NUTRITIVE VALUE OF SOME KINDS OF EGYPTIAN BREADS

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BY
ADEL SIDKI EL SAKR
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Name : Adel Sidki El-Sakr

M.Sc.Thesis approved by :

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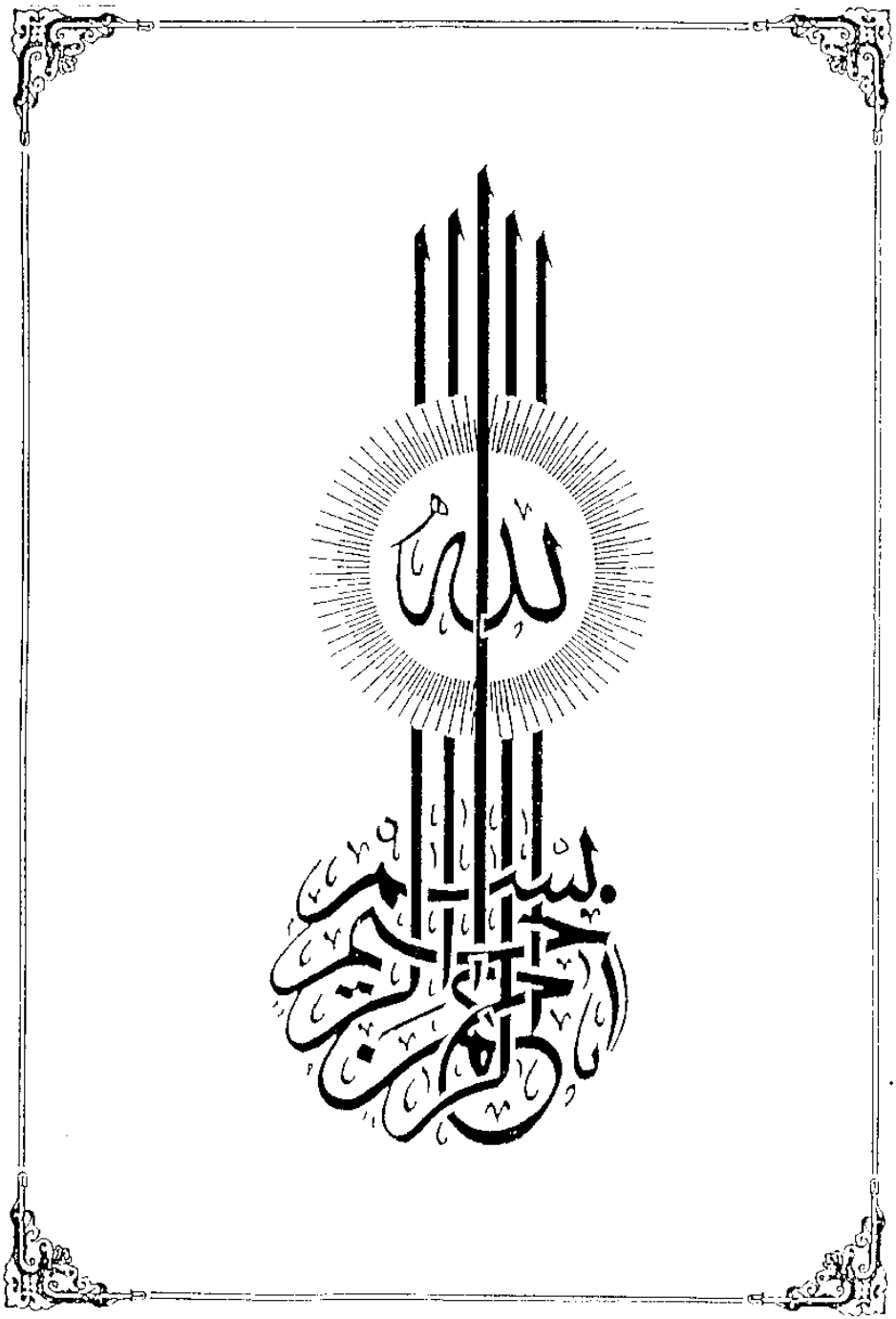

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C O N T E N T S

INTRODUCTION

Bread is the staple food of the people living in Egypt, providing on the average more than 70% of the calories and 80% of the protein in the diets.

According to the report of the FAO conference on cereals and bread technology for the Near East Region, held in Cairo February 1966, the average requirements per capita in Egypt is 2350 calories & 55 gm protein, out of which the bread grains contribute 1729 calories and 48.7 gms protein or 74% of the calories and 89% of the protein in the diet.

Bread also makes substantial contributions to the supplies of B vitamins, calcium and Iron.

The comparatively high extraction rates of the flours used in breadmaking in Egypt is responsible for nutritional deficiency diseases not being more widespread.

Moreover, bread is a convenient medium for supplementing diets in protein, calcium, iron and some of the B vitamins. There is evidence that enrichment of flour in these substances is nutritionally desirable and feasible on technical and economic grounds.

Due to the nutritional importance of bread and due to the numerous kinds of bread made in Egypt, It seemed of great interest to study the nutritive value of Egyptian breads.

REVIEW OF LITERATURE

I - History :

Man ate bread before he made history. Primetive people probably found a grass grain bearing kernels of grain. They found this grass grain tasted good and that it kept well and could be stored for food. Later the grain was pounded, between stones to make it easier to eat. Still later it was mixed with water into a sort of paste. This paste was eaten like porridge. Some of it may have been dried in the sunlight or baked on stones. Perhaps it was thrown out and some spattered on a hot stone in the fire. (The world book Encyclopedia 1956).

Why or when man first ate seeds of grasses, learned to grind them into flour, mix the flour with water and bake it into bread is not known. Remains of the Swiss lake dwellers, who lived about 10,000 years ago, show that even then man had developed a baking art. Tomb-paintings of ancient Egypt portray not only the planting and harvesting of wheat but grinding, bread mixing and baking as well. (Encyclopedia Britannica 1768).

The manufacture of bread from a variety of roughly milled seeds which as nature provided them, were too hard or unpalatable to eat, augmented early man's diet of fish and game. In fact bread became so important that the prehistoric man was stimulated to culture the seeds from which it was made.

Agriculture, milling and baking, all so dependent upon one another, have developed to a high degree of perfection since the discovery by Paleolithic man that wild seeds ground to a meal, mixed with water, and cooked on a hot stone offered security against hunger.

Wheat, barley and millet were grown in lake dwellers of Switzerland and Northern Italy and made into flat, unleavened cakes or biscuits fragments of which have been found.

The Greeks made flat cakes, baked over coals and then rolled like manuscripts. This type of bread persists even today, examples are the tortille in Mexico from corn, and the chapatty made by the Hindus in India from wheat.

Bread as we now know it, made porous by the action of yeast and sloped into loaves, was born in Egypt. It is

speculated that the first leavened bread resulted from neglect of a flour and water dough which, fortunately become contaminated with airborne wild yeast. The yeasts acting on sugars indigenous to the wheat formed alcohol and bubbles of CO_2. When this fermented dough was formed and cooked the CO_2 expanded with heat and gave height and porosity to bread which had previously been flat and dense.

Ovens were developed so that the dough piece would be heated simultaneously from the bottom, sides, and top. These ovens were made of clay bricks and had a firebox and a baking chamber.

There are many indications that baking in Ancient Egypt reached a highly developed stage. In the extensive murals of tombs and palaces the story of baking is told. In the huroglyphics there is a symbol for loaf of bread. In the writing of the Greek historian Herodotus, who made an extended stay in Egypt, there is detailed story of baking process as they were followed. Many varieties of bread and cakes were made.

To the basic ingredients of flour, water, salt, and leavening, were added various seeds and flavours. In the

Metropolitan Museum of Art. New York City, there is an exhibition of Egyptian bread which dates back 3,500 years. For all Egyptians bread was the principal food, but, there were special types for those of different social levels. White bread was for the privileged and was eaten by the kings and nobles. Bread was used as coin and wages were paid in numbers of loaves of bread.

In ancient Chaldea excavation has revealed, in the countryards of homes ovens with grinding stones as accompanying equipment. Among the Hebreus, bread was the principal article of food with meats and vegetables as accompaniements. In ancient Greece baking reached a high degree of development as shown by the writings of poets and historians and by archaeological discoveries. Bread was regarded as one of the principal sources of nourishment and of good health. It is believed that as many as 50 varieties of bread were made by the 2nd century A.D. by the Greeks, who were credit with the development of a cheese-bread not unlike the product of todsy.

In early stages Rome bread was produced in the homes but much of it was baked in community ovens. Commercial

baking made its appearance after 168 B.C. and the Emperor of Trejan (r. 98-117 A.D.) established a college of bakers.

When Columbus reached America, a stable item in the diet of the native Indians was a bread made from maize or Indian corn. The earliest settlers used those native grains until importation of form equipment and seed made possible the growing of wheat and other cereal grains.

Bread was so important a part of the diet during the American Revolution that the Continental Congress appointed a "Superintendant of Bakers and Director States".

The greatest period of growth of the baking industry occurred about the time of World War I and during the period of prosperity which followed, when home baking rapidly decreased in favor of commercially produced products. By 1939 the value of commercially produced bakery products in U.S.A. was 1, 4, 11, 816, 633. (Encyclopedia Americana 1829).

The Development of Baking

The ancient Egyptians were the first people in the world who have made bread. They observed the results of

adding stale dough to the recent kneaded flour, a process which is now known as "fermentation".

The development of ovens, as seen, illustrates the simplest forms of ovens during the Old Kingdom, to the cylindrical ovens in the form of cones trancated at their upper parts and built of Nile-mud bricks in the New Kingdom (the Royal Bakery). The hearth was opened at the base for heating, a second higher and larger opening was made to slide the dough into the oven. The baking of bread, afterwards, has changed from almost exclusive baking at home to that in commercial bakeries located in urban centres. At last bread making has achieved great progress in both technology and bakery engineering.

List of pictures illustrating development of baking

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