

**CHEMICAL AND MICROBIOLOGICAL STUDIES ON
SOME TRADITIONAL MEAT PRODUCTS**

By

Samah Ahmed Abd-Eltwab Awad

B.Sc. Agricultural Science, 1997 (Food Science and Technology,
Faculty of Agriculture
Cairo University
El-Fayoum Branch

Thesis

Submitted in partial fulfillment of
The requirements for the degree of
Master of Science

In

Food science and Technology Department
Faculty of Agriculture
Cairo University
El-Fayoum Branch

(2003)

**CHEMICAL AND MICROBIOLOGICAL STUDIES
ON TRADITIONAL MEAT PRODUCTS**

BY
Samah Ahmed Abd-Eltwab Awad

THESIS of Master of Science
In
Agriculture Science, (Food Science and Technology)
Department of Food Science and Technology,
Faculty of Agriculture, El- Fayoum,
Cairo University.

Supervised by:

1- Prof. Dr. Nabil El-Sayed Hafiz .

Professor of Food Science and Technology.
Fac. of Agric., Fayoum, Cairo University.

2- Prof. Dr. Khalil Ebrahim Khalil .

Associate Professor of Food Science and Technology.
Fac. of Agric., Fayoum, Cairo University.

3- Dr. Nady Abd Aziz El-Neairy.

Lecturer of Food Science and Technology.
Fac. of Agric., Fayoum, Cairo University.

ABSTRACT

The present work was carried out on some locally processed meat products included sausage, beef burger and kofta. Three leading factories for processing meat products in Egypt were selected for this study. The objectives of this work were evaluating the different meat products; chemically, organoleptically and microbiologically and following up storage changes in the different products to determine shelf life of each product. Results showed wide variations in the chemical composition for each product from factories to other in comparison with Egyptian Standards Specifications. Moreover, although shelf life of these meat products has been decided by their producers to be three months, signs of chemical deterioration and microbiological spoilage have been detected within shorter times. The need of accurate quality control and good sanitary conditions during preparation, processing, handling, and distribution is recommended to get such processed meat products with good quality.

Key words:

Sausage - Beef burger - Kofta - Peroxide value - Thiobarbituric acid - Total volatile basic-nitrogen - Cooking loss - *Staphylococcus aureus* - *Salmonella* - Coliform Count.