dark chocolate available from grocery shops.
- Cleaning:** The clean the oats & remove the seeds of dates if it is with seed
- Preparation of mixture:** Take a oats and dates & chocolates roast the oats & dates in small amount of oil or butter (the proportion of dates and oats should be in equal preparation) roast till it get brown after getting's brownish color of mixture grind it from grinder up to powder form.
- Making of Ball:** Make the small ball of mixture.
- Dipping & Freezing:** Dipped the ball into a liquid dark chocolate & freeze at temp 0-1 for 2-3 hrs. in fridge (until it gets in hard form).
- Packaging:** Packaging of this product other done is plastic box & any other plastic container.
- Storage:** This product must be store in refrigerator 4° or in freezer

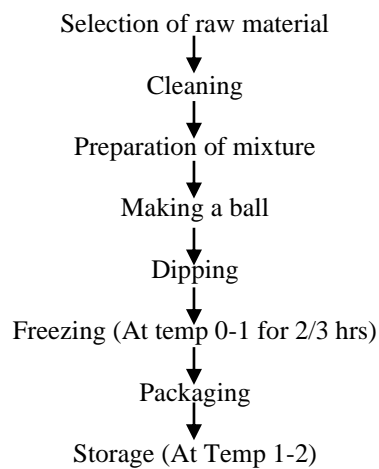
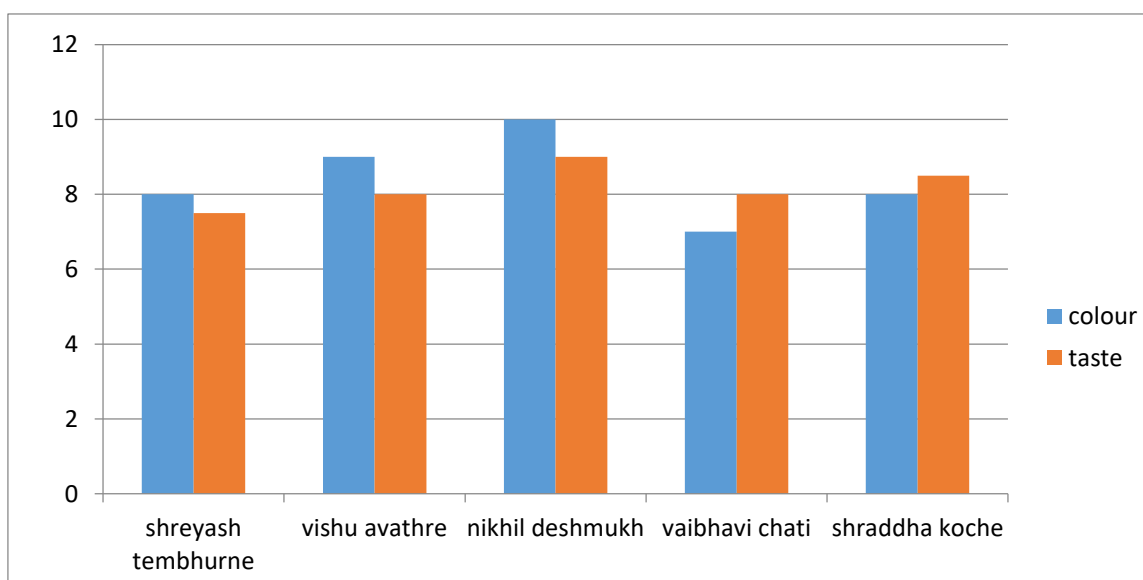


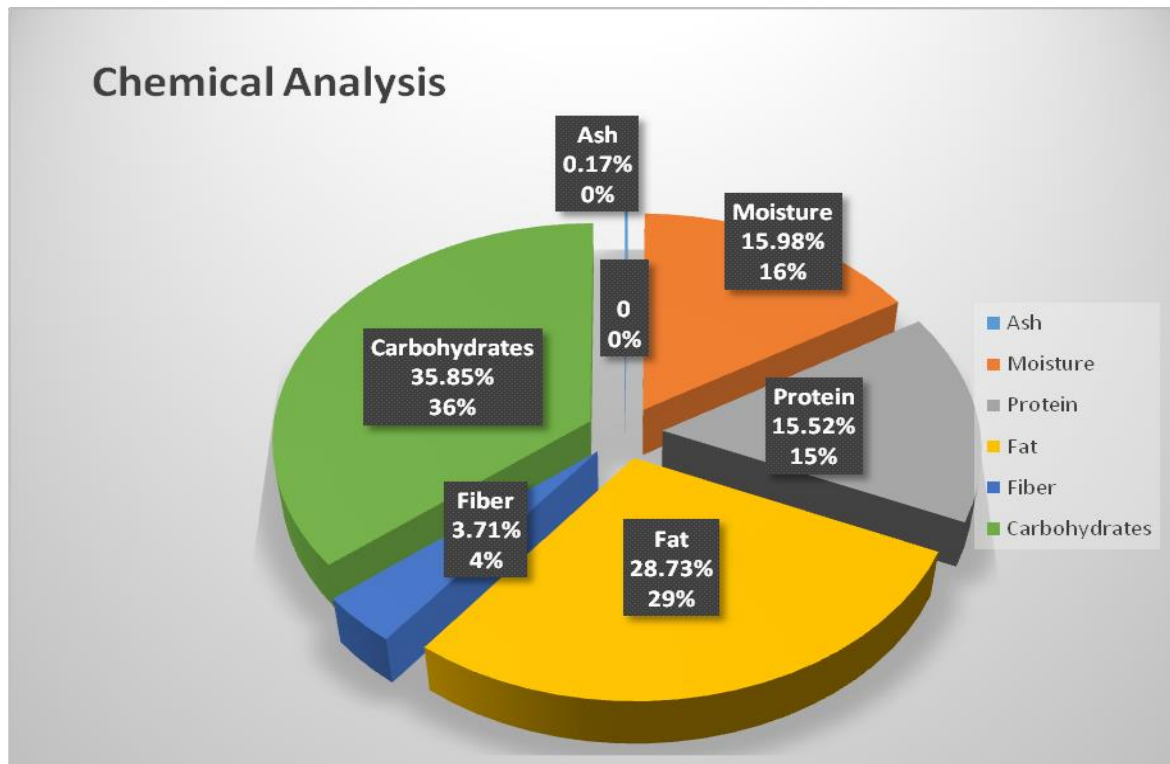
Fig. 1: Flow chart

Sensory Quality Evaluation: Sensory quality of product was determined by conducting Organolyptic taste. Examination was done by student of B.tech food technology, Pala, Amravati. Marks were given out of 10.

Name	Color	Taste
Shreyash tembhurane	8	7.5
Vishu Avathre	9	8
Nikhil Deshmukh	10	9
Vaibhavi Chati	7	8
Shraddha koche	8	8.5



Chemical analysis: Result of chemical analysis as conducted at KVK Durgapur.



3. CONCLUSION

The product was found to have high percentage of proteins and carbohydrate. Also, it contains healthy fats which helps to reduce bad cholesterol. And it reduces the risk of coronary heart diseases, it maintains blood sugar balance also control blood pressure. Final product has chocolaty appearance and was sweet in taste. As the product is rich in fat it helps to reduce problems of malnutrition as it has chocolate flavor it is highly acceptable by children.

4. REFERENCES

- [1] <https://www.medicalnewstoday.com/articles/270680>
- [2] <https://www.healthline.com/nutrition/9-benefits-oats-oatmeal#section1>
- [3] <http://www.fao.org/3/a0442e/a0442e0d>
- [4] <http://www.fao.org/europe/news/detail-news/en/c/1070294/>
- [5] <https://www.cseindia.org/malnutrition-free-india-by-2022-unlikely-because-the-government-s-poshan-abhiyaan-s-implementation-poor-and-targets-unambitious-9925>
- [6] <https://m-economictimes-com.cdn.ampproject.org/v/s/m.economictimes.com/industry/cons-products/food/levels-of-sal>
- [7] Ali, Amanat & Waly, Mostafa & Musthafa, Mohamed Essa & Devarajan, Sankar. (2012). Nutritional and Medicinal Value of Date Fruit. Dates: Production, Processing, Food, and Medicinal Values. 50. 361.
- [8] Abuharfeil, N.M., El-Sukhon, S., Msameh, Y., and Sallal, A.K.J. 1999. Effect of date fruits, Phoenix dactylifera L., on the haemolytic activity of Streptolysin O. Pharmaceutical Biology 37: 335–339.
- [9] Biglari, F., Abbas, F.M., Alkarkhi, F.M., and Azahar, M.E. 2008. Antioxidant activity and phenolic content of various date palm (Phoenix dactylifera) fruits from Iran. Food Chemistry 107: 1636–1641.
- [10] Visioli, Francesco & Bernaert, Herwig & Corti, Roberto & Ferri, Claudio & Heptinstall, Stan & Molinari, Enrico & Poli, Andrea & Serafini, Mauro & Smit, Hendrik & Vinson, Joe & Violi, Francesco & Paoletti, Rodolfo. (2009). Chocolate, Lifestyle, and Health. Critical reviews in food science and nutrition. 49. 299-312. 10.1080/10408390802066805. A study on chocolate consumption in prospective teachers-ERIC by L. Ozgen.2016
- [11] <https://www.hsph.harvard.edu/nutritionsource/food-features/oats/>
- [12] Reynolds, S.G. Background to Fodder Oats Worldwide.
- [13] <http://www.fao.org/3/y5765e/y5765e00.htm>
- [14] Al-Shahib, W. and Marshall, R.J. 2003. The fruit of date palm: Its possible uses as best food for the future. International Journal of Foods Science and Nutrition 54:247–259.
- [15] Ahmed, I.A., Ahemed, A.W.K., and Robinson, R.K. 1995. Chemical composition of date varieties as influenced by the stage of ripening. Food Chemistry 54: 305–309.
- [16] Peterson, David. (2001). Oat Antioxidants. Journal of Cereal Science. 33. 115-129. 10.1006/jcres.2000.0349.
- [17] Charvet, A., Brogan Hartlieb, K., Yeh, Y. et al. A comparison of snack serving sizes to USDA guidelines in healthy weight and overweight minority preschool children enrolled in Head Start. BMC Obes 3, 36 (2016).
- [18] USDA Foods Product Information Sheet For Children Nutrition Programs 100466-Oats, Rolled, WholeSource-USDA National Nutrient Data Base