## SUGAR BEYOND SWEETNESS

important
functional
roles of sugar

Sugar, also known as sucrose, s a naturally occurring product of photosynthesis made by all green plants. It is a highly versatile ngredient added to foods for much more than just sweetness.

## 1. Flavour

A small amount of sugar is added to nutritious foods such as flavoured yogurts and whole grain products to balance out sour and bitter flavours.

Sugar is also added to tomato and vinegar based sauces, dressings, and brines to balance out spicy, salty, and acidic flavours. Without sugar, these foods would not be as enjoyable.


## 2. Preservation

When making jams, jellies, preserves, sauces, and dressings, sugar absorbs
extra moisture and stops bacteria
from growing, delaying spoilage.


In bread products and baked goods, sugar's ability to retain moisture helps to extend shelf life. Without sugar, these foods would spoil sooner and mould would grow much faster.

## 3. Texture

Sugar lowers the freezing point
of ice cream, preventing the
formation of large ice crystals,
which helps make it soft, smooth
and easy to scoop.

The gel-like consistency found in jams and jellies is created when sugar is mixed with fruit fibre (pectin) and acids such as lemon juice.


The texture of hard and soft candies depends on the size of the sugar crystals that orm when different amounts of sugar are dissolved in a heated liquid mixture Sugar also contributes to the creamy texture of dressings, thickens jams, makes sauces syrupy, and adds a crunchy texture to pickled vegetables.


## 4. Volume

Sugar acts as the food for yeast,
which helps bread products and other baked goods rise, giving them an airy texture.


Sugar also adds volume to egg white foams, such as meringues, by stabilizing he foam structure and allowing air to be incorporated. Without sugar, these products would not be as tall, fluffy, or soft

## 5. Colour

When heated, sugar caramelizes or undergoes a Maillard reaction (browning) if proteins are present. Both of these processes result in the characteristic golden brown colour and pleasing aromes of bread products, baked goods, bread proaucts, ba

## Now You Know!

Sugar is a highly versatile ingredient - no other sweetener can match all of its roles. When you try to replace sugar in foods, often many additives are needed. This can make for a onger and more confusing ingredient list. Depending on the replacement ingredients, total calories may not always be lower than the original product.


