

# ANZAC BISCUITS - SODIUM BICARBONATE FUN

Bicarbonate of soda or sodium bicarbonate needs acid and water to achieve the bubbly reaction seen when making ANZAC biscuits.

In this recipe the acid comes from the golden syrup and the moisture from the melted butter and water. When all 3 are mixed carbonic acid is created which quickly breaks down into carbon dioxide ( $\text{CO}_2$ ) and water ( $\text{H}_2\text{O}$ ). The carbon dioxide gas is what makes the foam and bubbles. For children to be able to see this without the risk of getting burnt the following experiment can be performed.

## EXPERIMENT!

### Introduction

This experiment will demonstrate that when sodium bicarbonate is mixed with liquid and acid it creates carbon dioxide gas.

### Material

- 1/2 cup of water in a tall clear glass
- 10 sultanas
- 1/2 teaspoon bicarbonate of soda
- 1/4 cup vinegar

### Method

1. Place sultanas in the water
2. Place the bicarbonate of soda in the water
3. Pour the vinegar slowly into the glass

### Results

The carbon dioxide sticks to the sultanas causing them to rise to the top of the container. On reaching the top the gas evaporates and the sultanas, being too heavy to float, sink to the bottom. When they reach the bottom the cycle starts again.

