



REPLACING SUGAR WITH SWEETENERS

BY: Elizda Hanekom / DATE: October 2019

DATE OF NEXT REVIEW: October 2023

With health at the top of your mind you are aiming to make better choices every single day. You order your cappuccino with foam, not cream, yay that wasn't too bad but now you are faced with another dilemma. You stare at the small container on the table and wonder whether you should be adding a sachet of sugar or opt for the sweetener instead? With so much conflicting information out there you are completely confused. Here is the short and sweet on them both.

WHAT'S THE DIFFERENCE?

1. WHAT IS SUGAR?

Sugar is a type of carbohydrate found in foods as well as drinks. Sugar is your body's main energy source and provides you with glucose¹. Natural sugars - such as fructose - are found in fruits and lactose are found in dairy products, like milk and yoghurt. Added sugars (usually sucrose or high fructose corn syrup) are found in many processed foods, sweetened coffees, teas, breakfast cereals, fruit drinks, baked goods, flavoured yoghurts, sauces and condiments¹. Sugar can also be added to foods that already have natural sugars, such as sweetened yoghurt (lactose). Our bodies recognise added sugars the same way they do natural sugars. It is, however, important to note that natural sugars usually contain healthier nutrients, such as vitamins, minerals and fibre^{2,3}.

a. Sugar Guidelines

The World Health Organisation (WHO) and the Food and Drug Authority (FDA) both recommend that we eat no more than 12.5 teaspoons of added sugar per day^{4,5}. New guidelines by the WHO also recommend adults and children reduce their daily intake of free sugars, to less than 10% of their total energy intake⁴. Reducing this further- to below 5%, or about 25 grams (6 teaspoons) per day - to provide added health benefits. The American Heart Association (AHA) recommends that adult women eat no more than 6 teaspoons (25g) of added sugar (beyond naturally occurring sugar) a day. Adult men should eat no more than 9 teaspoons (40g) of added sugar a day⁶.

Sugar is added to so many products due to having many different functional properties, it not only adds flavour to products, but also helps keeps food fresher for longer, is a bulking and raising agent, adds moisture and structure. This makes it very difficult to keep track of how much sugar you are consuming. South Africans consume between 12 and 24 teaspoons of sugar per day - four to eight teaspoons are from sugar-sweetened beverages, therefore on average South Africans are consuming more than double the sugar recommendations⁷. So why is this bad and are there alternatives?



b. Health risks associated with sugar

A higher intake of added sugars is associated with higher energy intake and lower diet quality. This can increase the risk for obesity, pre-diabetes, type 2 diabetes, inflammation, dental caries and cardiovascular disease.

In South Africa the statistics show⁷:

- 7 out of 10 women above age 35 are overweight
- 4 out of 10 men above age 35 are overweight
- 1 out of 5 teenage girls are overweight
- Overweight and obesity increase the risk for diseases such as diabetes, heart disease, high blood pressure, stroke and cancer by four to eight times
- Obesity-related diseases are among the top 10 causes of death – this prevalence is only rivalled by HIV/AIDS

2. SWEETENERS

Sweeteners can be divided into 2 groups:

- Nutritive sweetening agents⁵:
 - Add calories to the foods that contain them. Examples include aspartame and all the sugar alcohols (polyols) namely sorbitol, mannitol, xylitol, isomalt, and hydrogenated starch hydrolysates.
- Non-nutritive sweetening (NNS) agents:
 - Are very low in calories or contain no calories at all. Examples include saccharin, acesulfame potassium (Ace-K), sucralose, neotame, advantame and stevia.

a. Sweetener Guidelines

Sweeteners are regulated by the Food and Drug Administration as food additives and are generally recognized as safe. The Food and Drug Administration has an intensive approval process which includes determination of probable intake, cumulative effect from all uses and toxicology studies done on animals⁵. They have different functional properties that may affect perceived taste or use in different food applications. Many individuals still ask whether using sweeteners are safe? The American Diabetes Association (ADA) states that 'sugar alcohols and non-nutritive sweeteners are safe when consumed within the daily intake levels established by the Food and Drug Administration⁸'

Diabetes management guidelines include monitoring carbohydrate intake and blood glucose control and if using NNS instead of nutritive sweeteners will help to achieve better blood glucose control then ADA supports them⁸. The National Cancer Institute stated in 2009 that there is no clear evidence that the NNS available in the U.S were associated with any cancer risks.



b. Why replace sugar with sweeteners?

Sweeteners are commonly used as sugar substitutes or sugar alternatives because they are a lot sweeter than sugar (so less can be used) and they contribute only a few to no calories when added to foods, this can help individuals to stay within their calorie requirements and may even assist with weight management. As sugar is found in so many different foods and often in abundance, individuals struggle to stick to the recommendations. Opting to use sweeteners instead could help decrease the amount of sugar consumed and in turn lead to a healthier lifestyle with fewer health risks.

HOW FUTURELIFE® BEAUTI FOOD™ FITS IN

BEAUTI FOOD™ Nutritional Shake is a patented* and scientifically formulated combination of beauty specific collagen peptides (5 g per serving) coupled with vitamin C, E, Niacin, Biotin and Riboflavin aimed at the maintenance, enhancement and protection of your skin. High in protein, low GI and containing **no added sugar**, formulated with xylitol. Available in 2 delicious flavours: French Vanilla and Caramel Latte.

BEAUTI FOOD™ Nutritional Bar contains beauty specific collagen peptides (5 g per serving) and is High Protein and low GI with a light nougat centre and enrobed in a deliciously decadent **sugar free** dark chocolate coating Available in 2 delicious flavours: French Vanilla and Chocolate Brownie.

Enjoy one BEAUTI FOOD™ Protein Bar (40g) or one BEAUTI FOOD™ Nutritional shake daily to reduce wrinkles in 28 days (based on research conducted in Germany), improve skin elasticity and firmness as well as skin hydration. To learn more visit www.futurelifefood.com.

CONCLUSION

So next time you see that little round container on the table with sugar and sweetener sachets you now know that choosing the sweetener option isn't all bad. Replacing sugar with sweeteners not just in your everyday life, but also when baking and purchasing products that contain sugar alternatives, can in fact be the healthier way to go, help keep your calories in check and decrease your risk for many diseases.

REFERENCES

1. Canada Do. . (2016). Retrieved from PEN: Practise Evidence Based Nutrition: <http://www.pennutrition.com/viewhandout.aspx?Portal=VLGMKA==&id=J8HrUAI=&PreviewHandout=bA=>
2. Thompson JL, M. M. (2008). Science of Nutrition. San Francisco. Pearson Education.
3. Mahan, L., Escott-Stump, S., & Raymond, J. (2012). *Krause's Food & the Nutrition Care Process 13th Edition*. Elsevier.



4. (2015). Retrieved from WHO: World Health Organisation:
<http://www.who.int/mediacentre/news/releases/2015/sugar-guideline/en/>.
5. High-Intensity Sweeteners. (2014, May 19). Retrieved from US Food and Drug Administration:
<https://www.fda.gov/food/food-additives-petitions/high-intensity-sweeteners>
6. American Heart Association. (2014). Retrieved from Added Sugars: <https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/sugar/added-sugars>
7. University of Witwatersrand. (2016). Retrieved from Facts about sugar-sweetened beverages (SSBs) and obesity in South Africa: <https://www.wits.ac.za/news/latest-news/research-news/2016/2016-04/ssb-tax-home/sugar-facts/>
8. Position of the Academy of Nutrition and Dietetics: Use of Nutritive and Nonnutritive Sweeteners. (2012). J Acad Nutr Diet, 112:739-758.