



Judging of dairy products

by Hans Keller

A few years ago we received a food powder sample at the laboratory I was involved with. This sample had to go through a series of expensive physical, chemical and microbiological analysis to determine if it conforms to the specifications required for this specific product. The final result was, until somebody asked out of the blue "What does it taste like?" It tasted awful.

We could have saved a lot of money and effort by just tasting the product. From this lesson we can see how important it is to always do a sensory evaluation on a food product because in the end, considering food safety and nutrition, the product must still be enjoyed.

Sensory evaluation is still the only way to tell if we are going to enjoy a product or not. We can inject a sample of the product into a analyser and it will give us all the information on the flavour compounds present, but it will not give the sensation of all those components simultaneously, only live organisms can achieve that. Sensory evaluation is the final assessment of a

food product as the consumer is performing the judgment in that way.

People tend to think that sensory evaluation is subjective. It is not always the case. Where the person being the judge does not know the food product, one can assume that the evaluation is subjective (either likes it or not), but an experienced judge with knowledge of the physical, chemical and microbiological aspects of dairy products, will make it much more objective. Put on top of that criteria for evaluation, and we can begin to say that the judgment can be fair and objective. Some judges are able to even tell the pH of a product just by tasting it. This is also true of salt, free fatty acids, oxidation flavours, etc. The human being becomes a calibrated analyser.

Judging for shows

To determine which product in a specific class is the best on judging day, we set a panel of judges and stewards to help with the assessment. Between three and five judges can form a panel. The highest and lowest scores from the judges are discarded. If a judges' score tends

to differ too much from the others, the stewards will inform him or her and their scores will not be taken into consideration.

Judges must possess certain character qualities, these include:

- A judge must be, first of all, unbiased. A good judge will evaluate what is before him – even if the labels are visible. He will not discriminate among the entries
- He must have a good knowledge of the products he is judging. A judge is an expert in his particular field – one can not ask a dairy judge to judge fowls if he does not know a thing about them
- He must not be temperamental and let the environment influence his judgment
- He must not let own preferences influence the evaluation.

The qualities of stewards include:

- Must have reasonable knowledge of the products to be evaluated
- Must be honest
- Must be accurate in presentation of products to be judged
- Must check judges scorecards and the integrity of judges
- See to it that results are accurate and well documented.

Scorecard

To evaluate on the same level, a scorecard is given to each judge. This scorecard can vary from country to country, or even from show to show. Products are placed into categories and classes, and will then be just accordingly. Cheddar will, for example, be divided into young and matured classes, and will be totally separated from Gouda or any other classes.

Most products are judged according to a points system with the following categories:

- **Colour and appearance (2 points)** – The colour must be typical of the specific product and must not be too intense or too colourless. The appearance must be attractive without any spots or surface defects
- **Body and texture (7 points)** – Each type or variety of dairy products has a specific body and texture that could be identified with it.



For example, fruit yoghurt and drinking yoghurt, hard and soft cheese, cheese with and without holes, etc. Microbiological defects will also show when cheese is examined, for example small, round holes could be an indication of coliform bacteria (a contaminant).

- **Flavour and taste (11 points)** – All off-flavours will be penalised in this category. The flavours associated with a specific product will be looked for and, if not present, points will be deducted. A bitter taste will be discriminated against and salt and sour must have the right balance. If a product does not have any flavour, it will also lose some points.

A score of 15 out of 20 is considered to be a good product. Scores of 20 out of 20 is possible and have been achieved. Scores below 13 out of twenty indicates a defective product and will not receive a prize. After judging and the stewards' reports, the points are collected by the chief steward who awards the prizes and trophies. **M&JR**