



## Strategies and options for reducing sugar consumption

Our sugar consumption is well above the recommended amount, but we can skilfully reduce our consumption in everyday life.

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Explainer videos

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## English translation of the German explainer video transcript

### Why we should talk again about our sugar consumption

Are you one of those people who always need something sweet after a meal? I certainly am - there's nothing like a piece of chocolate. Or do you love your chips with an extra big blob of ketchup? Maybe we should try to break these habits. We all eat far too much sugar. Today I'm going to talk about why this is actually so bad and why it often happens to us unintentionally. And finally, I will give you a few tips on what you can take care of in order to eat less sugar in the future.

### Sugar consumption: intake recommendations, reality and disease risks

According to the World Health Organization (WHO) and German professional societies, a maximum of 10 percent of our daily energy intake should consist of free sugars. Free sugars include sugars that manufacturers or consumers add to foods and beverages as well as sugars naturally present in honey, syrup, fruit juices and fruit juice concentrates. They do not include, for example, the lactose present in milk and dairy products or the fructose in unprocessed fruit.

An average adult should consume about 2000 kilocalories per day. 10 percent corresponds to a maximum of 50 grams of free sugars. That would be, for example, two and a half chocolate muffins.

Unfortunately, the reality in Germany is somewhat different. According to the latest National Nutrition Survey NVS II, free sugars account for about 13 percent of the daily energy intake of men and women. However, young adults in particular eat significantly more sugar: women and men between 15 and 29 consume so much sugar every day that it accounts for about 17 percent of their energy intake.

### **Why does the WHO recommend reducing sugar consumption?**

There is now good evidence that an increased intake of free sugars causes weight gain - and conversely, a reduction in sugar leads to lower body weight. This is true for both adults and children. For example, children who drink a lot of sugar-sweetened beverages have a considerably higher risk of obesity than children who drink little lemonade and the like.

The weight gain due to sugar is probably not due to sugar per se. Foods rich in sugar typically have a high energy density. They therefore provide many calories per unit of weight. If we eat foods with a high energy density frequently and in abundance, this can cause us to gain much weight. For example, a single chocolate chip biscuit contains 95 kilocalories and 6 grams of sugar - and how many of us manage to stop after the first biscuit?

In addition, the large amount of sugar causes our insulin levels to rise sharply. This in turn leads to a drop in sugar in the blood and cravings.

And there is another problem: Liquids hardly satiate us. If you drink 1 litre of Fanta a day, which contains 9.1 grams of sugar and 38 kilocalories per 100 millilitres, that's almost 100 grams of sugar and 380 calories. This litre of Fanta covers almost a quarter of your daily calorie requirement. But you don't feel satiated, you might even eat more.

### **Which foods contain particularly high amounts of sugar?**

If you want to know how much and which sugars a food contains, you almost have to become a detective. The nutritional information on the packaging reveals the total amount of sugar in a food. These are obligatory in the EU and must always be given in relation to 100 grams or 100 millilitres. In the case of a fruit yoghurt, for example, you will find 11.8 grams of sugar per 100 grams. This number indicates the total sugar in the yoghurt, i.e. all naturally contained and added sugars.

If you want to find out if there are free sugars, you have to check the ingredients list. This is not always so easy. Sugar is hidden behind many other names such as dextrose, glucose-fructose syrup, barley malt extract or maltodextrin. You can estimate the amount of each ingredient by looking at the order: The ingredient with the largest share is at the beginning, the ingredient with the smallest share is at the end.

### **So where does all the sugar we consume every day come from?**

When we think of sweets and lemonades, everyone immediately thinks that they usually contain quite a lot of sugar. But fruit juices and nectars are also often real sugar bombs because they contain a lot of fructose. Without the positive aspects of fresh fruit, which we owe to the dietary fibre, for example, the fructose has a negative impact. This is precisely why the WHO intentionally includes sugar from juices in its definition of "free sugars". Other important sources of free sugars here in Germany are baked goods, dairy products such as fruit yoghurts and cereal products such as muesli. Not to be neglected are also sauces and other seasoning ingredients - keyword ketchup. Our favourite chips sauce contains an average of one whole sugar cube per tablespoon. That's about 23 grams of sugar per 100 grams.

If you are now wondering why ketchup has to contain sugar - after all, we eat it with savoury dishes and not for dessert: sugar is not only added to food to sweeten it. Sugar is generally considered a flavour carrier. It is also used to ferment yeast dough or as a preservative in jams, and it delays the rapid melting of ice cream and sorbets - a function we probably all appreciate in summer.

## **What are politics and the food industry doing?**

As you can see, implementing the plan to eat less sugar is not that easy, even if we as consumers have actively decided to do so. Politicians have also recognised this and have launched a reduction strategy. Within this framework, the food industry voluntarily committed itself in 2018 to gradually reduce the sugar content in foods such as dairy products, soft drinks and breakfast cereals by 2025. The interim balance is positive: the sugar content in almost all products examined has fallen since then. Fruit yoghurts, for example, now contain 4 per cent less sugar.

That actually sounds quite good, doesn't it? But if you take a closer look at these figures, there are definitely some products that still need improvement. For cola and lemonade, for example, the sugar content has only been reduced by 0.2 grams per 100 millilitres. The Fanta in our example would therefore have 8.9 grams of sugar per 100 millilitres instead of 9.1 grams. The sugar content of mueslis advertised for children was also statistically significantly reduced. However, this still amounts to an average of 24 grams of sugar per 100 grams. For this reason, the federal government's reduction strategy is criticised. It is criticised that voluntary commitments are unlikely to achieve a sufficient and, above all, timely reduction in sugar content. Critics call for other, more far-reaching measures, such as a tax on sugar-sweetened beverages.

The WHO has been recommending such a tax for several years to reduce the consumption of sugar-sweetened beverages. The tax should be high enough to increase the price of these drinks by 20 per cent or more. This could possibly achieve that the consumption of these drinks is reduced by the same amount.

Our neighbouring country Great Britain has already had positive experiences with such a tax. As a result of the tax, the daily sugar consumption of Britons from soft drinks has dropped by 30 per cent. In addition, food companies have adapted their recipes to avoid heavier taxation. The tax applies if the sugar content exceeds 5 grams per 100 millilitres. At the same time, there is a voluntary reduction programme for other product groups in Great Britain. The conclusion of those responsible is clear. The tax leads to much greater sugar reductions than voluntary self-commitments.

## **How do I manage to eat less sugar?**

Whether there will ever be a sugar tax in Germany is still written in the stars. Until then, we are responsible for eating less sugar ourselves. So what can I do myself now? Many of us are probably familiar with the following tips, but it can help to remind ourselves of them every now and then:

- Try to eat as little highly processed food as possible. If you cook with fresh ingredients, you can control how many free sugars are in your food.
- If you buy packaged food, always look at the nutritional information and ingredient list. The sugar content of the food is given per 100 grams - 30 grams of sugar per 100 grams means 30 per cent sugar. If there is sugar among the first three ingredients, then it is very likely that the food contains too much of it.
- Try to drink less soft drinks and pure juices. Instead, choose water, perhaps with a dash of fruit juice, or unsweetened teas.
- Avoid ready-made cakes and desserts. Instead, eat fruit or homemade cakes. In most recipes, you can easily reduce the amount of sugar by up to a third.

Eating less sugar has some benefits for your health. But that doesn't mean you have to give up sugar completely. The WHO also says that up to 50 grams of free sugar per day is still within limits. Next time you go shopping, look at the sugar content of your yoghurt and see if you can find an alternative with less sugar. My recommendation is natural yoghurt with fresh fruit. You can kill several birds with one stone: you avoid a processed food, you know exactly which ingredients your yoghurt contains and you get the fibre and vitamins from the fresh fruit.

## Literature

AOK-Bundesverband, Berufsverband der Kinder- und Jugendärzte e.V. & Deutsche Diabetes Gesellschaft e.V. (27. Oktober 2020). Gemeinsame Pressemitteilung vom 27. Oktober 2020. AOK, BVKJ und DDG fordern gesetzgeberische Maßnahmen zur Zuckerreduktion [Press release]. [https://www.aok-bv.de/imperia/md/aokbv/presse/pressemitteilungen/archiv/2020/pm201027\\_maÄŸnahmen\\_zuckerr](https://www.aok-bv.de/imperia/md/aokbv/presse/pressemitteilungen/archiv/2020/pm201027_ma%C3%9Anahmen_zuckerr%20reduktion.pdf) eduktion.pdf

Bagus, T., Roser, S. & Watzl, B. (2016). Reformulierung von verarbeiteten Lebensmitteln: Bewertungen und Empfehlungen zur Reduktion des Zuckergehalts. Karlsruhe. [https://www.mri.bund.de/fileadmin/MRI/Themen/Reformulierung/Reformulierung\\_Thema-Zucker.pdf](https://www.mri.bund.de/fileadmin/MRI/Themen/Reformulierung/Reformulierung_Thema-Zucker.pdf)

Bundesministerium für Ernährung und Landwirtschaft. (2019). Nationale Reduktions- und Innovationsstrategie für Zucker, Fette und Salz in Fertigprodukten: Zwischenbericht.

Crowe, T. (16. März 2020). All things sweet: sugar and your health [Audio podcast episode]. In Thinking Nutrition. <https://open.spotify.com/episode/67AhBBSouDwixlmVGrWj2?si=tqHLRMkHTeqHfeoV7fjH6w>

Heuer, T. (2018). Zuckerkonsum in Deutschland. Aktuelle Ernährungsmedizin, 43(S 01), S8-S11. <https://doi.org/10.1055/a-0659-8828>

Lebensmittelklarheit. (2016). Zucker hat viele Namen. <https://www.lebensmittelklarheit.de/informationen/zucker-hat-viele-namen>

Lebensmittelverband Deutschland e. V. (2020). Funktion von Zucker, Fett und Salz in Lebensmitteln (Infografiken): Lebensmittelverband veröffentlicht Infografiken zu Fokusnährstoffen. <https://www.lebensmittelverband.de/de/aktuell/20200129-funktionen-von-zucker-fett-salz-in-lebensmitteln>

Thow, A. M., Downs, S. M., Mayes, C., Trevena, H., Waqanivalu, T. & Cawley, J. (2018). Fiscal policy to improve diets and prevent noncommunicable diseases: from recommendations to action. Bulletin of the World Health Organization, 96(3), 201–210. <https://doi.org/10.2471/BLT.17.195982>

World Health Organization. (2015a). Fiscal Policies for Diet and Prevention of Noncommunicable Diseases: Technical Meeting Report. Geneva. <https://apps.who.int/iris/bitstream/handle/10665/250131/9789241511247-eng.pdf;jsessionid=187D37A3EE4EF9807613AE155D041F34?sequence=1>

World Health Organization. (2015b). Guideline: Sugars intake for adults and children. Geneva. <http://gbv.ebilib.com/patron/FullRecord.aspx?p=2033879>