# Quality Control of Canned Peas

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**Abstract**
Vegetables are food of vegetable origin which has an important place in human nutrition because of their complex chemical composition. With the discovery of causes that cause alteration of food (the vital action of microorganisms), the problem of food conservation began to be substantiated in terms scientific, in that way that the present conservation means not only to avoid microbial spoilage of food, but also keeping most of the nutritional and organoleptic properties of the product under conservation. The paper is structured in six chapters that have followed all the stages of pea to preserve the finished product-peas canned, and changes occurring in the process of preservation by analyzing four different kinds of peas. In this paper work is has been showed fat content determination, determination of sodium chloride and microbiological control of canned peas.

**Keywords**: organoleptic, keeping, and microbiological

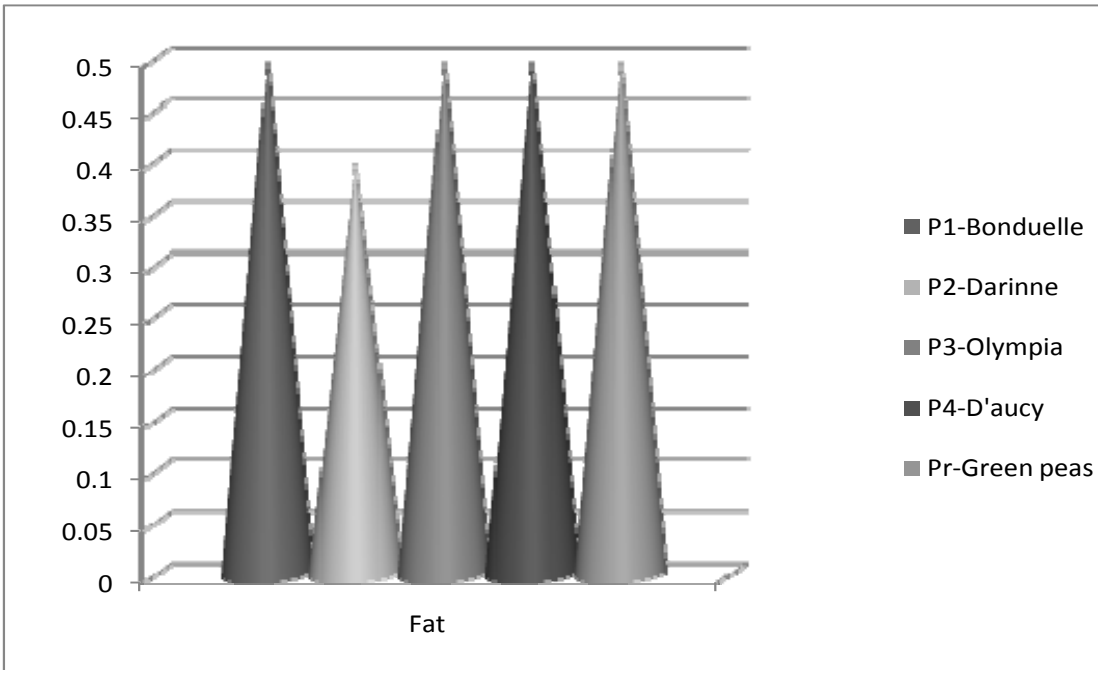
## 1. Introduction

A large quantity of vegetables is raw material for canneries. Vegetables can be preserved for a limited period of time - semi-preserved that will ceases with the removal of a preservative agent.
Tins themselves have greater shelf life, because through their sterilization, enzymes and microorganisms are destroyed. [1], [2]
Of world production of vegetables, two thirds is consumed fresh, the rest are preserved. [3]
If fresh foods are kept in inappropriate conditions, quantitative and qualitative losses are unavoidable.[4] Even if they are kept in good, food still suffers some changes: lose some vitamins, such changes suffer physical - chemical, lose quality, especially in terms of their taste and appearance. [5]

## 2. Materials and methods

We analyzed four different types canned peas were compare with a reference sample represented by fresh green peas. These types are: Bonduelle, Darinne, Olympia, and D'aucy.

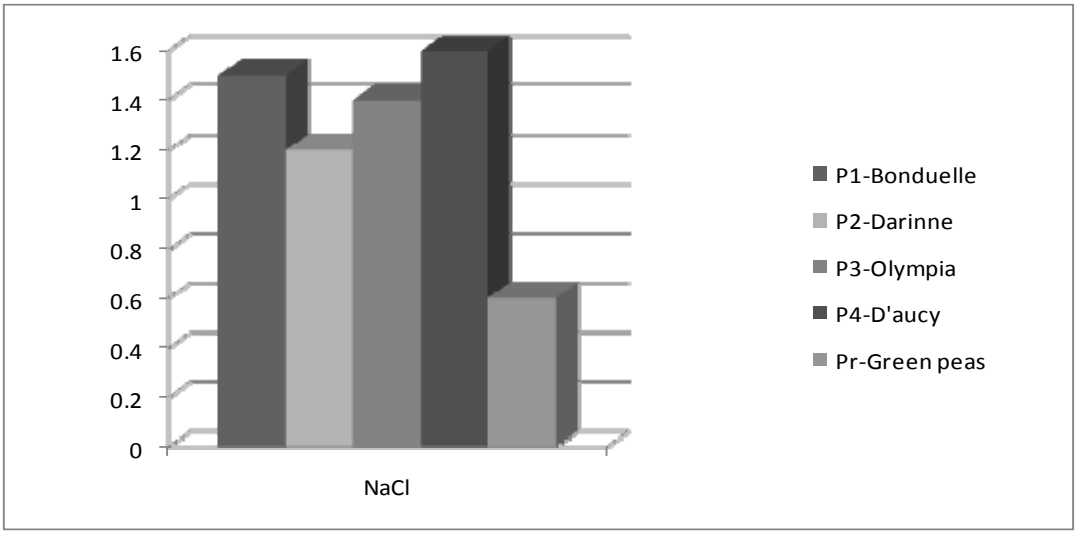
| | P1 Bonduelle | P2 Darinne | P3 Olympia | P4 D'aucy | Pr Green peas |
|---|---|---|---|---|---|
| Fat content [%] | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 |




In terms of fat content in canned peas, there is no significant increase or decrease compared with green peas, which maintain the same properties after conservation.

Determination of sodium chloride

| | P1 Bonduelle | P2 Darinne | P3 Olympia | P4 D'aucy | Pr Green peas |
|---|---|---|---|---|---|
| Content of NaCl [g/100ml] | 1.5 | 1.2 | 1.4 | 1.6 | 0.6 |



## 3. Results and discussion

Following analysis, found, a substantial increase in the amount of salt in canned peas analyzed, compared with green peas.
High salt content provides a more intense color of canned peas and a better preservation.
Salt in large quantities in substrate peas, contribute to the destruction of microorganism's non halophile types.
In the control microbiological analysis that were made it has been checked the hermeticity and the thermostaticity.

**Checking hermeticity**

At the checking of hermeticity all samples proved to be consistent, showing no bubbles or a stream of gas bubbles from sinking in water.

**Checking thermostaticity**

Since containers corresponded to the hermeticity test it was performed and tested their thermostaticity. Containers did not convex surfaces.
Containers have kept their original form and have not changed, which shows that sterilization, exhaust and sealing containers was conducted according to standards.

## 4. Conclusions

If raw food is kept in unsuitable conditions, quantitative and qualitative losses are unavoidable. Even if they are kept in good, food still suffers some changes: lose some vitamins, such changes suffer physical - chemical, lose quality, especially in terms of their taste and appearance.

Comparing losses both in one case and in the other, it was established that when industrial processes are reasonably led conservation, loss of nutritional value of products subject to conservation, are lower than the losses caused by the domestic preparedness food. Also found that products preserved by different industrial processes have a higher food value than the same products kept fresh for a long time.

## References

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