Journal of Pharmacognosy and Phytochemistry
Available online at www.phytojournal.com

E-ISSN: 2278-4136
P-ISSN: 2349-8234
JPP 2019; SP5: 412-413

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(Special Issue- 5)
International Conference on
"Food Security through Agriculture & Allied Sciences"
(May 27-29, 2019)

Preparation and standardization of papad using golden sweet potato

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Abstract
The study was under taken Golden sweet potato and to study the nutritional quality of papad. It analysis showed that Proximate analysis of Papad (100gm) showed energy (469Kcal), Carbohydrate (67.11%), Protein (5.35%), Fat (20.0%), Iron (2.2mg), Vitamin A (14 J) and ash content of prepared papad is (4.39%). It is nutritional beneficial for reducing Vitamin A and iron deficiency among school going children.

Keywords: Golden sweet potato, Vitamin A, Iron and Nutrition

Introduction
Papad is a traditional food item having a thin- crispy wafer like texture which is consumed as an accompaniment along with meals and snacks. Among Indian reciepes, papad are most popular, it is an inseparate part of food in Indian families of all income groups to cultural backgrounds. Processed tradition papad is using cereal, legumes flour or potato sago with minor quantities of spice, vegetable oil, salt, and alkaline additive. It is widely consumed in Indian as an adjunct after frying or toasting.

Golden Sweet potato the second most important root tuber of the world, but in India categorized as "poor man's food" or "famine crop", has tremendous potential to contribute to a food based approach to promote food and nutrition security. It has diverse range of positive attributes like high yield with limited inputs, short duration, high nutritional value and tolerance to various biotic and abiotic stresses. Golden sweet potato to tackle the problem of vitamin a deficiency. Apart from being rich source of vitamin a in the form of betacarotene, benefits may also occur from other health enhancing features of sweet potato like adequate calories, vitamin C, vitamin D and micronutrients such as iron and zinc. The various preparations of golden sweet potato tubers and tender leaves and vine could also be eaten (Chaudhary, *et al*. 2015b) [6]. Thus, the poor people having only limited access to the expensive vitamin A rich animal food like fish oil, egg, and cow milk or plant products like papaya, mango, carrot etc. can consume it. As a biofortifield crop many African countries are using it to alleviate vitamin A malnutrition (CIP2015). 100g of sweet potato may supply enough a-carotene to satisfy 0to 100% of the sweet potato variety used. It is estimated that 300-400 microgram equivalents of retinol per day satisfy the daily requirements for infants up to 10 years old, which is equivalent to about 2100-2400 micro-grams of a-carotene. Usually a ratio of 4:1 to 8:1 is used to convert a-carotene into retinol since not all a-carotene can be convert by the human body. Therefore 100-120 g of a yellow flesh sweet potato containing 2500 micro-gram/100 g fresh weight of a-carotene is adequate to meet the daily requirement of vitamin A. Regular intake of 100g per day golden sweet potato roots provides the recommended daily dose of vitamin A for children.

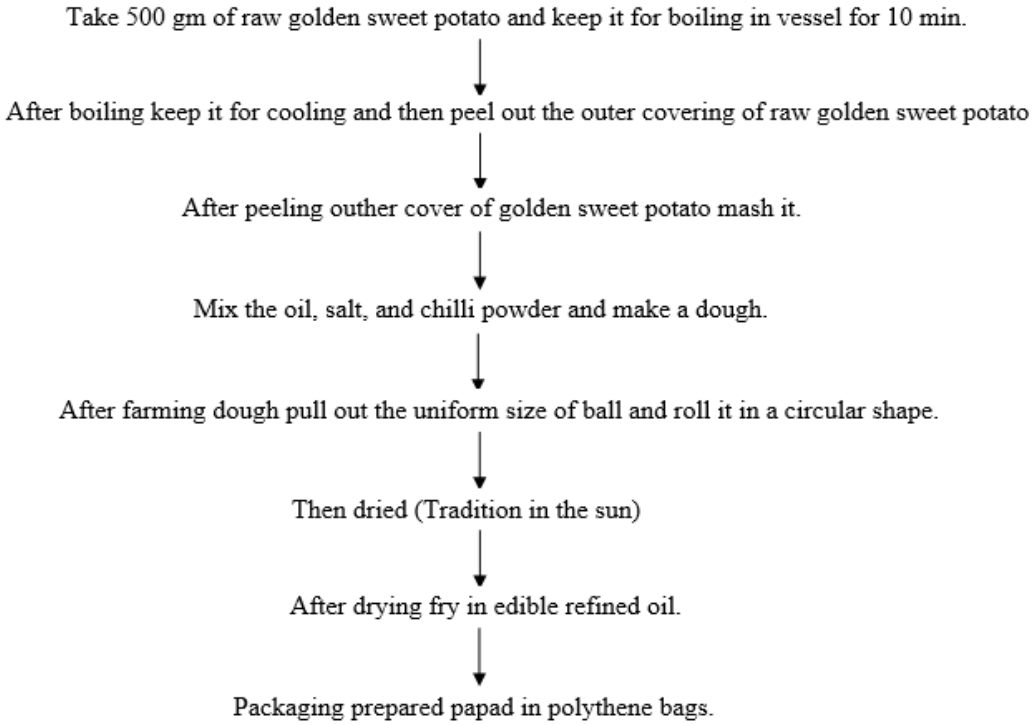
Hence the objective of the research study is develop a papad using golden sweet potato and standardized the nutritive value of develop papad.

Material and Methods
Raw Material and Ingredients
Golden Sweet Potato, Oil, Chilli Powder, Salt.

Formulation of Papad

Mix the golden sweet potato, oil, salt, chilli powder and make the dough. The dough is rolled manually in a thin round shape and then dried (Traditional in the sun).

Preparation of Papad



Standardized recipe of Papad

Ingredients	Ammount
Golden sweet potato from golden sweet potato)	500 gm (100 gm Papad made
Chilli powder	2 gm
Oil	10ml
Salt	5gm (as a required)

Proximate Analysis

Energy, Carbohydrate, fat, Iron and Vitamin A by different method were determined (AOAC, 2012) from Regional Food Research and Analysis Center, Lucknow (2018).

Result and Discussion

Proximate analysis of Papad (100gm) showed energy (469Kcal), Carbohydrate (67.11%), Protein (5.35%), Fat (20.0%), Iron (2.2mg), Vitamin A (14 J) and ash content of prepared papad is (4.39%).

Conclusion

Golden sweet Potato is a natural biofortifield food. It is rich source of beta carotene, energy, iron, etc. Hence the papad sample prepared by golden sweet potato will be beneficial for amelioration of vitamin A and iron deficiency among school going children.

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