FOODIE TALKS
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The Salt Story

Salt was once one of the most prized of all seasonings, as revealed in the expression "below the salt"- nobles, who sat at the head of the table (above the salt), were allowed to use salt, while lesser folk, sitting below the salt, had to rely on herbs to flavour their food.

Salt is a white crystalline odourless sharp-tasting substance, which is used as a condiment, and preserving agent. Of all flavourings, salt is the most elemental.

The importance of salt can also be demonstrated by the fact that it has been used instead of money. The word "Salary" is derived from the Latin word Salarium, referring to the direct payment of salt as wages to soldiers.

The careful use of salt for seasoning is one sign of a good cook. Salt is usually added at the beginning of cooking, but with discretion; if too much is added at the end of cooking, the raw salt taste will be dominant. In soups or sauces that are boiled to concentrate the flavour, the salt will become stronger as the quantity of liquid reduces. Salty ingredients such as bacon or cheese can also be a trap since they will indirectly salt a dish. A dish that has been over-salted is hard to remedy. The effect may be balanced by adding a bland ingredient such as cream, milk, rice or potatoes. A soup or sauce can be diluted at the last minute with milk or water, and then thickened with arrowroot or corn flour.

Salt is almost indispensable in baking bread and pastry and can improve the flavour of cakes by highlighting their sweetness. Salt is sometimes used to draw out liquid, which is why meat is soaked in brine to preserve them. Watery vegetables such as cucumber are sprinkled with salt to draw out liquid and soften them; others like aubergine are salted to remove the bitter juices. The cut surfaces of meat, especially red meat, should never be salted in advance of cooking, or the surface of the meat will be too moist to brown.

Salt is used in the manufacture of pickles, and cheese, and in the preserving and curing of fish and meat products. Brine is used extensively in refrigeration and cooling processes. Water softening equipment uses salt, which exchanges sodium ions for those of Calcium and Magnesium in the water being treated.

Salt changes food, by drawing out water, blood and other impurities. In doing so, it preserves them.

USES FOR SALT

The basic processes in which salt plays an important role are:
Osmosis
Dehydration
Fermentation

OSMOSIS

It is the movement of a solvent (water) through a semi-permeable membrane in order to equalise the concentration of a solute (salt) on both sides of the membrane.

When you apply salt to a piece of meat, the fluids inside the cell travel across the cell membrane in an effort to dilute the salt on the other side of the membrane. Once there is more fluid outside the cell than in, the fluids return to the cell's interior, taking with them the dissolved salt. Once the salt enters the cell, it can kill off harmful pathogens, and that is the essence of salt-curing foods.

DEHYDRATION

In order to keep food safe, and appealing to eat for long periods of time, it is important to remove as much excess water as possible. Applying salt to food can dry them effectively, since the salt tends to attract the free water, making it unavailable to microbes.

FERMENTATION

When left unchecked, the process of fermentation would completely break down the food. Salt is important to act as a control in this process since it affects how much water is available to the enzymes. Like bacteria and other microbes, enzymes cannot live without water. Salt uses up the water, and thereby prevents fermentation from getting out of hand.

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