Subject: KS2 Maths

Topic: Interpret and Construct Tables

Length of film: 03:50

Alison Stancliffe is a food scientist. In her job she has to interpret and construct tables.

Description: Alison works for Nestle, her job is to see if new products ideas can actually be turned into brands which will appeal to customers. She knows that although chocolate is great, you shouldn't eat too much of it, so as a part of her job, she constructs the nutritional tables which appear on the back of the chocolate wrappers. The tables tell you how much chocolate you can eat and still stay healthy.

Discussion points:

1. How do you think Alison goes about inventing new chocolate bars?
2. In what ways does Alison consider people's health? (bring out point that chocolate should be no more than 10% daily calorie intake)
3. What do you think she likes best about the job?
4. What does GDA mean?
5. What is the maximum about of sugar an adult should have in a day? (pause 2.30 look at table) If a grown up ate 20 chocolate buttons in a day, how much of their sugar allowance would they have used?

Suggested activities:

1. Look at the table on the GDA web link showing GDA for children 5-10 yrs. Work out how many of the choc buttons would be ok for a child. Extend the table shown on screen at 2.30 with a column for children.

2. Bring in some choc bars and some 'healthy snack' bars. Compare the nutritional content. Photo the tables on the packets, children can create comparison tables of overall calories and sugar content for a range of bars. (They could use a spreadsheet to organise the data).

Bar	Calories per bar	GDA for children	Sugar per bar	GDA for children
mars	Xxx kcal	18000 kcal	Xxx g	85 g

Extension activities:

- Organise and analyse the data in a spreadsheet, find the mean calorie/sugar content of choc bars compared with cereal bars.
- Make your own healthier chocolate bar. What could you mix with milk chocolate to make a healthier bar? (oats /bran flakes/rice krispies /raisins/pumpkin seeds… NB avoid nuts because of allergies). Design a wrapper for your new bar, make a nutritional table for it like the one in the film, but with an extra column for children.

Teacher's notes:

Subject keywords:

table, tabulate, columns, order, data, organise, interpret, sort
percentage % grams (g) kilocalories (kcal)

Job keywords:

Product developer – person who improves an existing product or develops new kinds of products.

Nutrition GDA - guideline daily amount.

Energy content – the amount of energy stored.

Typical back of pack nutrition and GDA information							
Nutrition information				Guideline Daily Amount			
Typical values	Per 100g	Per slice (approx. 5.7g)	% based on GDA for an Adult	Woman	Man	Children (5-10 years)	
Calories	360 kcal	20 kcal	1%	2,000 kcal	2,500 kcal	1,800 kcal	
Protein	12.4 g	0.7 g	2%	45 g	55 g	24 g	
Carbohydrate	68.7 g	3.9 g	2%	230 g	300 g	220 g	
Sugars	5.0 g	0.3 g	<1%	90 g	120 g	85 g	
Fat	3.9 g	0.2 g	<1%	70 g	95 g	70 g	
Saturates	0.5 g	Trace	<1%	20 g	30 g	20 g	
Fibre	9.8 g	0.6 g	3%	24 g	24 g	15 g	
Salt	0.8 g	0.05 g	1%	6 g	6 g	4 g	