

## Y3,4 Wednesday – Science – Sugary drinks

### LO: I know that sugary drinks are unhealthy

In this lesson, we're looking at the sugar content of different drinks. We know from the previous lesson that we should limit the amount of sugary and fatty foods that we eat. The same goes for drinks.

Some drinks have sugar added to them to make them sweeter – like Coca Cola.

Fruit juice also contains sugar but it is not added sugar. Fruit juice does count towards your five a day but you shouldn't drink more than 150ml of fruit juice a day. It is also better if you drink fruit juice with a meal.

For more information about sugar and some ideas for sugar swaps visit the Change 4 Life website.

<https://www.nhs.uk/change4life/food-facts/sugar>



**Task 1:** Look at the next page, which has a range of drinks and their nutritional information. Identify how much sugar each drink contains in 100ml. Which are the best drinks. If you drink lots of a sugary drink, what change could you make?

**Task 2:** Watch the BBC Bitesize video about experiments to test the effect of sugary drinks on our teeth. <https://www.bbc.co.uk/bitesize/clips/znr4wx>

- How did the scientist try to make the experiments fair?
- What are the conclusions of his experiments?

**Optional tasks:** Create a poster for younger children educating them about drinks and sugar. Visually show the amount of sugar in different drinks by measuring the weight of sugar contained in each drink – remember that people will often drink much more than 100ml of these drinks. For example, a small bottle of Coca Cola contains 500ml. That's a lot of sugar!

## Sugar content of different drinks per 100ml



each Per 100 ml diluted serving gives you

Energy 0%kJ 2%kcal	Fat 0g	Saturates 0g	Sugars 4.6g	Salt 0.06g
1.2%	0%	0%	5.2%	1.2%



each Per 100ml diluted serving gives you

Energy 0%kJ 0kcal	Fat 0g	Saturates 0g	Sugars 0g	Salt 0g
0%	0%	0%	0%	0%



### Nutrition

Typical Values	per 100 ml
Energy	104 kJ (25 kcal)
Fat	0 g
of which saturates	0 g
Carbohydrate	11 g
of which sugars	11 g
Protein	0 g
Salt	0.1 g
Niacin	0.1 mg (20% RNI*)
Pantothenic Acid	2 mg (50% RNI*)
Vitamin B6	2 mg (143% RNI*)
Vitamin B12	2 µg (80% RNI*)
Vitamins	-



### Nutrition

Typical Values	per 100 ml	per serving (250 ml)	% RI* (250 ml)
Energy	42 kJ	105 kJ	1%
	10 kcal	25 kcal	1%
Fat	0.0 g	<0.5 g	0%
of which saturates	0 g	0 g	0%
Carbohydrate	2.2 g	5.7 g	2%
of which sugars	2.3 g	5.7 g	4%
Fibre	0.0 g	<0.0 g	-
Protein	0.0 g	<0.0 g	0%
Salt	<0.01 g	<0.01 g	0%

\*RI = Reference intake of an average adult (8400 kJ/2000 kcal)  
This table contains 0 servings of 250 ml



### Nutrition

Typical Values	Per 100ml	Per 100ml (%)
Energy	201 kJ	362 kJ
	47 kcal	71 kcal (8%)
Fat	0g	0g (0%)
of which saturates	0g	0g (0%)
Carbohydrate	10g	10g
of which sugars	10g	10g (17%)
Fibre	0.0g	1.2g
Protein	0.0g	1.2g
Salt	0g	0g (0%)
Vitamin C	10mg (20%)	20mg (33%)

\*Average serving. This pack contains 2 servings  
\*Contains naturally occurring sugars from juice  
\*Reference intake of an average adult (8400kJ/2000kcal)



### Nutrition

Typical Values	per 100ml	Per 250ml
Energy	300kJ*	100kJ*
	80kcal	100kcal (8%)
Fat	1.2g	2.6g (5%)
of which saturates	0.0g	1.0g (2%)
Carbohydrate	8.6g	16.2g (17%)
of which sugars	8.6g	16.2g (21%)
Protein	0g	0g (0%)
Salt	0.1g	0.2g (2%)
Calcium	120mg (18%*)	240mg (30%*)
Vitamin B2 (Riboflavin)	0.1mg (1.8%*)	0.2mg (10%*)

\*RI = Reference intake  
\*DRI = Daily Reference Intake  
Reference intake of an average adult (8400kJ/2000kcal)  
Sugars present naturally found in milk

**Coca-Cola**

**NUTRITION INFORMATION TYPICAL VALUES**

Per:	100ml	250ml	(%)
Energy:	180kJ / 42kcal	450kJ / 105kcal	(5%)
Fat:	0g	0g	(0%)
of which saturates:	0g	0g	(0%)
Carbohydrate:	10.6g	27g	(10%)
of which sugars:	10.6g	27g	(29%)
Protein:	0g	0g	(0%)
Salt:	0g	0g	(0%)

\* Reference intake of an average adult (8400kJ/2000kcal)

250ml

Energy	Fat	Saturates	Sugars	Salt
450kJ / 105kcal	0g	0g	27g	0g
5%	0%	0%	29%	0%

100ml: 180kJ / 42kcal

Typical Values	per 100ml	per 250ml
Energy, kJ/kcal	158/37	395/93
Carbohydrate, g	8.9	22.3
of which sugars, g	4.5	11.3
Salt, g	0.08	0.20



Does anything surprise you?

What swap would you suggest for someone who drinks a lot of sugary drinks?