

Why is there **SUGAR** in my food?

SUGAR IS A MULTITASKING INGREDIENT

Too much or too little can change the taste, look, colour, size, shape and feel of food.

Many of the foods we eat and enjoy rely on the unique properties of sugar. Even you as the home cook have probably used some of sugar's properties without knowing it.

Sugar helps...



Bread
with
COLOUR
SOFTNESS
RISING
FLAVOUR
ENHANCEMENT

Without sugar
BECOMES
FLAT & TOUGH



Baking
with
COLOUR
SOFTNESS
BULK & VOLUME
FLAVOUR
ENHANCEMENT
RISING

Without sugar
BECOMES
**BLAND &
WOULDN'T RISE**



*Wine
& Beer*
with
**ALCOHOL
FERMENTATION**

Without sugar
BECOMES
**ALCOHOL
WOULDN'T EXIST**



Jam
with
PRESERVING
FLAVOUR
ENHANCEMENT
GELLING

Without sugar
BECOMES
**TOO RUNNY TO
SPREAD & WOULD
GROW MOULD
QUICKLY**



*Sauces &
Dressings*
with
MOUTHFEEL
FLAVOUR
ENHANCEMENT
PRESERVING

Without sugar
BECOMES
**TART, TOO
RUNNY & WOULD
GO OFF QUICKLY**



*Fruit or
Soft Drink*
with
PRESERVING
MOUTHFEEL
**FLAVOUR
ENHANCEMENT**

Without sugar
WOULD
**TASTE THIN &
WATERY & GO OFF
QUICKLY**



Ice Cream
with
FREEZING POINT

Without sugar
BECOMES
**HARD &
UNSCOOPABLE**



Yoghurt
with
**FLAVOUR
ENHANCEMENT**

Without sugar
BECOMES
VERY SOUR

**READ
MORE**

Why is there **SUGAR** in my food?

The sugar in food can either be naturally present [e.g. in milk, fruits and vegetables] or added during preparation and at the table – called free sugars [e.g. soft drink]. Some foods contain a mix of natural and free sugars [e.g. jam and yoghurt].

Whether it's added or already in a food, it's used by the body in the same way.

How can you tell if there's sugar in a food? On packaged foods, total sugar, which is the combination of natural sugar and added sugar, is included in the Nutrition Information Panel. The type of sugar or where the sugar comes from can be found in the ingredients list.



FREEZING POINT

Sugar lowers the freezing point of foods so they stay softer at lower temperatures. Sugar also creates a smoother texture by forming smaller ice crystals. Too much sugar can cause freezer burn.



FLAVOUR ENHANCEMENT

The flavour of acidic, tart and bitter foods can be made more palatable by adding sugar. Sugar enhances not only the flavour but also the scent of foods, such as baked foods and sauces.



PRESERVING

Bacteria and mould need water to multiply. Sugar slows their growth by holding on to water, thereby reducing the 'water activity'. The right amount of sugar in a liquid product helps to preserve it.



COLOUR

Sugar gives food colour. Browning occurs when sugars and proteins react under heat – called the maillard reaction. Caramelisation occurs under heat when sugars react with each other.



RISING

Sugar provides food for yeast, which creates air bubbles, helping baked goods to rise and expand at a faster and more consistent rate [fermentation]. Beating sugar into liquid ingredients, creates tiny air bubbles which expand during baking.



ALCOHOL (FERMENTATION)

Yeast uses sugar as food to create alcohol, through fermentation. During fermentation some of the sugar is used up so the amount in the end product is lower than in the recipe. The sugar in alcoholic beverages may come from grapes or other fruit, through the breakdown of starch or be added by the winemaker/brewer.



BULK & VOLUME

When sugar is one of the main ingredients it provides bulk and volume. This is particularly important in baking.



GELLING

Sugar helps create a gel-like texture when combined with pectin, a natural component of fruits. Too much or too little sugar and the sugar will crystallise or the consistency will be runny.



MOUTHFEEL

Sugar gives liquids a certain body or thickness, contributing to an appealing drinking experience.



SOFTNESS

Sugar helps keep foods moist and soft and slows staleness, by attracting and binding water.



SUGARNUTRITION
RESOURCE CENTRE

More info available at sugarnutritionresource.org

References

Alexander, RJ. Sweeteners: Nutritive: practical Guides for the Food Industry. St. Paul, Minn: Eagan Pr; 1998.

Charley, H. Food science. New York: Wiley; 1982.