

Sugar and Trans Fats Teaching Toolkit

For a description of the Sugar & Trans Fat Toolkit, please click [here](#).

Target Age(s): 11+

Includes:

-Film links

- Film 1 - The case against Excess Sugar (13 minutes 48") - <https://www.youtube.com/watch?v=g5ED0180Y4g>
- Film 2 - The case against Trans Fats (16 minutes 19") - https://www.youtube.com/watch?v=AvDJt_Z2ta4&t=1s

-Learning Objectives

-Student activity

-Teachers notes

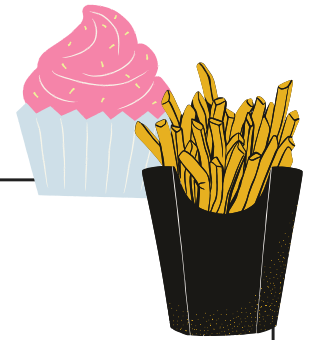
Duration: 1hr

Additional link

- Film 3 short,- Activity / healthier alternatives/ healthy cake recipe (14 minutes 49"): <https://www.youtube.com/watch?v=wZmE7L01LA>
- Film 3 long - Activity and FAQs/ healthier alternatives/ healthy cake recipe (22 minutes 46") - <https://www.youtube.com/watch?v=OPGw-xeoBD4>

Evaluation survey: <https://forms.office.com/r/y0gixGqqGZ>

Sugar and Trans Fats Presentations



Learning Objectives:

Sugar

- The students will be able to name at least one detrimental effect of excess sugar on health.
- The students will be able to distinguish between 'lifestyle' (non-communicable) diseases like type 2 diabetes, heart disease and cancer, and infectious diseases like typhoid, smallpox and covid19.
- The students will distinguish between the sort of foods that raise blood sugar quickly like cakes, cookies, and sugary foods and drinks, and foods that raise blood sugar slowly like porridge and a chicken salad sandwich.
- The students will realise that sugar can be addictive and food manufacturers often use this to sell more products like biscuits, cakes and even savoury foods.
- The students will realise that the 'amount of sugar per 100g' written on a food label is actually the percentage of sugar in that product.

Trans Fats

- The students will be able to give a definition of what Trans fats are (this can be a vague description as they might not yet have the words to describe hydrogenation. Something like 'liquid oils that have been thickened/ hardened' or 'chemicals in man-made oils that are bad for us' will suffice).
- The students will be able to name at least one illness that Trans fats increase risk of developing.
- The students will recognise that they could be eating Trans fats because the partially hydrogenated oils that they are found in are used to deep fry food in chicken shops and other fast food restaurants.
- The students will recognise the foods that are most likely to contain Trans fats.
- The students will be able to relate environmental damage such as fatbergs in sewers and burst water pipes to Trans fats being discarded down drains by fast food restaurants.

Overall

The students will be able to decide which they feel is the worst food in the human diet - excess sugar or Trans fats, and they will be able to give a reason to justify their choice.

Student Activity

Name:

Class:

Date:

Please answer the following questions:

Sugar

1. Name at least one disease or illness that has an increased risk of developing after eating excess sugar over a period of time:
2. What is the main difference between a 'lifestyle' (non-communicable) diseases and an infectious (or communicable) disease?
3. Circle the foods that raise blood sugar quickly:
Bananas; Doughnuts; Jaffa Cakes; Apples; Chicken salad sandwich; Cocopops; Porridge; Frosties; Milk chocolate; Dark chocolate; Choc chip cookies
4. Why do you think that food manufacturers put sugar in even savoury foods?

Trans Fats

1. Give a definition of what Trans fats are:
2. Which one of these are you most likely to find food containing Trans fats? (please circle)
McDonalds's; High Street Chicken Shops; Nando's
3. Who do you think is most responsible for removing Trans fats from food: the government; restaurants; or individuals? Explain why.

What do you consider be the worst food in the diet - excess sugar of Trans fat, and give at least one reason why:

Sugar & Trans Fats: Teachers Notes

Learning Objectives:

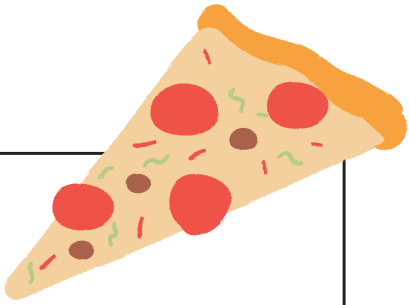
Answers to students' activity:

- Sugar: Diseases that you are at increased risk of developing after eating excess sugar over a period of time: Heart disease, cancer, type 2 diabetes, stroke, tooth decay and gum disease, obesity.
- A 'lifestyle' (non-communicable) disease is a disease that develops after poor lifestyle choices such as poor diet; an infectious (or communicable) disease is a disease that you can catch from a virus or bacteria.
- The foods that raise blood sugar quickly are: Doughnuts, Jaffa Cakes, Cocopops, Frosties, Milk chocolate, Choc chip cookies
- Food manufacturers put sugar in savoury foods so that they taste sweeter, which our taste buds enjoy so we're more likely to buy them again.
- Trans fats: See learning outcome for question 1
- You are most likely to find food containing Trans fats in High Street Chicken Shops
- Q3 This answer is the personal opinion of the student, as is what they consider to be the worst of the two

Some discussion points:

- The film said that these diseases can take years to develop so why should you be concerned now, when you're only 11, 12, 13, or 14?
- Should the government put a tax on sugary foods, like they did on sugary drinks? (The Soft Drinks Industry Levy (SDIL) means that the government charges manufacturers £0.24 per litre for drinks with over 8g sugar per 100ml, and £0.18 per litre for drinks with 5 to 8g sugar per 100ml. The manufacturers reformulated their drinks to replace the sugar with chemical sweeteners.)
- Are you going to do anything differently after what you've learnt in this lesson?

Teachers, please re-emphasise this point to the students - that the 'amount of sugar per 100g' written on a food label is actually the percentage of sugar in that product. E.g. Jaffa Cakes contain 52.6g sugar per 100g so they are 52.6% sugar (see image)



NUTRITION INFORMATION		
Average Quantity: per serving per 100g		
Energy	222 kJ	2700 kJ
Protein	2.0 g	10.0 g
Fat - total	11.0 g	55.0 g
Carbohydrate	2.8 g	14.0 g
- sugars	1.4 g	7.0 g

Store in a cool and dry place