

KEY STAGE 2:

Session Two – Sugar Detectives

Learning objectives:

- To understand the sugar content of popular sugary drinks readily available in the UK
- To familiarise pupils with reading and interpreting front of pack colour coded nutrition labelling on packaged foods and drinks
- Contextualise the amount of sugar that sugary drinks contain

Resources:

- GULP 'Sugar Detectives' PPT
- X30 Sugar Detectives Worksheet PDF
- Selection of cans and bottles that you and pupils have brought in over the week
- GULP 'Higher or Lower' PPT

PART ONE: POWERPOINT SESSION

Slide	Information
1	• Explain to the children that by the end of today's session they will all be a fully qualified Sugar Detective! • Explain to the children that this session will help them to read nutrition labels, understand the information they show and some of the tricks the industry use to try and fool you into thinking they contain less sugar than they actually do
2	• Briefly recap what was covered in the previous session: Looking After Your Teeth
3-5	• Talk the children through the front of label traffic lights system and what each colour represents • Ask the children which category (green, amber, red) they think most drinks falls into
6-7	• Quick-fire question – remember to try to integrate some physical activity
8-13	• How much sugar is in your drink? • For each slide, ask the children which category (green, amber, red) they think the drinks fits into (colour of text corresponds with category – all drinks are red) • Ask the children if they are surprised by the volume of sugar in any of the drinks? • Which was the most surprising?
14	• Ask the children which drink they think this label belongs to (Coca-Cola) • The "39%" corresponds with the total added sugar an adult should have per day (90g) those experts suggest this should be halved to 45g
15-16	• Ask the children to guess how many cubes 35g of sugar is • Tell the children that one sugar cube is equal to 4g of sugar

17-19	• Tell the children that 7 to 10 year-olds (their age group) should only have 24g of sugar per day • Therefore, if you have one can of Coca-Cola per day, you will consume more sugar than is advised in one go – that's before you think about cereal in the morning or chocolate, sweets, cakes, biscuits etc.
20-21	• Quick-fire question
22-26	• Handout the Sugar Detectives worksheet and talk the children through how to complete the task: - Write the name of the drink you have in the left-hand column - Record the size of the drink in millilitres (ml) in the next column - Record the sugar content in grams (g) per can or bottle - Explain to the children that the drink bottles do not always display the overall volume – it may be per 100ml, per 250ml etc. - Ask the children to convert the total volume of sugar into sugar cubes by dividing by 4 - Remind the students that 1 sugar cube is equal to 4g • Once the children have completed one drink, ask them to pass their drink on to the next person and repeat the process on another drink • Discuss the result with the children – were there any surprises? • Encourage the children to take the worksheets home and repeat the task with drinks they have in their house – tell the children you will ask them about this at the start of the next lesson.
27-28	• Quick-fire question
29	• Summarise the session
30	• PART TWO: Physical Activity session – see Physical activity booklet

PART TWO: PHYSICAL ACTIVITY SESSION

Activity 1: Traffic Lights

Discuss with the children what activities they think require: a lot of effort, some effort, little effort and assign a single activity for each of these.

Tell the children that you will now shout out the name of a sugary drink you have looked at previously.

- If the drink is **high in sugar** i.e. it has a **red label** >>> e.g. Coca-Cola, Red Bull, Lucozade; children have to perform the activity that requires a lot of effort
 - This demonstrates that you have to exercise a lot to burn off the calories in sugary drinks
- If the drink has **some sugar** in i.e. it has an **amber label** >>> e.g. some flavoured waters, low sugar juices; children have to perform the activity that required some effort
 - This represents drinks with less sugar require fewer calories to burn off
- If the drink has **little or no sugar** in it i.e. it has a **green label** >>> e.g. water, low sugar fruit juices; children have to perform an activity that requires little effort
 - Although drinks such as water do not contain sugar, it is important to exercise regularly to keep your heart, muscles and bones healthy.

Activity 2: Higher or Lower

This game is a variation on the classic card game of the same name, but instead of predicting whether a card will be 'higher or lower' the aim of the game is to guess whether a drink has more or less sugar than the previous drink.

- Start the game by designating one side of the room as 'higher' and the other 'lower' (feel free to improvise here)
- Call out the name of a sugary drink and how much sugar it contains (see "List of Drinks on page 25")
 - Coca-Cola = 35g of sugar
- Then call out the name of a second drink and ask the children whether they think it has more (higher) or less (lower) sugar than the previous drink
 - Robinson's Fruit Shoot = 2.2g of sugar
- If the children think it has more sugar than the previous drink they should run to the 'higher' side of the room; if the children think it has less sugar than the previous drink they should run to the 'lower' side of the room

Note: feel free to improvise too by asking the children to stand if the drink is 'higher' and sit if the drink is 'lower' if you are restricted to a classroom setting.

End of session

- Cool down with some simple stretches
- Ask pupils to turn to the person next to them and come up with three things they've learnt in this session. Share some of the ideas.

FURTHER INFORMATION

Nutrition labelling

- Sugar can be labelled under several different names on packaging, including; sucrose, fructose, glucose, hydrolysed syrup, honey, corn, fruit juice, maltose, starch etc.
- Both naturally occurring and added sugars can be found in all kinds of foods and drink, some more obvious than others
 - Naturally occurring sugars: fresh fruit and vegetables (carrots, beetroot, and butternut squash), milk and plain yoghurts
 - Added sugar sources: breads, cakes, pastries biscuits, ready meals, soups, sauces, salad dressings, desserts, confectionary, flavoured yoghurts, milkshakes and soft drinks. Honey also contributes to added sugar intake.
- Understanding and interpreting food labels, particularly front of pack, colour coded (red, amber, green) nutritional labels can help consumers compare foods and drinks to make healthier choices
- Energy (calories), fat, saturated fat, salt and total sugars are listed on front of packets to help consumers 'at a glance' understand how much of each of these nutrients is found within 100g / 100ml or a portion of pre-packaged food and drink and to make comparisons of similar products
- Front of pack labels use reference intakes (values for adults) as a means of communicating maximum recommended nutrient intake to the public. The values for the nutrients are all maximums, not targets. The daily reference intake for adults for total sugars is 90g, though experts recommend this should be halved to 45g.

References

Public Health England (2015). Sugar Reduction: The Evidence for Action.

Scientific Advisory Committee on Nutrition. (2015) Carbohydrates and health. London: Crown Copyright.

National Diet and Nutrition Survey (2014). Results from Yrs 1 to 4 (combined) of rolling programme for 2008 & 2009, 2011 & 2012. Public Health England.

National Child Measurement Programme (2018) <https://fingertips.phe.org.uk/profile/national-child-measurement-programme>

Food Active website: <http://www.foodactive.org.uk>

GULP website: <http://www.giveuplovingpop.org>

NHS choices: <http://www.nhs.uk/Livewell/Goodfood/Pages/sugars.aspx>