

KEY STAGE 3:

Session One – Sugary Drinks

Learning objectives:

- To raise awareness of the health consequences of regularly consuming sugary drinks.
- To understand the sugar content of popular soft 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 in the UK.

Resources:

- On-line baseline knowledge and awareness questionnaire for pupils (printable)
- PowerPoint Presentation; to be delivered alongside the online resources including information covering;
 - Health consequences associated with soft drink consumption
 - Recognising different names to describe sugar
 - Reading food labels, interpreting nutritional information in line with dietary advice
- Give Up Loving Pop (GULP) campaign leaflets
- Box of sugar cubes (or white sugar and a teaspoon)
- A collection of empty drinks cans and bottles plus some empty food wrappers such as biscuits, ketchup bottle, granola bar, chocolate bar etc.

LESSON PLAN

PART ONE: INTRODUCTION AND QUESTIONNAIRE

- Introduction to the lesson [5 min]
 - Overview of the session within the context of the GULP campaign.
- Completion of on-line questionnaire [10 min]
 - Information collated from pupils on; consumption habits of sugary drinks, awareness of the dietary related health implications of excessive consumption and the influences of branding, marketing and advertising of sugary drinks on purchasing and consumption.

PART TWO: POWERPOINT PRESENTATION [40 min]

Slide	Information
1-2	• Explain to the students that you are now going to go through a presentation around sugary drinks.
3-4	• Ask the students what do they notice about the figures for teens in these diagrams? Why do you think that is? Why do the numbers go up for teens? Is that linked to going to secondary school / gaining more independence / were there any surprises?
5-7	• Remind students that naturally occurring sugars are better than free sugars but we should still monitor our intake. Ask students if they can think of any more examples of popular foods containing free sugars.

8-10	Demonstrate the recommended amounts of sugar with sugar cubes. Remember these are the upper limits! Does it seem like a lot or a little?
11-20	- Set out 7 sugar cubes and explain that this is the maximum daily amount of sugar we should eat per day. Ask a student to come to the front of the class and guess how sugar cubes there are in the sugar content of a 330ml can of Coco-Cola and to count out the cubes. Encourage the rest of the class to call out whether they think the amount is higher or lower that they have guessed. Reveal the answer: the equivalent of 9 cubes. Ask if they think a can of Red Bull has more or less sugar than the Coca-Cola. Ask the student to make their guess in sugar cubes and reveal the answer. Repeat for the rest of the slides. Make sure to discuss volume of sugar in relation to volume of fluid in drinks. Now compare the individual piles of sugar cubes to the seven cubes. Were there any surprises? What if they had a can of drink and a chocolate bar on the way home from school? - Mention that drinks such as Ribena, Rubicon and Lucozade have reduced their sugar content by over half following the sugar tax. - Highlight the fact milk-based drinks are excluded from the levy due to their calcium content, but drinks such as Friji Banana are now amongst the most sugariest drinks available to buy.
21	What is the issue with sugar?
21-31	Allow the students to read the slides in their own time.
32-33	Talk the students through these slides and allow the students to read the word cloud.
34	Explain how to read labels and leave this slide on show as you hand out the empty cans, drinks containers and food wrappers. Remind the students that are comparing like for like ie: 100ml or per 100g. Some labels show serving sizes so we need to read carefully. Usually we eat or drink more than the suggested serving! Ask the students to read the labels and place the items in order of lowest to highest in amounts of sugar. Remember that if sugar is removed from an item it may be replaced with more fat and that lower sugar may not be the same as low or no sugar.
35	What are the alternatives? What is the drink that is lowest in sugar? Water.
36	- What action will the students take now to change their habits? Remind them that an occasional fizzy drink is fine as part of a balanced diet but drinking fizzy and energy drinks every day will start to affect their ability to function at school and may affect their sleep patterns. Final game: Conscience corridor. Split the class into two groups and ask them to face each other and form a corridor. One side will be 'devils' and one side will be 'angels.' Choose a confident student to walk through the corridor very slowly. As they pass through, each 'devil' must whisper a reason why drinking fizzy pop is a good thing e.g.: it gives you energy, it's what everyone drinks, one can won't hurt. Each 'angel' must whisper why they shouldn't drink pop e.g.: it can rot your teeth and you'll never get a date, you'll be tired at school, it's expensive. Which side made the best argument? Were the reasons on both sides compelling?

	• Self-assessment: Hand out post it notes and ask the students to write down one 'I know' (knowledge) statement, one 'I can' (skills) statement and one 'I understand' (understanding) statement. Stick the post-it notes on a large sheet of paper and take a photo.
37	• End and summarise the lesson by citing what we have covered in the lesson

FURTHER INFORMATION

Background to the Give Up Loving Pop campaign

- The GULP campaign was created by Food Active, a collaborative healthy weight programme commissioned by the North West Directors of Public Health and delivered by the Health Equalities Group (HEG), Liverpool.
- Research carried out in collaboration with Liverpool John Moores University revealed a lack of awareness among adults and young people regarding the link between sugary drinks and dietary related ill-health such as obesity and type 2 diabetes.
- As a result the GULP campaign, aimed at families, children and young people, was launched in February 2015 across the North West using roadshow events and social media to deliver the campaign messages.
- This resource pack was funded by Big Lottery Awards for All.

Consequences of regular consumption of sugary soft drinks

- Young people 11-18 years are consuming on average 15% of their daily energy intake from added sugars (National Diet and Nutrition Survey). 3 x more than revised SACN (Scientific Advisory Committee for Nutrition) recommendations.
- The biggest source of added sugar is soft drinks (40%).
- Sugary soft drinks include fizzy drinks like coca cola & lemonade, fruit drinks, sports drinks, energy drinks and sweetened ice teas.
- Fresh fruit juice and smoothies can have considerably high sugar contents, despite being considered healthier drinks due to the nutritional value (vitamins or minerals present) they should not be consumed more than 1 x day and a maximum portion should not exceed 150ml. Fresh fruit juice contains a lot of fruit per serving and there is less fibre present to slow down the absorption.
- Regular consumption of sugary soft drinks is linked to a greater risk of being overweight or obese. Drinking one can of sugary soft drinks everyday could result in weight gain of up to one stone (6kg) every year. Being overweight or obese during childhood dramatically increases the chances of being obese in adulthood as well as developing other diseases and health problems including cancer and heart disease.
 - Currently in the UK 61% of adults and 31% of children aged 2-15 years old are either overweight or obese.
 - In parts of the North West almost 40% of children in year 6 are either overweight or obese.
 - Drinking 2 cans of sugary soft drinks daily increases the risk of developing type 2 diabetes by more than a quarter. Type 2 diabetes is a condition whereby the body doesn't produce enough insulin, the hormone that regulates blood glucose resulting in high

blood sugar levels. This can result in unpleasant symptoms such as feeling thirsty, tired and needing the toilet frequently. Type 2 diabetes has previously been referred to as adult onset diabetes as it generally develops in over 40's, however increasing numbers of young people are being diagnosed.

- Drinking one can of sugary drinks every day increases the risk of dying from heart disease by a third. Growing evidence suggests that sugar consumption independent of weight gain can lead to heart disease.
- A major cause of poor dental health such as tooth decay and erosion is sugary pop, as a result 1 in 4 five year olds experience tooth ache, fillings and tooth loss. Tooth decay is the main reason for administering anaesthesia among young children.
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Sugar in foods

- 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, some obvious and some not so obvious.
 - Naturally occurring sugars: Fresh fruit and vegetables (carrots, beetroots, and butternut squash), milk, 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 foods 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.

References and further reading

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>

Consultation to end the sale of energy drinks to children (2018) <http://www.foodactive.org.uk/5-things-to-know-about-why-we-need-a-ban-on-energy-drinks-to-children/>

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>
Change4life <https://www.nhs.uk/change4life-beta/campaigns/sugar-smart/home>