#### Butter Characteristics (Butter quality)

 

Butter quality can be discussed under two main headings:

* Compositional quality
* Organoleptic quality

The compositional quality of butter can be further divided into two subsections:

* Chemical composition
* Bacteriological composition

***Compositional quality***

There is no standard composition for grading butter quality. The difference type of butter difference composition would be occured. However the composition of commercial butter is generally about 80-82% butterfat, 15-16% water, and 1-2% milk solids other than fat. A normal salted butter contains salt is about 1.2% as well as protein, calcium, and phosphorous. The bacteriological quality is determined when total bacteria (pathogenic and nonpathogenic) is regulated. It is determined during the production and processing stages.

Chemical composition affects butter yield, while butter of poor microbiological quality will deteriorate rapidly and become unacceptable to consumers. The butter may also contain pathogens. Cleanliness at all stages of production is, therefore, essential.

***Organoleptic quality***

The organoleptic quality of butter can be described as the customer's reaction to its colour, texture and flavour. Each is assessed base on its score on a standard quality point scale. Commercially practices, score for

((Body is 25, colour 15, flavour 45, and salty taste 10, and the total must be 100)).

Butter produced carelessly and without the use of preservatives has a very short shelf life. Preservation of butter quality can assist the smallholder in two ways:

* The less perishable the product the longer the smallholder can retain it to obtain a good price.
* He or she can store the surplus made during the production season for consumption during the season in which he or she cannot produce butter.

The grade of butter is determined by first the flavor characteristics and then the characteristics of body, color, and salt content. The following comment is made in the above reference about the body of butter.

1. Butter with a firm waxy body has an attractive appearance.
2. Have granules that are close knit, smooth cuts clean when sliced (trier sample).
3. Has good spreadability.
4. The temperature of the butter at the time of grading is important in determining the true characteristics of body and should be between 45oF and 50oF.

With the organoleptic quality, three standard grades are commonly used for classification of butter quality :

1. Grade AA

* delicate, sweet flavour, with a fine, highly pleasing aroma
* made from high-quality fresh, sweet cream
* smooth, creamy texture with good spreadability
* may possess a slight feed and a definite cooked flavour

1. Grade A :

* Pleasing flavour, Rates close to top grade
* Made from fresh cream
* Fairly smooth texture
* May possess any of the following flavours to a slight degree : acid, aged, bitter, coarse, flat, smothered, and storage and may possess feed flavour to definite degree

1. Grade B :

* May have slightly acid flavour
* Readily acceptable to many consumers
* May possess any of the following flavours to a slight degree : malty, musty, neutralizer, scorched, utensil, weed, and whey
* May possess any of the following to a definite degree : acid, aged, bitter, smothered storage, and old cream, feed flavour to a pronounced degree

Graders evaluate body in butter for its characteristics or defects. There are eight major defects considered in this evaluation:

(1) Crumbly (lacks cohesion).

(2) Gummy (sticky mouthful).

(3) Leaky (free moisture on the butter surface).

(4) Mealy or grainy (a grainy feels on the tongue similar to cornmeal).

(5) Ragged boring (unable to draw a smooth full trier of butter).

(6) Short (lacks plasticity and tends toward brittleness).

(7) Sticky (butter sticks to trier as a smear), and

(8) Weak (lacks firmness).

Most of the above defects in body can be associated with the spreadability characteristics of butter.

  