

FOOD RESEARCH INSTITUTE
(COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH)

A SURVEY OF THE PREPARATION AND CONSUMPTION OF GHANAIAN FOODS



FOOD RESEARCH INSTITUTE



GHANA

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

SUMMARY

FOOD RESEARCH INSTITUTE

(COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH)

MAJOR STAPLE FOODS

A SURVEY OF THE PREPARATION AND CONSUMPTION OF GHANAIAN FOODS

By

John Dei-Tutu and Agnes Kafui Kwami



Food Research Institute
P. O. Box M.20
Accra. Tel.: 777330

AUGUST, 1993

9. SOUPS, STEWS AND SAUCES

9.1 SOUPS

9.2 STEWS

REFERENCES

C O N T E N T S

	PAGE
TABLE OF CONTENTS	i
ACKNOWLEDGEMENTS	ii
SUMMARY	iii
INTRODUCTION	1
1. MAJOR STAPLE FOODS	2
2. PREPARATION OF GHANAIAN FOODS FROM THE MAIN STAPLE FOODSTUFFS	2
2.1 CEREAL BASED DISHES	2
2.1.1 MAIZE	2
2.1.2 RICE	11
2.1.3 WHEAT	12
2.1.4 MILLET AND GUINEA CORN	14
3. PLANTAIN	19
3.1 PREPARATION OF PLANTAIN DISHES	19
3.1.1 FERMENTED PLANTAIN PREPARATIONS	19
3.1.2 UNFERMENTED PLANTAIN PREPARATION	20
4. CASSAVA	24
4.1 UNFERMENTED CASSAVA PREPARATIONS	24
4.2 FERMENTED CASSAVA PREPARATIONS	25
5. YAM	28
5.1 UNFERMENTED YAM PREPARATION	28
5.2 FERMENTED YAM PREPARATION	29
6. SWEET POTATOES DISHES	30
7. COCOYAM DISHES	31
8. LEGUMES	32
9. SOUPS, STEWS AND SAUCES	40
9.1 SOUPS	41
9.2 STEWS	42
REFERENCES	44

ACKNOWLEDGEMENTS

Information in this survey covers published literature on Ghanaian

foods as well as new information gathered from other sources. Some

Grateful acknowledgements are due to the following: The Director, National Board for Small Scale Industries for providing the funds for carrying out the project on Development of Traditional Foods into Intermediate, Finished and Convenience Forms.

Descriptions are given of the variety of uses of the following

Women in Agricultural Development (WIAD) of the Ministry of Agriculture (MOA) for providing information on some of the lesser known Ghanaian foods.

Information is also given on the following: *Sorghum* (Sorghum sp.), *Cassava* (Cassava sp.), and

Amorpha fulgens sp.

The staff of the Food Research Institute (FRI) test kitchen for providing information on some Ghanaian foods and recipes.

The *garden*, *garden*, *garden* and *garden* used as accompaniments of the

staples have also been covered. These are usually prepared from

A number of street food vendors who willingly provided information on the methods of preparation of some of the foods they produce for sale.

Information is also given on *garden* and *garden*.

Finally information is also given on snack foods from the various

regions of the country.

SUMMARY

Information in this survey covers published literature on Ghanaian foods as well as new information gathered from other sources. Some of the new sources include Women in Agricultural Development (WIAD), Food Research Institute Test Kitchen and a Number of street food vendors.

Descriptions are given of the variety of uses of the major staple foodstuffs namely maize (zea mays), Cassava (Manihot sp), yam (Dioscova sp), Cocoyam (Xanthosoma sp), Plantain (Musa sp), millet (Pennisetum sp), guinea Corn (Sorghum sp), rice (oryza sp), and cowpeas (vigna sp).

The sauces, stews, soups and gravies used as accompaniments of the staples have also been covered. These are usually prepared from vegetables spices cooking oils and protein foods such as meat fish, grain legumes and other sea foods.

Finally information is also given on snack foods from the various regions of the country.

The staple foods reviewed included cereals, pulses, oil seeds, fruits and vegetables from which a wide range of Ghanaian dishes and beverages could be prepared. The report also highlighted on sauces, stews and soups which may be prepared with pulses, vegetables, oilseeds and foods of animal origin.

INTRODUCTION

The population of Ghana is about 14 million with annual rate of increase of 2.3%. With this rate of increase, efforts have to be made in several directions to improve on the quality and quantity of food supplies so that all income groups can be provided with sufficient food to meet their nutrient requirements.

There is also the need to upgrade the level of processing, packaging so as to prolong the shelf-life of indigenous foods to a point where they can adequately compete with imported foods which are not nutritionally superior but have the advantage of convenience and attractive packaging.

Very little published information exists on Ghanaian foods. In the review of foods of Ghana, Whitby (1968) noted that the art of Ghanaian cookery has been an oral tradition for generations hence some of the descriptions she gave were based either on direct observation or on information from people who are accustomed to cooking the foods in question. She noted, that the descriptions might not satisfy everybody, especially people who are familiar with other methods.

This review covers published literature as well as information from Women in Agricultural Development (WIAD), the Food Research Institute and personal communication with cooked food sellers. It describes the preparation and consumption of Ghanaian food from a number of staple foodstuffs grown in the country and also on imported wheat flour.

The staple foods reviewed included cereals, pulses, oil seeds, fruits and vegetables from which a wide range of Ghanaian dishes and beverages could be prepared. The report also highlighted on sauces, stews and soups which may be prepared with pulses, vegetables, oilseeds and foods of animal origin

STAPLE FOODS

(ie meat, fish and seafoods.)

It is clear that the pattern of food preparation and consumption is similar for all the regions and ethnic groupings. If the staple is a cereal, it is either milled directly into flour or steeped in water, milled, made into a dough and fermented briefly. The flour or dough is cooked in water with constant stirring into a thick paste. This is eaten with a soup, stew, sauce or gravy.

The roots and tubers and similar starchy staples like plantain are normally boiled in water and eaten with soup or sauce. The boiled root/tuber may be mashed or pounded into a paste and similarly eaten. They may also be cut up into small pieces, fried in oil and eaten with gravy or sauce. Another method is cutting them up, sundrying, milling into flour which is cooked into paste. In addition to these methods of food preparation, baking and roasting are also done with some of the staples and the products consumed similarly.

Even though the present survey may not exhaust the list of foods prepared and consumed in all districts and villages in Ghana, it is hoped the scattered information on Ghanaian foods has been brought together for the benefit of the Food Scientist/Technologist, Nutritionist, Dieticians, Home Economists and Entrepreneurs.

MAJOR STAPLE FOODS

1. STAPLE FOODS

(Whitby, (1968) reported that the main staple foodstuffs in Ghana may be found in broadly three main zones namely: Coastal plain, Forest zones and the Savannah zones.

- a) The coastal plain in which the chief staple crops are corn or maize (*Zea mays*) and cassava (*Manihot sp.*)
- b) The forest zone, in which the chief staples are plantain (*Musa paradisiaca*), cassava (*Manihot sp.*) and cocoyam (*Xanthosoma mafaffa*) with some maize and yam (*Dioscorea sp.*).
- c) The northern savannah zone where the main staple crops are millet (*Pennisetum sp.*) with early and late varieties; guinea-corn (*Sorghum sp.*) and yam with some rice, maize and cassava. It is also an area of the greatest production of groundnuts. It is of interest to note that now rice production is being promoted in virtually all the ecological zones even though large quantities of it and wheat are still imported.

2. PREPARATION OF GHANAIAN FOODS FROM THE MAIN STAPLE FOODSTUFF

2.1 CEREAL BASED DISHES

2.1.1 MAIZE

Maize may be prepared in a variety of ways and the maize dough serves as the basis of many common dishes. To make the dough, the corn is soaked for a period of one to three days, according to the use for which it is finally intended. It is then milled and mixed with water to make a stiff dough which is then allowed to ferment spontaneously for a period of less than a day to about three days depending on

the use to which it will be put. It is cooked into banku, kenkey of various kinds, akple, kpokponso and other dishes. The following are descriptions of some of the dishes:

2.1.1.1 Fermented Maize Preparation Dishes

- a) **Banku (Ga):** A thick porridge made for home consumption or for sale. Banku is not normally wrapped. A slurry of maize dough is added to the boiling water and stirred vigorously with a wooden ladle to prevent lumps from forming. More water may be added, a little at a time, until the desired consistency is obtained. During the entire cooking period, the pot is kept on the fire. Total cooking time is about 30 minutes. The banku is usually moulded into balls the size of which may be the serving for one person. It is served with soups, stew or gravy and fried fish.
- b) **Akpler (Ewe):** A rather softer form of banku. It is often made from a mixture of corn dough and cassava dough in a ratio of about one to one. This ratio may however vary depending on the cook.
- c) **Kenkey:** It is one of the most widely used foods. There are different types which are associated with particular regions of the country. Kenkey is thick porridge made into balls or other shapes, wrapped in corn-husks or leaves and steamed. The process of kenkey making is lengthy and it is more often purchased from a kenkey-maker than cooked at home.

i) **Komi or Ga kenkey:** The dough is fermented for two to three days. It is then divided into two portions. One-half is steamed with constant stirring until it is about half-cooked and this is called aflata. Salt is added during the steaming process. The aflata is then mixed thoroughly with the uncooked dough. The mixture is then divided into portions which are wrapped in clean pre-wetted corn husks. Sticks, leaves or broken earthenware pieces are placed at the bottom of a large iron pot. Some water is poured on the sticks and brought to the boil. The balls are then arranged on the sticks above the water and are covered with a heavy cloth. A good fitting lead is placed over the top of the pot and the contents cooked on fire for about two hours or more depending on the size of the batch. The kenkey balls must be covered with water during cooking. If the water does not rise high enough on boiling, the top most balls are re-cooked again. The Ga kenkey is characteristically sour and it is prepared from whole meal. The balls are wrapped in corn husk or leaves and

ii) **Dokono or Ntaw-fanti kenkey:** The dough is fermented not more than two days. When the dough and aflata have been mixed, the mixture is left to stand six to eight hours. The final balls are wrapped in plantain leaves and steamed. This type of kenkey is less sour than Ga kenkey and contains no salt.

- iii) **Akporhe, Nsihu (white kenkey):** Before being taken to the mill for grinding, the corn is dehulled by pounding lightly with a little water to remove the bran. These days, the dehulling of the maize may be done mechanically at the mill before the grinding takes place. The dough is fermented for just 24 hours. Akporhe, the Ga form, is wrapped in corn husks with part of the ball exposed at the top and steamed. Nsihu, the Fanti variety is completely wrapped in leaves.
- iv) **Kokui-Ewe kenkey:** The meal is sifted to remove some of the bran before being made into dough. The mixture of dough and aflata is left to ferment for about eight hours before being moulded into balls. The balls are then wrapped in corn husks and steamed.
- v) **Sweet kenkey:** In this variety sugar or boiled mashed sweet potato is added to the dough as a sweetner and part of the dough is used for the aflata. The mixture of dough and aflata is left to stand for about eight hours. The balls are wrapped in corn husk or leaves and steamed for about four hours.
- d) **Abolo (Ewe):** The process of manufacture of this product resembles that of kenkey with the following exception: It is made from polished maize. The corn is wetted with water (not soaked) and ground coarsely immediately. The meal is sifted to remove the bran and germ. The

g) **Kasafa (Ewe) or Agidi (Ga or Yoruba):** Maize is soaked in

resulting endosperm is finely ground into flour which is made into dough with water. Half to two-thirds of it is cooked into aflata. This is then mixed with the uncooked dough and the mixture allowed to ferment for about eight hours after which it is placed on leaves and steamed into "cakes". The fermentation may be aided by the addition of bakers yeast and some wheat flour in order to improve the texture.

i) **Abolo (Ga):** This type of abolo is prepared in the same way as the ewe type, but it is baked instead of steamed.

e) **Akasa (Ga), Akatsa (Ewe), Koko (Hausa):** A thin pap prepared from fermented maize, millet or sorghum dough. It is pleasantly sour in taste and used as traditional weaning food for children. It is also taken for breakfast with akla or bread. In making akasa in large quantities for sale, corn is soaked for about twenty hours, ground and mixed with a large volume of water. It is then put through a fine sieve or muslin to remove the particles of bran. The mixture is allowed to ferment for 18 to 20 hours then cooked till it thickens.

f) **Kpokpoi (Ga), Amo yakayake (Ewe):** This is eaten especially at the Homowo festival by the Gas. However, the Ewes do not associate it with any special occasion. To make this product, maize is soaked 24 hours, milled, slightly wetted, and allowed to ferment overnight. The following day the fermented dough is steamed in a specially designed pot. After steaming palm-oil and some cooked okro are added. It is then served with palm soup or, okro soup. An alternative method is to sun-dry the fermented corn dough and mix it with the other ingredients without application of heat. Kpokpoi, especially when made by this second method, frequently ends up contaminated causing "Homowo diarrhoea".

g) **Kaafa(Ewe) or Agidi (Ga or Yoruba):** Maize is soaked 18 to 20 hours, ground, and mixed with a large volume of water. It is then strained through a very fine sieve to remove the bran. The liquid is then allowed to ferment for about 18 hours. The "sour water" which by this time contains lactic acid, is then poured off, leaving a very wet paste. The paste contains 55 per cent water. This paste is added to boiling water and cooked on fire until it is very thick. It is then scooped out into leaves and wrapped into a wedge-shaped package. Agidi is eaten with soup. It is particularly popular in feeding the sick in Ghana and is used widely in hospitals.

h) **Tuo Zaafi.** It is a meal that is made from maize, millet or sorghum mainly in the Northern and Upper Regions of Ghana.

Corn being very much harder than millet or sorghum is traditionally not directly ground by hand on stones. The process of manufacturing flour is more elaborate than that of other grains. The method is described in four steps:

i. The maize is wetted with a little amount of water and pounded lightly for dehulling. Grit may be added to the maize before pounding in order to facilitate dehulling. After pounding the testa is winnowed off.

ii. The grain is next soaked overnight.

iii. It is then pounded, or as is the practice nowadays, taken to a commercial mill to be ground.

iv. The damp flour is spread to dry in the sun and then sometimes (or possibly always) milled again, after which it is sifted. It should be noted, however, that the

commercial mills can be used to grind whole grain maize into fine flour through repeated grinding. The use of this flour is fast replacing the one obtained by the traditional process.

To make tuo zaafi the flour is sprinkled by handfuls into boiling water and stirred. It is cooked on fire with vigorous stirring for about ten minutes or longer, if the quantity is large, into a paste. It is served with soup.

2.1.1.2 Unfermented Maize Preparation

- a) **Oblayo (Ga):** the testa of maize is removed by pounding and the whole grain boiled to make porridge.
- b) **Ekuegbeemi (Ga) (maize grit):** The polished maize is broken into grits by either pounding or rough grinding in a corn mill. It is washed repeatedly (3-4 times) and boiled to make porridge known as ekuegbeemi.
- c) **Maize Grit Jollof:** Gritted corn is washed and soaked overnight. A little water is added to prepared beans stew which is allowed to boil for sometime. After this the soaked corn grit is added and the mixture is boiled till maize grit is tender. It is served warm.

2.1.1.3 Roasted Maize Preparation

- a) **Roasted Corn Meal:** Ablemamu (Ga) Kyekyire (Twi) Eborow isiam (Fanti) Wototoe (Ewe). The dry corn is roasted in an earthenware pot until brown. It is milled into a whole meal flour after cooling.

The flour from this product is sometimes used in much the same way as corn-dough in such dishes as ablemamu banku and ablemamu akasa. It can be eaten uncooked also with banana or pawpaw or mixed with water and sugar as a drink.

- b) **Aprapransa (Twi)** Palm soup is prepared with vegetables, spices, fish and beans. Roasted corn meal flour is sprinkled into the soup on fire and it is carefully stirred to avoid lumpiness. Cooking continues until it reaches a desirable consistency. It is a popular dish, especially when served hot.

Dzenkple (Ewe) Akplidzii (Ga) is similar to this but palm-oil is used instead of palm soup. This foodstuff is often eaten with crabs.

2.1.1.4 Snacks from Maize

- a) **Iced Kenkey:** Kenkey is mashed and made into slurry with water and sweetened with sugar into a drink. It is chilled and commonly offered for sale by drink-bars.
- b) **Banfo Bisi (Twi) Amo kaklo (Ewe):** A small amount of wheat flour and sugar are added to unfermented corn dough and the mixture made into cakes and fried.
- c) **Roasted corn:** The grains are roasted in a pot over heat until golden brown. They are then poured into salted water and allowed to soak for about 20 minutes, then drained and heated till dry. The corn is served with roasted groundnuts.

- d) **Esie (Twi):** The corn and groundnuts may be pounded together after roasting to make a meal **Esie (Twi) Ebuoro Sam (Fante) Sale (Nzima)** which is eaten with sugar and salt.
- e) **Dzowe (Ewe):** It is made from the same ingredient as above except that pepper is added and the flour is formed into balls.
- f) Whole dry maize may be boiled and salted. If the maize is very dry it is usually soaked for few hours before boiling. It is served with roasted groundnuts. In **Ashikoo (Ga)** the corn and groundnuts are boiled together.
- d) **Atifufui (Ewe):** Thick porridge is prepared with corn flour, sugar and salt are added to taste whilst cooking. It is spread to cool and some dry flour again mixed with it. It is rolled into round strips and deep fried in oil till deep brown and served with any soft drink.

2.1.1.5 Non Alcoholic beverage from Maize

a) **Adimankyenewom (Farmers special)**

Maize is soaked overnight, strained and spread on clean cloth to germinate for 3-4 days. It is washed and dried. The grain is coarsely ground. A quantity of water divided into 3 parts $\frac{2}{3}$ is boiled, $\frac{1}{3}$ is mixed with the milled maize and added to the boiling water. It is then boiled till $\frac{1}{3}$ of the water evaporates. Caramel is prepared and it is

left on low heat to melt after which it is added to the boiling drink to colour. Salt and sugar are added to taste. The mixture is strained and allowed to cool. It is served chilled.

- b) **Liha (Ewe) Ahey (Fanti) Mmeda (Ga):**
Maize is germinated or malted and sundried and roughly milled or pounded. Water is added and it is boiled in a big pot to evaporate some of the water. It is strained and left to mature and ferment 2-3 days. After this sugar and caramel are added. It is served chilled.

2.1.2

RICE

This is a popular food in all parts of the country but it is not the chief staple in any area. A certain amount of rice is grown in Ghana but the greater part is imported.

Whitby (1968) reported that some of the rice grown in northern Ghana is steamed or boiled as paddy so as to loosen the glumes. This results in the transfer of some of the pigment in the pericarp to the endosperm as in parboiling. Whether B vitamins are transferred too does not appear to have been investigated.

Country rice frequently has small stones and grit in it, necessitating long and elaborate washing. This undoubtedly leads to a considerable loss of water-soluble nutrients.

- 2.1.3.1
- a) **Cooked Rice** is frequently sold by food-hawkers. It is often bought as a supplementary food for babies. A popular mixture for breakfast is rice and cowpeas (**Vigna unguiculata**) served with pepper fried in oil. (This may also be purchased from hawkers). A number of purchased samples of this foodstuff were found to contain about 10 per cent of beans by cooked weight whereas home-made ones usually have a bean content ranging from 25 to 30 per cent.
 - b) **Rice+water** or rice cooked in water and sweetened with sugar is sometimes taken for breakfast.
 - c) **Jollof Rice.** - A dish originating from Sierra Leone. In making it, boiled rice is mixed with meat stew containing pepper, onions and tomatoes to make a preparation resembling a pilao or risotto. Ghanaians frequently cook the rice together with the other ingredients. In Sierra Leone stew and rice are cooked separately and mixed afterwards.

2.1.3

WHEAT

Wheat is not grown in Ghana but a considerable tonnage of imported wheat is milled in the country. Bread is a popular food, especially for people who have little time to cook. Brick Beehive-shaped ovens, are used in many areas for baking it. The oven is pre-heated by burning wood fuel in it. When the desired temperature is attained the fire is raked out and the bread is baked by the residual heat. There are also modern bakeries in most large towns which make bread for sale.

2.1.3.1 Wheat Flour Products

a) Bread

There are two main types of bread, **Tea bread**, which is not sweetened, and **sugar bread**. Both come in loaves of several sizes, from (28g) upwards. Tea bread is often served with a glass of "tea" (the term tea covers coffee and various proprietary beverages) for breakfast. Stalls providing this meal can be seen in many towns. A loaf may also be eaten by itself or with tinned fish or corned beef.

b) Cookies

Various popular snacks are made from wheat flour and sold by hawkers. They include pan-cakes, doughnuts and the following:-

i) **Twisted Cakes, Atshomo** - To prepare this, a dough is made with flour, fat, sugar and water; or among the Gas and Ewes with an egg and milk instead of fat but without sugar. The dough is flavoured with aniseed or nutmeg rolled and cut into diamond shaped pieces which are then slit, twisted, and fried in hot fat.

ii) **Dough-cakes: Togbei, Bafroto, Baflot** (dough fruit). - A dough is made with flour, sugar, palm-wine to supply yeast and beaten egg. It is allowed to rise for four hours and then fried as balls. The dough may be flavoured with nutmeg.

iii) **Water cakes.** - Fat and sugar are creamed together; flour, egg and water are added to make batter and the mixture fried in small balls.

iv) **Sweet Cakes** (English type). - These may be plain or may contain glaceed fruit, dried fruit or resin. They may be made for domestic consumption or for sale.

2.1.4. **MILLET AND GUINEA CORN**

Whitby (1968) gave a good account of the traditional process of obtaining flour from millet and guinea corn. Both early and late maturing millets occur in Ghana. The uses of these grains are for the most part similar, though some types of guinea-corn are reserved for brewing, while millets are used in the preparation of traditional northern dishes such as maasa and fula.

- a) **Tuo-zaafi (Hausa)** The commonest use for both millet and guinea-corn is in the form of a stiff porridge made from the ground flour. The word used for this dish in southern Ghana is tuo zaafi, which will be used here since each of the northern languages has a different name for it. It is sometimes referred to by the initials of the Hausa name "T.Z." Traditionally millet or sorghum is ground to flour between stones or in a mill. Usually the grain is stored intact and only one or two days' supply of flour is ground at a time, though ready-ground flour is sold in the main markets. The grain may be washed before grinding but is not usually soaked. The bran does not appear to be removed,

either by sifting the flour or by pounding and winnowing before grinding. As far as has been ascertained most of the flour used in the northern savannahs is of very high extraction. In this it differs for example, from Gambian millet or sorghum flour - from which the bran is removed by pounding and winnowing.

To make tuo zaafi the flour is sprinkled by handfuls on to boiling water and stirred in. It is cooked on fire with vigorous stirring for about ten minutes or longer if the quantity is large it is eaten with soup. It should be noted that with the introduction of commercial grinding mills the traditional mill stone has been faced out for milling grain.

Flour from millet and guinea corn may also be taken raw. It is usually damped and shaped into a cake which is broken up in water and drunk, but a person in a hurry may simply stir a handful of flour into water and drink it.

The flour may also be cooked to make gruel or pap, koko (Hausa). It is simply mixed with water and boiled till it thickens. No fermentation is involved in the preparation.

- b) **Maasa, (Millet cakes)**- The millet grain is decorticated by pounding and washing away the husks. One-half is pounded to flour and sifted. The other half is boiled without pounding until soft. The sifted millet flour is added to the boiled half with enough water to make a batter. This is often done in a special cooking vessel

(made of clay) which resembles a very set of patty-pans. This is put over fire and one cake fried in each cup. The process can be seen in many northern markets where the cakes are made for sale.

- c) **Fula.** - The millet is soaked and pounded to remove husks which are winnowed off. It is then ground to flour which is mixed with water to a dough and shaped into balls. These are put into a large container with yam vines or other support in the bottom to hold them above the level of the boiling water and are steamed for about one hour in the covered vessel. The dough is then removed and pounded gently in a mortar. Pepper and ground cloves (**kamafuri, masoro**) are added bit by bit until completely mixed. The dough is then shaped into balls again and rolled in rice or millet flour to prevent it from sticking. The balls are mashed into water or milk; sugar is added and so eaten. Brown rice may be used instead of millet. Fula is usually bought from hawkers.
- d) **Besi (Dagarti).** - A granular mixture of millet and groundnuts. The millet grain is fried then pepper is added and the mixture milled. It is then mixed with milled groundnuts and fried again. It is eaten with the addition of sugar and water, or if available, milk. The proportion of groundnuts in besi mixtures is generally small.
- e) **Bensaab (Dagarti)** is a thick porridge made of millet flour and beans which is eaten with groundnut soup.

- f) **Basi:** It is flour normally prepared for snack by the northerners. Millet is dehulled and cleaned, milled into flour and small water added to moisten it. The moistened flour is steamed and dried. Groundnuts are roasted and added to the flour. Salt and pepper are also added and the mixture is ground into fine flour. It is eaten with the addition of sugar and water, or milk.
- g) **Millet Koko:** Millet is soaked in water for 4 hours strained, and milled together with spices. It is mixed with a large volume of water, left to stand for sometime, strained and left overnight. Liquid from the surface is poured boiled and the dough then added and stirred until lump free and smooth. It is served with koose for breakfast.
- h) **Zog-Kuo (Flour water):** Millet is cleaned dried and roasted till brown. It is ground into smaller grits. Water is added to it and after sometime it is strained. Sugar is added to taste and it is served cool.
- i) **Millet and Beans:** Millet is cleaned and boiled for 20 minutes. Beans is washed and added to the boiling millet and cooked until well done. It is served with stew.
- j) **Yaakikalli:** Millet is milled into flour. Some water is added to already prepared gravy. The milled flour is stirred into it and cooked until well done. Served hot or warm.

k) **Yama:** Millet is ground into coarse flour and mixed with water into a dough. Handfulls are moulded and steamed over boiling water. Cold water is poured over it to reduce the temperature after it is cooked. The steamed product is picked out of water and served with ground pepper salt and the fried onions. Or it can be mashed in fresh milk and sugar is added to taste. It is eaten as snack.

l) **Kyebala:** (Millet pancake): Ground onions and salt are added to millet flour and made into batter. It is fried shallow and served as snack.

2.1.4.1 **Alcoholic beverage from millet or sorghum**

a) **Pito:** It is a local beer made from either millet or sorghum. The grain is malted by dampening and leaving it to sprout. It is sun-dried, ground and boiled for many hours with a large volume of water in an earthenware pot. It is strained and the wort so obtained is allowed to ferment spontaneously into pito. It may or maynot be chilled before serving. Pito is a common drink all over Ghana especially in the Northern and Upper regions. It plays an important role in the social life of the people and is often brewed for sale.

3. PLANTAIN

3.1 Preparation of Plantain Dishes

These comprise of several sweet foods prepared from mixture of corn dough and pounded ripe plantain. The fermentation period is always brief.

3.1.1 Fermented Plantain Preparations

a) **Apiti (Akan):** Corn dough is fermented eight hours and one part of it mixed with three parts of soft ripe plantain pulp and the mixture wrapped in leaves and baked in an oven. It is eaten as a snack.

b) **Ofam (Twi):** The proportion of pounded soft ripe plantain and corn dough as for apiti is used. Palm-oil is added and the mixture is baked without wrapping. Groundnuts, eggs, and condiments may also be added to make a richer mixture.
Abongo (Ewe): Pounded soft ripe plantain

is mixed with a small amount of unfermented corn dough. It is mixed with palm-oil and sugar, wrapped in leaves and baked.

c) **Plantain Kokonte:** It is made from green, dehydrated plantain. It's preparation is similar to cassava kokonte. Flour prepared from it is cooked into thick porridge and eaten with soup. Cassava kokonte flour may be mixed with the plantain kokonte flour to improve the texture. It is eaten with groundnut soup or okro soup.

Unfermented Plantain Preparation

- a) **Kyekyirebetu (Twi):** Soft ripe plantain is roasted with the peel. It is then peeled and pounded together with spices. Corn flour is added in the proportion 1:3 and mixed thoroughly to avoid lumps. Groundnut paste is added to taste. It is then made into balls wrapped in leaves and baked. It is eaten as snack.
- b) **Plantain Kakro, Kaklo (Ga, Ewe, Twi):** Soft ripe plantain is peeled and pounded until free of lumps. Wheat flour and condiments are added to the pounded plantain and mixed well. It should be of dropping consistency. It is fried in hot oil and served with beans stew or roasted groundnuts.
- c) **Tatale:** It is a product similar to kakro. Finely ground rice or corn dough is added to the plantain paste. The mixture is spiced with ground onions, ginger, and salt and fried in hot oil into flat pan cakes. It is usually served with boiled bambara beans either as a snack or main meal.
- d) **Kelewele (Ga):** Ripe plantain is peeled and cut into pieces. Ground pepper, onions and ginger are added and mixed well with the cut pieces. It is fried in hot oil until well browned and cooked. It is served with roasted groundnuts.

- e) **Plantain or Banana Koko:** This is mainly prepared for children. Soft ripe banana or plantain is washed and cooked unpeeled till tender. It is left to cool, peeled and mashed. Sugar and salt are added to taste.
- f) **Plantain Ampesi:** This is boiled mature green plantain. During boiling salt is added to the water. It is served with vegetable, meat or fish stew.
- g) **Platain fufu:** Boiled green plantain is pounded in a wooden mortar with a wooden pestle into a thick paste. It is served with soup prepared with fish or meat. Cassava, yam and cocoyam can also be used in making fufu.
- h) **KokooKyimil (Ripe plantain paste for toddler weaners):** Riped plantain is peeled cut into pieces and boiled till tender. It is mashed and salt is added to taste. Palm oil and pounded dried fish (herrings) are also added. It is served warm.
- i) **Potrokoma (Twi):** Salt is added to ripe plantain and boiled till tender. Roasted groundnut, pepper, onions are ground together. The ripe plantain is mashed and mixed with the ingredients. Palm oil is added. It is served as snack.

- j) **Asenka (Twi):** Ripe plantain is peeled and pounded into a soft paste (free from lumps). Corn dough and little water are added and the mixture worked into dropping consistency. Salt is added to taste and it is wrapped with plantain leaves and boiled until done. It is served as snack with roasted groundnuts.
- k) **Epitsi:** It's preparation is similar to the above (Asenka) except that ground onions and pepper are added to the mixture and instead of boiling it is baked in the leaves. The name Akpiti (Ga) Epitsi (Fanti) may be used to describe similar but not identical products.
- l) **Esaata Ebeebe (Ga):** Unpeeled riped plantain is baked in hot oven until well done. Peel is removed and served with roasted peanuts.
- m) **Borodze Eto:** Green plantain is peeled cut into pieces and boiled till tender. Roasted salted fish is mixed with groundnut and is mashed with the cooked plantain. Ground condiments and palm oil is mixed together with the mashed plantain and served as snack or a main meal.
- n) **Plantain Chips:** Green plantain is peeled, sliced into pieces and soaked in salty water for some minutes. It is then fried in oil until crispy. It is also served with roasted peanut.
- o) **Ripe plantain mpotompoto:** Ripe plantain is peeled and boiled together with basic ingredients (onions, pepper, tomato and salt)

and mashed. Fish and palm oil is added to the mashed plantain and served as snack.

- p) **Doko Doko:** Water is extracted from very ripe plantain and boiled. Corndough is strained and added to the boiling plantain water.
- q) **Akatinakwa (Twi):** Ripe plantain is mashed. Basic ingredients and stinking fish is ground and added to the mashed plantain and brought to boil. Powdered green plantain is gradually added and the mixture stirred until tender. Palm oil is added. It is normally served for lunch.

4. CASSAVA

4.1 Unfermented Cassava Preparations

- a) **Cassava fufu:** Cassava is peeled cut into slices, and boiled till tender. It is cooled and pounded in a mortar into a stiff paste. It is eaten with either palm, groundnut or light soup. However, it is a common practice to mix cassava with green plantain, yam or cocoyam for preparation of the fufu.
- b) **Ampesi (Twi):** Fresh cassava roots are sometimes peeled cut into slices and boiled till tender. Salt is added to taste and it is served with stew or gravy. The Ampesi can also be made from cocoyam, plantain, sweet potatoes or yam.
- c) **Bankye Kyimil (Cassava mpotompoto):** Peeled washed cassava is cut into cubes and boiled together with tomatoes, pepper, fish (smoked or salted) and chopped onions. Salt is added to taste. The cubes are mashed into a smooth paste. Palm oil is added and it is served hot. Mpotompoto can also be made from yam and cocoyam.
- d) **Bankye Eto (Twi) (Mashed cooked cassava) :** Peeled cassava is cut and boiled with some salt until tender. Onions, tomatoes and pepper are ground and mixed thoroughly with the mashed cassava. Palm oil seasoned with onions is added to the mixture. It is served with roasted peanuts. Eto can also be made using plantain, yam, cocoyam.
- e) **Apalankye (Fried cassava):** Pelled cassava is cut into small pieces, washed in salted water and fried in hot oil (deep frying) until golden brown. It is served with pepper sauce and fried fish.

1.2 Fermented Cassava Preparations

Peeled fresh cassava is finely grated put into sack and dewatered by placing weight on the sack for fermentation. and kept for 3 days. A "starter culture" made from pieces of cassava which have been soaked in water for 5 days is sometimes used to speed up the fermentation process. This type of dough is used for preparing different dishes. It may be added to corn dough up to equal quantities to improve the texture and taste of akple or banku.

- a) **Agbelimokple (Ewe) Fufu (Ga).** A dish resembling banku in method of cooking may be made from cassava dough by adding the dough to boiling water and stirring until thoroughly cooked. It is usually served with okro, groundnut or palm soup.

- b) **(Yakayake)** The fermented cassava dough may also be sifted and steamed to make a dry flat spongy cake . It can be eaten with soup or fried fish with pepper.

- c) **Gari:** Similar to the preparation of cassava dough, peeled fresh cassava is grated. It is put in a sack and weights are placed on it to squeeze out the juice. During this time it partly ferments. Squeezing may continue for two or three days.

The squeezed pulp is sifted and is then roasted or fried in a very large shallow earthenware basin. Sometimes (especially near Cape Coast) the basin is greased with palm-oil, in which case the gari comes out yellow. While roasting, the gari is constantly tossed about with a scraper made from a piece of calabash. The resulting product is dry and granular. It is sifted again and any large pieces

are put aside to be milled and added to the original bulk.

The mass of gari in the basin does not appear to reach a very high temperature during roasting, but studies in Nigeria, where incidentally gari-making is believed to have originated, show that the gelatinization of the starch grains necessary to produce the cold swelling property takes place only when the gari reaches at least 75°C. Presumably the granules, spending brief periods in contact with the very hot basin, reach the necessary temperature for a few seconds or minutes.

- i) **Gari water:** Gari has the property of swelling up in cold water. It can be eaten (or "drank") simply with water, without any cooking. Sugar and milk may be added.

Gari and Beans: Gari may be mixed with cooked beans and a pepper sauce or dzomi. It is balanced meal and very popular with children. It may be served with fried ripe plantain.

- ii) **Gari Foto:** Little water is sprinkled on gari to soften it - Gravy is prepared with chopped onions, fish, tomatoes, pepper and salt to taste. The gari is then added to the Gravy stirred well on a very low heat. It is served hot.

- e) **Gari Balls (Banku):** Salt may be added to water and brought to boil. Gari is sprinkled into it while stirring vigorously to avoid lumps. It is stirred until it becomes thick porridge and then moulded into balls. It is eaten with okro stew, gravy or

f) **Kokonte.** - Cassava is peeled, cut into pieces and dried in the sun. In the early stages while it is still wet internally, it ferments. It may also become infested with black mould. Experiments have shown that the fermentation is essential for the production of the characteristic flavour of kokonte and that twenty-four hours is enough for the process.

When dry the kokonte is broken to pieces by pounding in a mortar, ground to flour in a mill and sifted. The flour is cooked by sprinkling into boiling water while stirring vigorously and makes a rather glutinous, somewhat translucent porridge. If mould was present on the cassava the porridge looks greenish or brownish; if not it is cream-coloured.

g) **Pino (Soaked Gari and Tomatoes)** Gari is well mixed with salt to taste. Small water is added to it. It is eaten with beans stew, gravy or soup.

h) **Starch Biscuits:** Starch from cassava is prepared by grating peeled cassava. It is put in sack and weight is placed on it to press out the milky juice, which is allowed to settle for day. Afterwards the water on top is discarded and the starch is dried. The unfermented starch is used for making biscuits.

5. YAM

Yams are grown more in northern Ghana than in the forest and coastal zones. In the latter areas, however, they are used in certain dishes which are not common in the north. Yam may be cooked as ampesi or fufu like other roots. Boiled Mashed yam is frequently given to infants.

5.1 Unfermented Yam Preparation

- a) **Oto (Twi, Fanti, Ga Bakebake, Ewe):** Mashed yam with palm oil and hard boiled eggs. Palm oil is mixed with cooked mashed yam. Boiled eggs are peeled and put on top of the mash. This is a festival dish. Sometimes tomato and onions are fried in oil and added to the yam.
- b) **Mpotompoto (Twi), Dablu (Ewe):** Yam pottage. Yam is peeled cut into cubes, and boiled with meat or smoked fish, onions, pepper and tomatoes in a fairly large volume of water. The soup is separated from the yam which is mashed with dzomi or palm oil. The mashed yam is served with the soup.
- c) **Fried Yam:** Peeled Yam is cut into pieces, rubbed with salt and fried in hot oil till light brown. It is served hot with gravy or beans stew.
- d) **Yam balls:** Peeled yam is boiled with salt and mashed. The mashed yam is mixed with ground onions and salt. Margarine is mixed with egg yolk and added to the mashed yam. The mixture is made into balls coated with egg white and fried till deep brown. It is eaten with gravy or beans stew.

5.2 Fermented Yam Preparation

- a) Yam flour/Yam kokonte: This is made from the "heads" of yams which take longer to cook than the rest and are therefore not commonly cooked when making ampesi or fufu. It may be made also from any yam which shows signs of rotting. Yam flour is cooked like cassava kokonte, or made into wasawasa. For this the damped flour is shaken in a calabash until it becomes rolled into tiny balls which are steamed in a perforated pot over boiling water.
- b) Sweet potato Keliho (fried potatoes): Sweet potatoes are peeled washed and cut into pieces and put into salt water. It is then fried in hot oil until golden brown. It is served with pepper sauce and fried fish.

SWEET POTATOES DISHES

Sweet potato is mainly grown in the north but it has become very popular in the south of late. Sweet potatoes is made into Oto, cooked as ampesi, mptompoto or fried like any other root and tuber.

a) **Akaw (Boiled Sweet Potatoes in Jacket):** Thoroughly washed sweet potato is boiled. It is peeled and eaten as such or served with hot pepper sauce and fish.

Cocoyan leaves (Nkontomira) (w) cocoyan leaves are

b) **Sweet potato Koliko (fried potatoes):** Sweet potatoes are peeled washed and cut into pieces and put into salt water. It is then fried in hot oil until golden brown. It is served with pepper sauce and fried fish.

COCOYAM DISHES

Cocoyam (*Vigna angustata*)

- a) **Cocoyam:** Ampesi, Oto, fufu, mpotompoto can also be made from cocoyam as from roots and tubers. It is a high protein content which is double the protein value of other tubers.
- b) **Cocoyam Ogo:** Cocoyam is roasted peeled and mashed. It is mixed with ground pepper, onion and salt after which Palm oil is added. It is served hot. It is usually referred to as red ogo, black ogo, etc.
- c) **Cocoyam leaves (Nkontomire, Twi)** cocoyam leaves are a very important leafy vegetable in the forest zone. It is transported to other regions of the country for its popularity. It is used mainly for soups, stews and sauces.

In the north boiled cocoyam may be eaten with soup in place of the usual...

a) Boiled cocoyam with garlic. Cocoyam are boiled until soft. Salt is added to taste. Palm oil is added to the boiled cocoyam and served with garlic.

b) Roasted corn and cocoyam Porridge. Cocoyam are boiled until soft. The water is drained off. Oil and ground pepper are added to the cocoyam. It is then mixed with the corn porridge. It is served hot.

c) Rice and Cocoyam (Wankya). Cocoyam are boiled until soft. They are mixed with rice and served with palm oil and salt.

8. LEGUMES

8.1 Cowpeas (*Vigna unguiculata*)

The economic value of cowpeas has long been recognised in Ghana, particularly as a subsidiary crop to be relied on during the lean season. Its nutritional value also lies in their high protein content which is double the protein value of most cereals. Whitby (1968) report that cowpeas are the most widespread legumes in Ghana and are eaten throughout the country. There are white, black, red and brown varieties usually referred to as red beans, black beans, etc. by Ghanaians. In the south cowpeas are most commonly eaten boiled with rice or gari. Rice and beans are among the commonest foods sold by hawkers and are often bought for breakfast or lunch by school children and workers. Stews or gravy are usually served with these dishes.

In the north boiled cowpeas may be eaten with soup in place of tuo zaafi.

- a) **Borbor** (boiled cowpeas with gari): Cowpeas are boiled until soft. Salt is added to taste. Palm oil or gravy is added to the boiled cowpeas and served with gari.
- b) **Roasted corn and cowpea Porridge**: cowpeas are boiled till soft, mashed and salt is added to taste. Oil and ground shrimps are added and it is left to boil for sometime. Roasted corn meal is added gradually and stirred briskly to make a stiff porridge. It is moulded into balls and served with meat or fish sauce or stew.
- c) **Rice and Cowpeas (Wankye)**: Cooking oil and salt are added to partly cooked cowpeas. Rice is washed and added to the cowpeas and the mixture cooked until well done. It is served with pepper sauce, meat or fried fish stew.

- d) **Cowpeas and Plantain Pottage:** Cowpeas are cooked till almost done. Ripe plantain is cut into cubes and added to the cowpeas and cooked till tender. Tomatoes, onions, pepper and other spices are added on the fire and cooking continuous until the mixture is very soft. It is served warm.
- e) **Cowpea Flour Soup:** Water is added to tomato sauce to make stock. Cowpea flour is blended with some water and added to the stock. It is cooked until the beany flavour disappears. After which fish is added and left to simmer for 10 minutes. It is served with banku, kenkey as main dish.
- f) **(Red Red) Cowpea stew with fried plantain:** Cowpeas are boiled till soft. A sauce is prepared using oil, sliced onions, tomatoes, pepper, ground shrimps and smoked fish. The cooked cowpeas are added to the sauce on fire and left to simmer for sometime. It is served with fried plantain.
- g) **Cowpeas with pumpkin:** Cowpeas with pumpkin is a dish that is cooked in the north. Cowpeas are boiled until partly cooked and Pumpkin is added, cooked until tender. It is served hot.
- h) **Cowpeas with Guinea Corn:** Cowpeas are stirred into partly cooked guinea-corn and it is boiled till tender. Groundnut paste, pepper and salt are also added and it is allowed to simmer. It is served hot or cold.
- i) **Adalu (cowpeas and maize):** Dry maize grains are partially cooked. Cowpeas, tomatoes, pepper, onions and salt are added. Boiling continues until it is done. It is served as a dish on it's own.

- j) **Ekuru** : Air is incorporated into cowpea paste by beating to make it light. Portions are wrapped in leaves and steamed. When cooked it is thick but fluffy like a cake. It is broken up into pieces and mixed with palm oil sauce and fried dry. It is served for lunch.
- k) **Owowo (corn, cowpeas and groundnuts)**: Cowpeas are added to partly cooked corn and it is boiled for sometime. Groundnut is added and the mixture cooked until all are done. Salt is added to taste. It is served with coconut.
- l) **Ayibli (cowpeas and maize)**: Cowpeas are soaked overnight. Maize is pounded to remove the and partly boiled. Cowpeas are added and boiling continuous until maize and beans become tender. Salt is added to taste. It is served with coconut and roasted groundnut as a snack.
- m) **(Palm Pulp and cowpea porridge)**: A sauce is prepared by boiling palm pulp together with tomatoes, onions, smoked fish, shrimps, ginger, pepper and dry fish. When it is almost done cowpea flour is briskly stirred into it, and cooked well. It is served hot with pepper sauce. This dish is similar to apapransa.
- n) **Cowpea Garifoto**: Cowpeas is boiled until very soft. Ground onion, salt, tomato puree is added to beaten eggs which is fried into an omelette and cut into strips. Sauce is made using fresh ground onions, tomatoes puree, ground shrimp, pepper and salt to taste. The gari is sprinkled with water to dampen it and then mixed with the sauce and cowpeas. It is served decorated with the strips of omelette.

- o) **Ayitale:** Cowpea flour and wheat flour are well mixed with pounded soft ripe plantain. Ginger, onion, water and salt are added and thoroughly mixed. It is left for sometime and fried in spoonfuls using just enough oil to prevent sticking. It is served for lunch.
- p) **Tubani (steamed cowpea paste):** Cowpea paste is beaten vigorously until it becomes fluffy. Ground Tomatoes, onions, pepper, shrimps, oil are added and mixed thoroughly. The mixture is wrapped in leaves and steamed. It is served hot.
- q) **Bonwake:** Kanwa (salt petre) is dissolved in water and mixed with cowpea flour. It is left to stand for sometime. Salt is added to taste and the paste dropped in spoonfuls into boiling water. After 5 minutes, it is removed and put into cold water to harden and thereafter sprinkled with fried oil, ground pepper and salt. It is eaten with Agidi or used in stew and served with boiled rice.
- r) **Cowpea Pap:** Corndough and cowpea flour are mixed smoothly with a small amount of water into a smooth paste. It is added to boiling water and stirred constantly to avoid lumps. Salt and sugar are added to taste. It is cooked till the beany flavour of cowpea is almost lost.
- s) **Bensaw:** Dehulled cowpea grains is made into grits and brought to boil. It's cooked till tender, maize flour is stirred into the cooked beans. Sheabutter is added. It is served hot or cold.

t) **Akla, Akara: Bean Cakes.** Beans are washed, soaked overnight and dehulled. The white variety from which the skins are easily rubbed off is commonly used. The beans are then ground or pounded to a smooth paste and mixed with water to a consistency of thick batter. This is salted, well-beaten and deep fried in spoonfuls in hot oil. This food is sometimes made with dry bean flour instead of soaked bean paste. When made by Yorubas it may contain whole red pepper, sliced onions etc. (The name is probably Yoruba in origin and akara is commoner in Nigeria than in Ghana).

u) **Allele (Ghana) Ole, olele, moyin-moyin (Yoruba).** A Nigerian dish made like tubani, but with palm oil and pepper added to the bean paste before wrapping. When cooked it is orange or pink. It is served with agidi as snack or part of the main meal.

8.2 **Large beans (Apotilamo (Ga) Apatram (Twi) Tsagba or gbenku (Ewe) Phaseolus lunatus).** This bean is grown in the forest country, but may be seen on sale in Accra and other large coastal towns. The beans are flat and may be white or mottled with a red pattern. They are usually boiled and added to soup, mashed or whole. They are much more expensive than cowpeas.

8.3 **Round beans**

Bambara groundnuts, Earth pea (*Voandzeia subterranea*). Akyi, Atwe (Twi) Akwen (Ga) Azi kpodoe, or aboboe when cooked (Ewe), These grow in savannah areas, mostly in the north. The pods ripen underground as in groundnut. The beans are almost spherical with a hard outer seed-coat, and may be buff-coloured, red or black with a well-marked white scar. They somehow resemble soya beans and are sometimes confused with them. The beans are usually soaked twenty four hours before

cooking and are then boiled till soft. Red pepper, salt and often sugar are added in cooking. It is served with tatale or kaklo. Aboboe is sold by food hawkers. In the north boiled round beans may be eaten with stew like cowpeas.

8.4 Pigeon pea (*Cajanus cajan*)

The plant originally was introduced as a hedge plant in the north on agricultural stations. The seeds are occasionally used but are considered difficult to cook. The pods can however, be harvested in the green state, shelled and use as green peas.

8.5 Geocarpa bean (*Kerstingiella geocarpa*). Sempu (Dagomba) Sumpui (Frafra) Sulimpia (Mamprusi). This bean is known only in northern Ghana. It does not appear to be common nowadays. The seeds are of various colours and ripen in an underground pod. The taste is good but the yield poor and the beans are subject to insect attack. According to Dalziel, in the north a food is prepared by adding shea-butter and salt to the pounded kernel.

8.6 Soybean

- a) **Soybean Paste:** Soybean is cleaned and washed to remove dust and dirt. It is then boiled for 20-25 minutes, washed with cold water, dehulled and then ground to smooth paste. The paste can be added to stews and sauces.

- b) **Soybean flour:** Dehulled soybeans are dried in the sun for 48 hours and then ground into a fine flour. If the dehulling is done with the dry seeds, there is no need for sun drying.

cooking and are then boiled till soft. Red pepper, salt and often sugar are added in cooking. It is served with tatale or kaklo. Aboboe is sold by food hawkers. In the north boiled round beans may be eaten with stew like cowpeas.

8.4 Pigeon pea (*Cajanus cajan*)

The plant originally was introduced as a hedge plant in the north on agricultural stations. The seeds are occasionally used but are considered difficult to cook. The pods can however, be harvested in the green state, shelled and use as green peas.

8.5 Geocarpa bean (*Kerstingiella geocarpa*). Sempu (Dagomba) Sumpui (Frafra) Sulimpia (Mamprusi). This bean is known only in northern Ghana. It does not appear to be common nowadays. The seeds are of various colours and ripen in an underground pod. The taste is good but the yield poor and the beans are subject to insect attack. According to Dalziel, in the north a food is prepared by adding shea-butter and salt to the pounded kernel.

8.6 Soybean

a) Soybean Paste: Soybean is cleaned and washed to remove dust and dirt. It is then boiled for 20-25 minutes, washed with cold water, dehulled and then ground to smooth paste. The paste can be added to stews and sauces.

b) Soybean flour: Dehulled soyabeans are dried in the sun for 48 hours and then ground into a fine flour. If the dehulling is done with the dry seeds, there is no need for sun drying.

- c) **Soymilk:** Water is added to soybean paste and it is strained through folded muslin cloth. It is sieved twice more and boiled for 15-20 minutes. Sugar and flavour may be added. It is served cool.
- d) **Infant soy porridge (soykoko):** Corn dough is mixed with water and strained. It is then mixed with soypaste. The mixture is put on fire and stirred until lump-free and smooth. Sugar is added to taste.
- e) **Soy Apapransa with Palm soup:** The pulp extracted from pounded palm fruits forms the basis of this soup. Chopped onion, tomato, smoked fish, ginger, pepper and shrimps are added to the liquid on fire. It is then cooked for about 45 minutes salt being added to taste. A mixture of roasted soybean flour and roasted corn flour is gradually stirred into the soup till desired consistency is achieved. It is then left to simmer for a while and it is ready to serve. This product is similar to other descriptions under maize and cowpea.
- f) **Soy/Ga Kenkey:** Corn dough is mixed with soybean paste and divided into 3 parts. One part is added to boiling water and half cooked (Aflata) salt is added to taste. The remaining dough is mixed with the aflata, made into balls and wrapped with corn husks. It is then put on fire to cook for about 2 hours and served hot with soup, stew or hot pepper and fried fish.
- g) **Soy Aboloo:** Soy abolo is prepared with a composite flour made from maize and soybean. Aflata is prepared with half of the composite flour. It is then mixed with the remainder of the flour and baking powder is added. The mixture is allowed to ferment for at least 4-5 hours. It is scooped onto flat leaves and baked or steamed. It is served hot with gravy and fried fish.

h) Soy Ablongo: Mashed ripe plantain is mixed with soybean flour. Spices and salt are added to taste. Little water and palm oil are added and it is baked. It is served hot or cold with roasted groundnuts.

8.7 Groundnuts (*Arachis hypogea*)

Grown chiefly in the north but also in parts of the Accra plains and Ashanti. There are several common varieties in Ghana. In the north groundnuts are often eaten raw on the farms, but in the south they are always cooked and raw ones are thought to be unhealthy. In preparing groundnuts the pods may be boiled whole or they may be shelled and roasted in hot sand. More commonly, however, the groundnuts are shelled from the pods before cooking.

a) **Groundnut soup:** Groundnuts are roasted, the skins rubbed off and the kernel ground to paste. This is used to thicken a soup containing meat or chicken or smoked fish with vegetables. Groundnut stew is also made from the paste. In the north leafy vegetables are commonly added to groundnut soup.

b) **Kulikuli:** The residue left after the oil has been expelled is shaped into a ring and fried. It is then sold as a snack in northern markets under this name.

(1) Stews are usually thicker and may contain leafy vegetables either in a mashed, sliced or chopped form. Soups are rather watery and are generally used for feeding rounded or pasty or sticky foods like fufu and kenkey. In some stews, the pepper, onion and tomato are fried in oil, so that all the recipes contain oil while those for soup usually do not. Vegetables included in either are often washed or ground to paste, either before or after cooking. In certain recipes however, they may be left as cut pieces.

9. SOUPS, STEWS AND SAUCES

Whitby (1968) noted that a certain amount of confusion arises because the terms soup, stew and sauce are used to translate local Ghanaian names which are not strictly equivalent. Also they are used somewhat differently in parts of West Africa. For instance, in Nigeria all three seem to mean the same thing. Thus the same dish may be referred to as pepper soup, pepper stew, or pepper sauce. In Sierra Leone the term "sauce" is used for what in Ghana would be called soup or stew, and so on.

In Ghana the word soup translates the local words **Wonu (Ga)** **Nkwan (Twi)** or **Detsi (Ewe)**. Stew translates **Flor (Ga)** **Abomu (Twi)**. Soup, as well as stew, contains as a rule solid pieces of meat and sometimes vegetables, so that it does not correspond to English "soup".

Either soup or stew is the usual accompaniment to the starchy staple at a main meal. Both dishes typically contain - as ingredients, pepper, onion and tomato and either meat or fish or both. In addition both may contain other vegetables, such as green leaves, okro, and garden-eggs; also groundnuts or other oil seeds - ground to paste, or palm-pulp (pericarp) extract or beans.

The chief differences between soup and stew are as follows:-

- (i) Stews are usually thicker and may contain leafy and non leafy vegetables either in a mashed, diced or chopped form. Soups are rather watery and are generally used for eating pounded or pasty or sticky foods like fufu and kokonte. To make stew, the pepper, onion and tomato are fried first in oil, so that all stew recipes contain oil while those for soup usually do not. Vegetables included in either are often mashed or ground to paste, either before or after cooking. In certain recipes however, they may be left as cut pieces.

soops containing fish, chicken or meat as well as okros
i i) **Gravy:** In Ghana this means pepper, onions, spices
and tomatoes stewed in oil. It has less liquid than
stew.

iii) **Sauce:** Fresh pepper, tomato and onions ground
together. This also is eaten with fried fish. All
recipes for soups include pepper, tomato and onion,
thus these are not listed under the ingredients of
individual soups or stews.

1.1 SOUPS

a) Plain soup or Light soup (Nklakla - Ga)

Plain or light soup is watery in consistency and it is
made with meat, fish or chicken and vegetables. The
garden-eggs are ground to a paste after cooking and put
back into the soup to thicken it slightly. Okros may
be added. However, these are optional in most areas.
Ethnic preferences exist and determines the recipes in
different areas. In the Ewe version of this dish
detsififi is a plain soup, which is not thickened with
garden-eggs. The garden-eggs are cut in desirable pieces
and put in the soup. Thickening of this soup is by starch

Stews in the form of either roasted or raw cornmeal or pounded
yam or casava. Stews, vegetables like onions, garden-eggs,
tomatoes, pepper, are either sliced, chopped or ground

b) Palm soup

Nmewonu (Ga) Mmewonu (Twi) Abenkwan (Fanti) dedetsi
(Ewe). The pulp from boiled pounded palm nuts forms the
basis of this soup. Chicken, meat and/or fish with
garden-eggs and okros are added. These vegetables may be
cut in pieces but not ground or mashed.

chopping or dicing the raw garden-eggs and adding it to
enough to cook it well.

c) Groundnut Soup

Nkatie-wonu (Ga) Nkate-nkwan (Twi) Nkatse-nkwan (Fanti)
Azi-detsi (Ewe). Groundnuts (*Arachis hypogaea*) are
roasted and ground to paste which is then used to thicken

- b) soups containing fish, chicken or meat as well as okros and sometimes garden-eggs. These vegetables are not mashed. The paste may be bought ready-made in the market.
- c) **Palaxar Sauces**
- d) **Bean Soup**
 Yoo-wonu (Ga) Ase Nkwan (Twi, Fanti) Ayi-detsi (Ewe). Cowpeas (*Vigna unguiculata*) or flat beans (*Phaseolus lunatus*) are used. They are boiled until soft, ground to paste, and used to thicken soups containing fish and/or meat and vegetables.
- e) **Okro Soup**
 Nkruma-nkwan (Akan) Enmomi-wonu (Ga) Fetri-detsi (Ewe). May contain fish, meat, tomato, garden-egg as well as okro. Prawns or shrimps - either fresh or smoked, are usually added. It preferably ground to powder or paste first. Tomatoes paste or whole tomatoes are ground and added to the soup. The okro is usually cut, into pieces or mashed and added to the soup.

9.2 Stews

In the preparation of stews, vegetables ie onions garden-eggs, tomatoes, pepper, are either sliced, chopped or ground and stewed in the oil.

a) Garden-egg Stew

Sebe flor (Ga) Ntorewa abom (Twi) Ntorobqa forowe (Fanti) Agbitsa flor (Ewe). The garden-eggs may be peeled after boiling, and mashed before being incorporated in the stew. Fish may be added. Another method involves chopping or dicing the raw garden eggs and adding it to the stew early enough to cook it well.

b) **Cocoyam Leaves Stew**

Nkontomire (Akan) Kontomle (Ga,Ewe) Cocoyam leaves are added to the other ingredients. Normally red palm oil is used in the preparation of nkontomire stew.

c) **Palavar Sauce**

It is also based on leafy vegetables like the nkontomire stew. Bokoboko leaves (*Portulaca oleracea*), Efan (*Amaranthus spp.*) and other edible leaves are used. Fish and agushi are added and usually red palm oil is used.

d) **Agushi Stew**

Basic vegetable stew thickened with ground melon seeds. Generally speaking, the distinctive ingredients of soups can also be used for stews and vice versa. Thus there is palm pulp stew, okro stew, nkontomire soup, etc. The dishes listed above are the most commonly encountered, but there are many others.

REFERNCES

1. Devlo, F.E., Williams, C.E., Laraba Zoaka (1984):
Cowpeas. Home Preparation and Use in West Africa.
2. Whitby, P. (1968):
Foods of Ghana, Food Research Institute Bulletin
No. 13, Food Research Institute Library, Accra.
3. Women in Agricultural Development (1991):
Some Selected Ghanaian Recipes of Grains and
Legumes. Ministry of Agriculture, Accra.
4. Women in Agricultural Development (1991):
Some selected Ghanaian Recipes of Maize
products. Ministry of Agriculture.