

## ABSTRACT

There are variations between quality of the same product from country to another. The lack of quality as it relates to safety and wholesomeness can result in personal injury. This investigation was carried out to study the chemical composition and microbiological load contamination level with heavy metals and pesticide residues of some widely imported foods as major large quantities. Two part of imported foods items : A) Fresh fruits and fruit products, B) Vegetable products. Some obtained results could be summarized as follows :

### **A. Fresh fruits and fruit products :**

#### ***1- Dried fruits :***

- Moisture content in raisins imported from three different countries and in Kamar El-Deen sheets imported from three different factories from Syria agree completely with the Egyptian Standard Specifications.
- The acidity in raisins ranged from (2.34%) to (3.72%) and in Kamar El-Deen sheets ranged from (2.35%) to (1.33%). pH value ranged from (4.2) in Turkish raisins to (3.4) in Iranian one. There were no considered variation in the pH- value of Kamar El-Deen sheets from three factories.
- Vitamin C content in raisins ranged from (51.53 mg/100g) of Turkish, whereas Iranian showed the lowest one (36.23 mg/100g). Highest vitamin C content (2.79 mg/100g) was found in Kamar El-Deen sheets of Esraa (E), whereas those of Razky (R) showed the lowest one (2.54 mg/100g).

- Raisins and Kamar El-Deen sheets showed a high lead content (0.18 and 1.6 mg/100g) respectively.
- No pesticide residues detected in Turkish raisins and Kamar El-Deen from Esraa (E) factory in Syria. The total pesticide residues were highest in American raisins followed by Iranian one.
- The highest total bacterial count was detected in Turkish raisins and in Kamar El-Deen sheets from Razky (R), however, the lowest bacterial count was recorded in American raisins. Kamar El-Deen sheets from Hwaa (H) had no bacteria.
- The highest count of both yeasts and moulds was recorded in Turkish raisins, whereas, Iranian raisins had no yeasts and moulds. The lead contamination in Turkish and American raisins was very higher when compared with that mentioned by the Egyptian Standard Specifications.
- All Kamar El-Deen sheets were negative for yeasts and moulds.

## **2. *Fruit juices :***

- Total soluble solids in orange juice was (9.30%) and in grape juice (8.10%).
- Titrable acidity in orange juice was found to be (2.70%) and the pH value was (3.9). Titrable acidity measured in grape juice was found to be (1.40%) and the pH value was (3.35).
- Vitamin C in orange juice was much higher than that grape juice (3.26 times).
- Lead content of orange juice (0.07 mg/100g) and in grape juice (0.05 mg/100g).
- In general, the total pesticide residues were highest in orange juice from France and grape juice from South Africa had no residues.

- Both orange and grape juices had no bacterial count.
- Orange and grape juices had no yeasts and moulds.

**B) Vegetable products :**

**1. Tomatoes whole in sun-rich tomato juice (canned tomatoes):**

- T.S. content, being (3.20%) recorded of American canned tomatoes. T.S.S. content being (3.10%), pH value (5.7).
- Lead level, being (0.10 mg/100g) in canned tomatoes.
- Residue of dieldren was only detected in canned tomatoes. It was higher than (MRL) recommended by the Egyptian Standard Specifications.

**2. Tomatoes sauce and tomato concentrate (salsa) :**

- The highest T.S. content, being (28.10%) for tomato sauce imported from Holland. However, tomato concentrate (salsa) produced in Egypt showed the lowest T.S. content (24.90%).
- Tomato sauce imported from Holland, had the highest T.S.S. content. But tomato concentrate produced in Egypt showed the lowest T.S.S. content.
- The pH value of tomato sauce being (3.5), while tomato concentrate the highest (4.5).
- Vitamin C content of tomato sauce being (25.11 mg/100g), whereas tomato concentrate contained (24.02 mg/100g).
- The highest contamination level of lead being (0.14 mg/100g) was found in tomato concentrate, whereas tomato sauce the lowest one, being (0.10 mg/100g).
- It could be considered tomatoes sauce imported from Holland and tomato concentrate (salsa) produced in Egypt as safe for human consumption.

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