



Quality Control: Meaning and Importance

The word **quality control** comprises of two words viz., quality and control. It would be appropriate to explain these two words separately to understand clearly the meaning of quality control.

According to Dr. W.K. Spriegel “The **quality** of a product may be defined as the sum of a number of related characteristics such as appearance (size, shape, colour, gloss, and consistency), texture, and flavour; factors such as federal grade standards (e.g. of eggs) and internal (chemical, physical, microbial).

In the words of John D. McIlellan, “**Quality** is the degree to which a product conforms to specification standards”.

Control refers to the use of all the ways and means whereby quality standards could be maintained. Control precisely aims at bringing the product up to predetermined standards by minimizing deviations from established and present standards.

According to Henry Fayol, “**Control** consists in verifying whether everything occurs in conformity with the plan adopted, the instructions issued and principles established. It has objected to point out weaknesses

and errors in order to rectify them and prevent recurrence. It operates on everything things, people, actions”

In the words of Theo Haimann, “control is the process of checking to determine whether or not, proper progress is being made towards the objectives and goals and acting if necessary to correct any deviation

Objectives of quality control:

1. To establish the desired quality standards which are acceptable to the customers .
2. To discover flaws or variations in the raw materials and the manufacturing processes in order to ensure smooth and uninterrupted production.
3. To evaluate the methods and processes of production and suggest further improvements in their functioning.
4. To study and determine the extent of quality deviation in a product during the manufacturing process.
5. To analyse in detail the causes responsible for such deviation.
6. To undertake such steps which are helpful in achieving the desired quality of the product.

What is food quality?

Food quality is the extent to which all the established requirements relating to the characteristics of a food are met. Examples:

- 1 - Identity of a food in relation to a standard (e.g., standardized food)
- 2 - Declared gross or net quantity (e.g., weight or volume) of a unit of the food or net fill of a food container .
- 3 - Declared or claimed amount of one or more stated components of a food .
- 4 - Appearance (e.g., size, shape, color)
- 5 - Flavor
- 6 - Aroma
- 7 - Texture
- 8- Viscosity
- 9 - Shelf-life stability
- 10 - Fitness for use as human food
- 11 - Wholesomeness
- 12 - Adulteration
- 13 - Packaging
- 14 - Labeling

Consumer requirements include:

1-Safety requirements

The absence of risk factors.

2-Commodity requirements

1-The conformity of a product to its definition.

2- Established by law, voluntary regulations or customary practices.

3-Nutritional requirements

1 - These are extremely important since the main purpose of eating is to satisfy nutritional needs.

2 - The growing interest of functional foods

4-Sensory requirements

1 - These are very important since the brain will transform sensation into perceptions.

2 - Our sensory perceptions take place in a space that is closely connected with other brain functions and contents, such as memory, culture, values, emotions, etc.

5-Requirements concerning the production context

1 - Indications concerning the origin or tradition of a product, or the use of organic culture, have a strong impact on consumers.

2 - They can satisfy the consumers on the “how”, “when”, and “where” the product was produced.

6-Ethical requirements

Include organic agriculture, the defence of the environment, the defence of biodiversity against mass production, the well-being of animals, etc.

7-Guarantee requirements

The certification and traceability procedure.

8-The requirements of the packaging system

1 - Facilitate product recognition, marketing and use.

2 - Also include aesthetic requirements concerning its presentation, and consumer information conveyed by the label.

3 - Consumers tend to prefer products that are easier to handle or use (convenience).