

Is all salt the same?



Introduction

Some recipes suggest the use of sea salt rather than 'ordinary' table salt. In this exercise you are asked to read the statements on packaging of different brands of salt and consider to what extent they are scientifically accurate and whether they might be misleading. Some statements are given below and your teacher may give you some others taken from packs found at home in the kitchen, in shops, in magazines and in recipes. You could try to find other statements yourself in supermarkets and other shops (health food stores often stock different types of salt), magazines and recipe books.

One brand of sea salt (sold in the form of flakes for grinding in a mill) has the following wording on the packet:

'Ingredient Pure Crystal Sea Salt with no additives.'

'Its combination of texture and flavour sets it apart from other salts and it is sought after by the health conscious and gourmet alike.'

'XXXX is a completely natural product without artificial additives, retaining valuable sea water trace elements such as magnesium and calcium.'

'Its pronounced and distinctive 'salty' taste means less is required, an advantage for those who wish to reduce their salt intake.'

'It is free from the bitter after-taste often associated with other salts and salt substitutes.'

Questions

Think about the following questions and discuss them with other members of your group.

1. To what extent are the statements about the sea salt contradictory? Can it be 'pure' and at the same time 'retain valuable sea water trace elements such as magnesium and calcium'?
2. Do the statements about sea salt suggest that it has a more salty taste than ordinary salt? Is this possible or likely considering that both types of salt are almost 100% sodium chloride?
3. Most sea salts are sold in the form of granules or flakes which are larger than the granules of ordinary table salt. Could this affect the taste
 - (a) when placed directly on the tongue?
 - (b) when the salt is dissolved in water as is done when cooking vegetables?
4. Sea salt is made by evaporating the water from seawater (in hot countries this is often done in outdoor lagoons using the Sun's rays). Most 'ordinary' salt in the UK is extracted from underground deposits by pumping water into the deposits to dissolve some of the salt and evaporating the resulting brine.
 - (a) Which is likely to be purer?
 - (b) Consider where the underground deposits came from. Can both types of salt be considered to be sea salt?