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### The Effect of Fortification Some of Buffalo Meat Products by Baladi Rose Petals on Nutritive Value and Blood Lipids Profile

### RY

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### **A THESIS**

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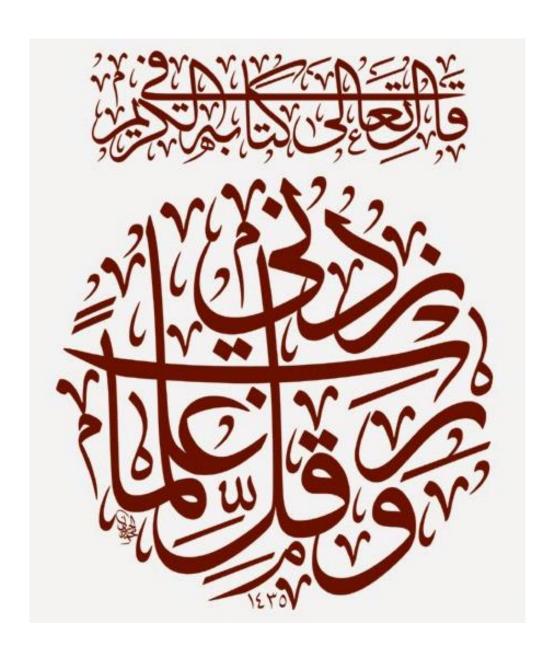
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Dedicate this thesis to
the spirit of my godfather
Professor
Mohammed Kamal Youssef
The God have mercy on him and placed
him into his havens...



First of all, thanks to **SOO** by the grace and care of whom indeed the complete of this work was possible.

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## List of Abbrevations

**<u>ALT</u>**: Aspartate amino transferase.

**AST**: Alanine amino transferase.

**BBF**: Black eye bean flour.

**BRPP**: *Baladi Rose* petals powder.

**BHA**: Butylated hydroxy toluene

**<u>BHT</u>**: Butylated hydroxy anisole

**<u>CKD</u>**: Chronic kidney disease.

**<u>CLA</u>**: Conjugated linoleic acid.

**CVD**: Cardiovascular disease.

**FRAP**: Ferric – reducing antioxidant power.

**<u>HDL</u>**: High – density lipoprotein.

LDL: Low-density lipoprotein.

**MUFAs**: Mono unsaturated fatty acids.

MCs: Mesangial cells.

**PUFAs**: Poly unsaturated fatty acids.

**ROS**: Reactive oxygen species.

**SFAs**: Saturated fatty acids.

**<u>TC</u>**: Total cholesterol.

<u>**TG**</u>: Triglyceride.

<u>**TFs**</u>: Total flavonoids.

<u>**TEAC**</u>: Trolox–equivalent antioxidant capacity.

**TDF**: Total daitry fiber.

**<u>UFAs</u>**: Unsaturated fatty acids.

<u>VSMCs</u>: Vascular smooth muscle cells.

**<u>WHC:</u>** Water holding capacity.

### Abstract

Buffalo meat is an excellent source of special nutrients. It contains 18-24% protein. It has low cholesterol and triglycerides.

**BRPP** are ornamental horticultural commodities of high economic value as cut flowers and flower oil raw materials used in the perfume industry. Likewise **BRPP** can also be used for tea, jelly and jam as a valuable healthful functional food due to their nutrients they contain (**Youssef and Mousa., 2012**).

The present study was nearried out to investigate about nutritive values in buffalo meat, *BRPP* and fortified buffalo meat products with different per cent of *BRPP* and their effect of improvement blood lipid profile.

In chemical composition both buffalo meat and buffalo meat products had the highest percentage of protein .in *BRPP*, highly per cent of chemical composition was carbohydrates then crude fibers.

This study has shown, as well as previous studies that a higher percentage of saturated fat from unsaturated fat in buffalo meat unlike the meat products (meatballs 20%, meatballs 10%, luncheon 10% & luncheon 20%). The *BRPP* had highly per cent of Arachidic acid, Stearic acid, Linoleic acid and Palmitic acid).

In buffalo meat and meat products (luncheon 10%, luncheon 20%, Meatballs 10% & Meatballs 20%) major amino acids were (Lysine, Glutamic acid, Glycine and Aspartic acid) respectively, major amino acids in *BRPP* were (Lysine, Aspartic acid and Glutamic acid) respectively.