



## **SUGAR: A VERSATILE INGREDIENT**

A number of physical and chemical properties make refined sugar a useful, safe and versatile food ingredient. These properties are either difficult or impossible to reproduce with any other sweetening substance.

### **BULKING AGENT**

Sugar provides body to foods. This is what gives bulk to cakes, breads and confectionery, and the correct texture to ice cream.

### **FERMENTATION**

Sugar accelerates the fermentation of yeast to raise and lighten dough. It also acts as a food for yeast in the production of some alcoholic and brewed beverages.

### **PERSERVATIVE AND ANTI-OXIDANT**

Sugar helps stop the growth of bacteria and mould in a wide range of products including jams and jellies, cordials and condensed milk. Added to canned fruits, sugar minimises oxidation of the fruit to prevent browning once the can is open.

### **FLAVOUR ENHANCER**

A small amount of sugar combines well with the natural flavours in canned fruits, condiments and soft drinks, enhancing the desired flavour without adding too much sweetness.

### **VISCOSITY**

Sugar adds body and viscosity to a wide range of liquid and semi-liquid products including soft drinks, flavoured milks, fruit drinks and yoghurts. This is used in beverages as a heavier liquid is generally more appealing and satisfying.

### **COLOUR**

Sugar will caramelize on heating to produce a distinctive colour and flavour in baked goods such as bread and biscuits. This property is relied upon to produce the distinctive colour of caramel confectionery.

### **ANTI-COAGULANT**

Sugar delays the coagulation of protein, producing a smoother product in recipes such as baked egg custard.

### **OSMOTIC PRESSURE AGENT CONTROL**

In canned fruits it is important to prevent the fruit sugars leaving the cell structure and entering the canning solution. Sugar raises the osmotic pressure of the canning solution, preventing the transfer out of fruit sugars and the associated loss of flavour.