

# Salt in food production - no substitution

## Hunger for salt

From the dawn of history, mankind has sought out salt, first to survive and secondly to make food palatable. Also, for thousands of years, salt has been used as a safe way to preserve food. Today it is an essential part of the manufacturing process of many favourite foods such as bread, cheese, sausages, certain meat and fish products, pickles and so on.

## Preservation

Salt preserves food by creating a hostile environment for micro-organisms. It does this by reducing the amount of "free water" in the food, which the micro-organisms need to survive.

## Technology

Along with its function as a preservative, salt is also vital in the production process of many foods. Salt is essential in the production of different cheeses, reducing the water content and regulating the activity of starter cultures. Popular meats such as pastrami and parma ham are dry cured using salt, which improves their tenderness and contributes to their distinctive flavour. For sausages and other meat products, salt is used in the production process, increasing the binding properties which in turn affects the consistency of the final product. In bread production, salt serves to soften up the dough, stops

it sticking together and controls the fermentation; this is important in improving the quality and texture of the finished bread.

## Taste

The most commonly known attribute of salt, however, is its ability to improve the flavour of many foods. 'Salty' is one of the four basic types of taste that we use to differentiate food together with sweet, sour and bitter. Tests have also shown that salt increases the perception of fullness and thickness, gives the impression of a less watery product and even increases the perception of sweetness.

## Salt is unique

It is clear that salt has a varied and vital role in the production and preservation of many foods. There is no substitute with all these qualities. Without salt we would have a largely tasteless and unappealing diet and many of our favourite foods could either not be produced or would be changed irrevocably.

(See our other related factsheets: Salt & Blood Pressure, Salt & Pregnancy, Salt & The Elderly, Salt & Food Production)