

## **THE USES AND IMPORTANCE OF NUTS AS AGRICULTURAL PRODUCTS IN THE HOSPITALITY INDUSTRY IN REFERENCE TO CASHEWNUT, COCONUT AND GROUNDNUT**

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### **ABSTRACT**

*The purpose of this Research is to know the uses and importance of nuts in the hospitality industry in reference to coconut, cashew nut and groundnut. The uses tells us more of what coconut and groundnut as an agricultural product can be used for aside their daily uses in the industry; likewise the importance tells us the essential nutrient and health benefit derived from the uses of this products. The research explains how to prepare nut product like cashewnut bread, desiccated coconut, groundnut soup etc and their importance in the hospitality industry. This research work however is based on practical which entails selection of good judges that have sharp taste buds. The quality parameter of measure; appearance, aroma, texture, taste, flavour and consistency which were used to determine the acceptability of the tasted product.*

## **INTRODUCTION**

Before independence Nigeria was able to grow all of its food needs but produced surpluses of the other agricultural raw materials such as cocoa, coffee, groundnut, cotton, palm product etc (Abdullahi, 1984). In other words agriculture then not only provided the Nigerian population with all its food need but it also provided the much needed foreign currency with which the country financed its capital development[2]. Nuts in the hospitality industry is grown almost in all major states of the country i.e. in Kwara, Benue, Oyo, Ekiti etc coconut, cashew nut and groundnut are widely known for their various importance and uses most especially in the hospitality industry. Coconut known as the "tree of life" in tropical climates is a way of life for millions of people all around the globe. Coconut is a versatile product and has multiple uses[3]. Almost all the parts of a freshly grown coconut are eatable or otherwise used in some of other manner. India is one of the leading coconut producers in the World, producing 13 billions nuts per annum. India accounts for nearly 20% of global coconut output. Cashew nuts are the seeds of a tree that is native to Brazil in South America, although they were later introduced to other tropical regions such as certain African countries and India[1]. Today the leading commercial producers of cashew are India, Brazil, Mozambique, Tanzania and Nigeria. In Nigeria, cashewnut are grown and can be located in the following states, Enugu, Abia, Imo, Anambra, Ebonyi, Cross River, Oyo, Osun, Ondo, Ekiti, Ogun, Kwara, Kogi, Nesarawa, Benue, Taraba, Niger, Abuja, Sokoto and Kebbi States. Groundnut led to the famous pyramid of Kano in the peak production years between 1960-1960 (NEARLS, 1995). Groundnut is also a versatile product which has multiple uses Kano state is one of the leading producers of groundnut in Nigeria[3].

## **CHEMICAL AND NUTRITIONAL COMPOSITION**

Cashews belong to the flowering plant family anacardiaceae and the order sapindales. The popular cashew nuts are actually the kidney shaped seeds that are found attached to the button of the fruit of the tree called the cashew apple. The nut is renowned for its delicate flavor and is a popular special garnish for a number of salads and fry dishes. The nut although considered native to the coastal areas of the northeastern zone of Brazil, cashews are regarded as delicacies and are widely appreciated by people all over the world. In the 16th century, Portuguese explorers introduced cashews into India and some African countries. Today, India, Tanzania, Mozambique, Nigerian and Brazil are the leading producers of cashew.

Cashews are a good source of magnesium; they also contain moderate amounts of vitamins A, B1, and B2, plus Iron, Phosphorus, Niacin, Calcium, Zinc and Amino acids. A quarter cup of cashews contains about 38% of the recommended daily allowance of copper, 22% of magnesium, 21% of tryptophan and 17% of phosphorus. These nuts are also a good source of calcium, iron, zinc, potassium, biotin and folic acid. They even contain some (about 0.8mg per 100 gram serving), manganese.

#### Nutritional Composition of Cashewnuts (per 100g)

Calories	584.5k cal
Carbohydrate	18.8g
Protein	15.7g
Fat	48.9g
Fibre	3.4g
Alcohol	0

Harvesting of cashewnuts starts towards the tail end of dry season mainly in February or March. The harvest period usually lasts for about 18 weeks. In the Eastern and Western parts of the country, where quality cashewnuts are grown, nuts are allowed to drop to the ground before they are collected. This practice ensures that only ripe nuts are collected. Cashewnut normally fall to the ground with their apples attached, the two are normally separated with a twisting action during collection. The remnants of the apple flesh adhering to the nuts are removed with a sharp knife. The cashewnuts are normally dried in the sun for 2-3 days, to reduce their moisture content to about 12%. They are packed in jute bags and are kept for up to 6-10 months to meet sudden demand for the cashewnuts.

Groundnuts known as *Arachis Hypogea* in an International Crops Research Institution for the Semi-Arid, Tropics (I.C.R.I.S.A.T) (1989-1990), describes groundnut as a dicotyledon plant consisting of a hardshell enclosing a kernel that can be eaten. They are very rich in fact and are not easily digested, it requires a coarse texture sandy light loam and slightly acidic soil to grow best on it. According to Akinsanmi (1975), the stated that: Groundnut is planted between March and April in West African forest zone, spacing is 15cm between seeds and 40cm -60cm between rows depending on each variety.

Propagation is 1-2 seeds in a hole with planting depth of 4-5cm. He went further that a matured groundnut last for five- six months and is harvested by picking from uprooted plant and digging from soil. Groundnuts are stored in sacks after shelling.

#### **Nutritional composition of Groundnuts (in percentage %)**

Fat 40%

Protein 18%

Alcohol 0%

Carbohydrate 21%

The Coconut Development Board has chalked out an ambitious plan for re-plantation of the crop and expansion of the area in nontraditional producing states. The objective of the programme is to achieve a level of annual production of 15 billion nuts by 2012. In India, almost the entire production goes for internal consumption in the following pattern about 47% for edible purposes, 28% for coconut oil 11% for tender nut and 6% for edible copra. Global export of coconut products exceeds \$1.2 billion annually. The growing market for all coconut product is waking up even in the USA and Europe countries which have used coconut in their cuisine.

#### **USES AND ECONOMIC IMPORTANCE OF NUTS**

- Cashewnut form part of many recipes, including salads, stir fry and stews. It even forms a key ingredient in a mock parmesan cheese
- Cashewnut when blended together with honey, cream and lemon juice is good and rich for a delicious dressing.
- Cashewnuts are a good source of magnesium, which contains a moderate amount of Vitamins A, B1 and B2.
- Cashewnuts are used as snacks or as a recipe which is good for the heart, the blood, bones and nerves, the immune system and general health.
- Consumption of cashews is very important for the prevention of gall stones in the human body, it is therefore, good to have a handful of cashewnut everyday as a snack or toss in some of them on your salad or over your oatmeal.
- Cashewnuts are very good source of vitamin K which help to prevent blood coagulation and the conditions associated with it.

- Cashewnuts are regarded as powerful diuretics
  - Cashewnuts are rich in copper being an important constituent of many <sup>15</sup> enzymes, copper aids in a number of physiological processes in the human body. It is especially beneficial in the removal of certain harmful free radicals from the body, aids in the utilization of iron.
- Cashewnuts help in the production of skin and melanin (hair pigment) and is important for the proper development of bones and connective tissues.
- Cashewnuts help to prevent excessive gushing of calcium into the nerve cells and activating the nerves. Thus, they play a major roles in keeping the nerves relaxed and prevent their over contraction.

### ANALYSIS OF THE NUTS

#### PREPARATION OF NUTS PRODUCT

There are so many products that can be prepared from the different nuts we have. But with cashew nut, coconut and groundnut as agricultural products , the following products were produced from the nuts cashew bread, coconut cake, desiccated coconut, groundnut soup.

#### CASHEW BREAD

##### RECIPE

Flour	1kg
Sugar	125g
Butter	125g
Yeast	1 tablespoon
Cashew	25g (grinded)

#### COCONUT CAKE

##### RECIPE

Butter	1kg
Flour	1kg
Baking powder	1 tablespoon
Egg	15
Sugar	500g
Flavour	2 tablespoon
Preservative	½ teaspoon
Coconut (grate)	30g

**DESSICATED COCONUT  
 RECIPE**

Coconut 250g

**GROUNDNUT SOUP  
 RECIPE**

**RECIPE**

Groundnut 200g

Rodo 50g

Dry fish 100g

Onions 20g

Maggi 2 cubes

Salt To taste

**ANALYSIS OF DATA COLLECTED**

**CASHEWNUT BREAD**

ATTRIBUTES	Very Good	%	Good	%	Fair	%	SATISFACTORY	%	TOTAL
Appearance	12	75	2	10	1	4	3	11	18
Texture	10	70	7	8	1	5	4	17	22
Taste	11	65	8	20	1	5	2	10	22
Consistency	10	65	3	12	1	4	6	19	20

**APPEARANCE:** 75% of the people who examined the appearance of the bread said it is very good, 10% said it is good, 4% said it is good and 11% said it is satisfactory meaning the appearance of the product is very good.

**TEXTURE:** 70% of the people said it is very good, 8% said it is good and 5% said it is fair, 17% said it is satisfactory, meaning the production has a fine texture. **TASTE:-** 65% said it is very good, 20% said it is good, 5% said it is fair and 10% said it is satisfactory.

**CONSISTENCY:** 65% said the consistency is very good, 12% said it is good, 40% said it is fair while 19% said it is satisfactory.

**TABLE I: SHOWS COCONUT CAKE ANALYSIS**

ATTRIBUTES	Very Good	%	Good	%	Fair	%	SATISFACTORY	%	TOTAL	%
Appearance	12	75	2	10	1	4	3	11	18	100
Aroma	8	65	7	10	1	8	3	17	19	100
Texture	10	70	7	8	1	5	4	17	22	100
Taste	8	65	8	20	1	5	2	10	22	100
Flavour	10	65	7	10	1	8	3	17	21	100
Consistency	10	65	3	12	1	4	6	19	20	100

**APPEARANCE:** 75% said the cake is very good in appearance, 10% said it is good, 4% said it is fair, 11% said it is satisfactory.

**AROMA:** 65% said it is very good, 10%, said it is good, 8% said it is fair, 17% said it is satisfactory.

**TEXTURE:**70% said it is very good, 8% said it is good, 5% said it is fair, 17% said it is satisfactory.

**TASTE:-** 65% said the taste and flavor is very good, 10 - 12% said it is good, 4 - 8% said it is fair, 17 - 19% said it is satisfactory.

**CONSISTENCY:** 65% said the consistency is very good, 12% said it is good, 4% said it is fair and 19% said it is satisfactory.

**TABLE 2: SHOWS GROUNDNUT SOUP ANALYSIS**

<b>ATTRIBUTE</b>	<b>Very Good</b>	<b>%</b>	<b>Good</b>	<b>%</b>	<b>Fair</b>	<b>%</b>	<b>SATISFACTORY</b>	<b>%</b>	<b>TOTAL</b>	<b>%</b>
Appearance	10	65	3	12	1	4	6	19	20	100
Aroma	8	65	7	10	1	8	3	17	19	100
Taste	10	70	7	8	1	5	4	17	22	100
Consistency	12	75	2	10	1	4	3	11	18	100

**APPEARANCE:** 65% said the appearance of the soup look very good, 12% said it is good, 4% said it is fair, 19% said it is satisfactory.

**AROMA:** 65% said the aroma is very good, 10%, said it is good, 8% said it is fair, 17% said it is satisfactory. **TEXTURE:**70% said the aroma is very good, 8% said it is good, 5% said it is fair,

17% said it is satisfactory. **CONSISTENCY:** 65% said the consistency is very good, 10% said it is good, 4% said it is fair and 11% said it is satisfactory.

**CONCLUSION**

In view of this research work, it is believe that the uses of nut product is well accepted. Cashewnut which contain about 38% of the recommended daily allowance of copper, 22% of magnesium, 21% of tryptophan and 17% of phosphorus. These nuts however are also a good source of calcium, iron, zinc, potassium, biotin and folic acid. They even contain some (about 0.8 mg per 100gram serving) manganese. However the groundnut soup can be improved upon by adding a little palmoil to make it colourful and attractive and appealing. This dish can be prepared in various hotels and restaurants and it can be served with Banku.

**REFERENCE**

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