



Confectionery Industry

Confectionery in general

Candy is made by dissolving sugar in water or milk to form a syrup, which is boiled until it reaches the desired concentration or starts to caramelize.

The type of candy depends on the ingredients and how long the mixture is boiled. The final texture depends on the sugar concentration. As the syrup is heated, it boils, water evaporates, the sugar concentration increases and the boiling point rises. A given temperature corresponds to a particular sugar concentration.

In general, higher temperatures and greater sugar concentrations result in hard, brittle candies and lower temperatures result in softer candies.

Around the world today, Haribo produces over 100 million Gold-Bears every day.

Trays are filled with a flattened heap of fine powdery starch. The Gold-Bears form is then pressed into the starch. The negative forms are transported to production where the fruit gum mixture is poured into the starch molds.



After a long drying process the fruit gums get a final coating of bees wax and carnauba wax, giving them a shiny appearance and keeps them from sticking to each other.

Why the need to measure humidity?

In the confectionery industry, there are quite a few applications where the need to measure humidity exists: drying, storage & packaging are the main ones.

1) Other ingredients included in sweets are: glucose syrup, dextrose, flavoring and citric acid. Glucose syrup is highly hygroscopic, so when placed in a high humidity environment, the product will absorb moisture.

Who has never unwrapped a sweet and found it sticking to the wrapper? This example is perhaps for the storage of the finished product, but if this was to happen during the production

process, the sweet would then stick to everything including the machinery, other sweets, etc.

2) Moisture gain in the product will also affect the shelf life. It may also favor the growth of different micro organisms depending on the total water activity.

3) The storage of confectionery products, must also be monitored in order to avoid issues during the different seasons. At high temperatures, the sweets may lose their form, color and taste among other things.

4) In order to reuse the starch in the production process, the starch is recovered, sieved and conveyed into a dryer in order to condition it for the next use.

Facts & Figures

- In 2008/09, 165.547 Million tons of sugar were consumed!
- In Europe and the Americas, people consume around 40kg a year.
- The world average being 20kg a year per person.

