

KEY STAGE 2: Session One – Looking After Your Teeth

Learning objectives:

- To raise awareness of the health harms of consuming too many sugary drinks
- To discuss why brushing your teeth is important
- To understand which types of drinks and which do not cause tooth decay

Resources:

- GULP 'Looking after your teeth' PPT
- X3 hardboiled eggs
- X3 sealable plastic containers
- X1 Coca cola, Pure Orange Juice and Water
- X30 GULP Quizzes

PART ONE: POWERPOINT SESSION

Slide	Information
1-2	• Tell the children that before we get into the session properly, you need them to complete a short quiz. This will assess how much the children know about sugary drinks before GULP. • Hand out one copy each of the GULP Quiz and ask pupils to complete both sides of the sheet. • This should take approximately 10 minutes.
3-4	• Discuss the background of GULP and some of the problems of consuming sugary drinks • Also mention the benefits of water
5-6	• Explain to the children that throughout the GULP sessions you will be asking them a number of quick-fire questions to keep them on their toes • These are simple questions about which drink has less sugary in them • Begin to get the children physically active by asking them to stand up/jog on the spot etc. if they think X drink has less sugar.
7	• Ask the children what they think teeth are for – common answers include: to help us eat and drink, to help us talk, they make our smiles look nice.
8-10	• Ask the children what they think toothbrushes and toothpaste are for • Ask the children how many times we should brush our teeth a day (x2) • Ask the children how long we should brush our teeth for (2 minutes) • Ask the children why they think it is important to look after their teeth • Tell the children they only get one set of adult teeth and if we don't look after them the plaque can build up and teeth can become decayed and need treatment
11	• Go through with the children some of the drinks that you can find in shops that can damage your teeth • Tell the children although they may be called different things they all contain lots of sugar, which can damage our teeth

12-13	• Quick-fire questions • Remind the children that even though fruit shoot has less sugar than other sugary drinks, it still contains some sugar which can damage our teeth so they are best to only be confused every so often. Milk and water are the best drinks for our teeth.
14-22	• Ask the children whether it is time to re-think their drink? • Discuss healthier drink options with the children. • Mention that although milk contains some natural sugar, it also contains lots of vitamins and minerals that are important for growing children. Remind the children that we don't need to worry about this type of sugar. • Mention to children that whilst Diet Coke, Coca Cola Zero and Pepsi Max all contain no sugar, they do contain acids which can still damage our teeth. Remind the children that water and milk do not cause tooth decay!
23-24	• Quick fire question
25	• Explain to the children that as a class they are going to do a small experiment • The experiment is designed to simulate the effects of various sugary drinks on our teeth when consumed regularly • To do this use three hard-boiled eggs as a stand-in for teeth: The hard-outer shell of the eggs represents the hard-outer structure of our teeth – called the enamel and the soft inside of the egg represents the pulp – the soft, living tissue inside of teeth. • Ask a volunteer to place an egg in a sealable, clear plastic container and to pour water over the egg so roughly half of it is covered • Seal the container and pass this around the class – ask the children what they think will happen to the egg during the next couple of weeks • Repeat this for the two other eggs with the fresh orange juice and Coca-Cola drinks with two additional volunteers • Explain to the children that the acid present in both the fresh orange juice and Coca-Cola drinks will begin to attack the hard-outer shell of the eggs during the delivery period. The egg suspended in water should remain relatively unchanged • Ask the teacher in the class to store these in a dark corner of the room and explain to the class that you will revisit the eggs in the final GULP session
26	• Briefly summarise the next session – you are going to get the pupils to become Sugar Detectives! • Ask the bring in an empty bottle of their favourite drink to the next GULP session (alternatively, you can bring in a selection of cans and bottles). These can include Coke, Lemonade, Water, Vimto, Ribena etc. Remind children the day before the next session.
27	• Summarise the session
28	• PART 2: Physical Activity session – see overleaf

PART TWO: PHYSICAL ACTIVITY SESSION

Activity 1: Dribbling

Progression 1

- Children run down a channel with a ball, reach the end zone and shoot into a goal
 - This represent how easy it is for sugar to attach your teeth if left unprotected.

Progression 2

- Children dribble through a set of cones with a ball before reaching the end zone and shooting into a goal
 - The increased difficulty of the task represents the effect brushing your teeth has on making it more difficult for sugar to cause tooth decay

Progression 3

- Children run down a channel with a ball, reach the end zone and try to score past the goalkeeper
 - As in progression 2, the increased difficulty represents the protective effects brushing your teeth has.

Activity 2: Stop the Rot

Progression 1

- Children are split into two equal teams: one team is called the **Toothbrush Team**, the other the **Plaque Pack**
- The **Toothbrush Team** have to turn the cones up, the **Plaque Pack** has to turn them down
 - This represents how you body is constantly fighting to protect your teeth

Progression 2

- This time split the children into unequal teams (ratio 2 : 1 – **Plaque Pack** : **Toothbrush Team**) and repeat the task
- Repeat the task with a ratio of 3 : 1 – **Plaque Pack** : **Toothbrush Team**
- Discuss with the children what made the game more difficult
 - Advise the children that the greater the number of sugary drinks they have, the harder it is for your body to protect your teeth

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

About Give Up Loving Pop

The GULP campaign was created by Food Active, a collaborative health 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, cardiovascular disease 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.

Consumption of sugar-sweetened beverages

- The biggest source of free sugar in children and young people's diets is soft drinks (ranging from 35-40%).
- 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 free high sugar contents, despite being considered healthier drinks due to their nutritional value (from vitamins and minerals) and therefore they should not be consumed more than once a day 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 of sugar
- Regular consumption of sugary 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 disease 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 six are either overweight or obese.
- Drinking 2 cans of sugary 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 need the toilet frequently. Type 2 diabetes has previously been referred to as adult onset diabetes as 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 to suggest that sugar consumption independent of weight gain can lead to heart disease.
- A major cause of poor oral health such as tooth decay 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 and as many as 170 children and young people undergo general anaesthetic every day in hospital to remove rotten teeth.
- A sugar tax on soft drinks (Soft Drinks Industry Levy) was introduced in Spring 2018 to encourage soft drink companies to reformulate their products to contain less sugar, as part of a wider strategy to reduce the population's over-consumption of sugar. 50% of popular soft drinks reduced their sugar content as a result, however the likes of Coca-Cola and Pepsi decided to increase prices of their products and reduce portion sizes instead.

References

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5. National Child Measurement Programme (2018) Available at:
<https://fingertips.phe.org.uk/profile/national-child-measurement-programme>
6. Food Active website: <http://www.foodactive.org.uk>
7. GULP website: <http://www.giveuplovingpop.org>
8. NHS choices: <http://www.nhs.uk/Livewell/Goodfood/Pages/sugars.aspx>