The Issue of Sugar & Toddlers

An evidence-based guide to toddler nutrition for healthcare professionals

Healthcare professionals play an important part in helping parents of toddlers (1-3 years) understand the impact of sugar on diet and health.

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Key Learnings

1. The World Health Organisation (WHO) recommends added or free sugars should be less than 10% of total energy intake.
2. There is no need to cut all added sugars, but parents should check the labels on pre-packaged foods and choose those with lower levels of sugars.
3. There is a strong association between intakes of sugars (with the exception of lactose) and dental caries.

Limiting sugar: The hot topic

Sugar has become one of the most debated topics in nutrition in recent years among healthcare professionals and parents alike, and the ensuing media coverage has given rise to a lot of misunderstanding. Though the idea of limiting sugar is not a new one, the spotlight fell on sugar in 2015 when the WHO announced it was updating guidelines for added sugar[1].

There is a concern that the intake of free sugars, especially from sugar-sweetened beverages, increases overall energy intakes and may reduce the intake of foods containing more nutritionally adequate calories. This may lead to an unhealthy diet, weight gain and increased risk of non-communicable diseases (NCDs). It is also linked to an increased risk of dental caries; a particularly relevant issue for toddlers[2].

What are added (or free) sugars?

Added or free sugars are any sugar that is added to foods, either at the table or during the production process. Sugar may be added to drinks, sprinkled over cereals or already present in breakfast cereal. Sugar is also added to biscuits and cakes as well as to many other prepackaged foods and treats. The key word is added. Many people think that a sugar that comes from a natural source (maple syrup, for example) does not count as an added sugar - but it does.

Added or free sugars include:

- White or brown sugar
- Glucose syrup
- Agave syrup
- Maple syrup
- Rice syrup
- Coconut sugar
- Barley Malt
- Honey

The recommendation to reduce added or free sugars to 5-10% of total energy intake includes limiting all of these listed. Advise parents they don't need to cut all added sugars from their toddler's diet, but to check the labels on pre-packaged foods (particularly breakfast cereals), and choose those with lower levels of sugars.

What are natural sugars?

Natural sugars refers to sugar naturally present in whole foods. It includes sugars naturally found in fruit, milk, yoghurts, beans, lentils and some vegetables. Such foods help form a healthy and balanced diet, and are important for toddlers. 'Natural sugar' can be confusing for parents because sugars such as maple syrup (though 'natural' in origin) are still added sugars, and need to be limited.

Understanding sugars on labels

One area of confusion around sugar is that there is no way to tell how much of the sugar listed on the label is naturally present in the food, or is added. The sugar listed in the nutrition table is the total sugar in the food, and includes both the sugar naturally in the food (for example, in tomatoes) as well as any added sugars (for example, the white sugar added to tomato sauce).

Parents should use the label to choose the lower sugar option between similar products (between two different types of pasta sauce, in the tomato example) but we cannot tell if the sugar is added or naturally present. Some consumers believe that the sugar on the label is only added sugar, but this is not the case. Advise parents to look at the ingredients: if there is no sugar listed, then any sugar on the label is naturally present in the food. If sugar is in the ingredient list, then at least some of the sugar on the label is added sugar. An example is yoghurt. Yoghurt naturally contains the milk sugar lactose, so there will always be sugar on the label for yoghurt. Some flavoured yoghurts have added fruit, which adds natural fruit sugar, and sugar to add sweetness. This means that the total sugar in a flavoured yoghurt will be: natural lactose + the natural fruit sugar + any added sugar.

Dental health & sugar

Dental caries are not uncommon in toddlers and young children. There are a number of factors involved in the development of caries in this age group. Fluoridation plays an important role in the prevention of caries, as does oral hygiene and teeth brushing. Frequency of eating is a factor that can affect the development of caries along with the amount and type of sugar in a toddler's diet[4].

Dental caries are caused by the action of acids on the enamel surface of the teeth. This acid is produced when sugars (mainly sucrose) in foods and drinks react with bacteria present in plaque on the tooth surface. The acid damages the enamel on the tooth and causes demineralization. Teeth can be remineralised by saliva after eating but if toddlers and children eat too often (as happens when they snack frequently throughout the day), this remineralisation cannot take place and caries can develop[5]. There is a strong association between intakes of sugars and dental caries in children and adults[6]. Although sucrose has the strongest effect, dental caries are seen with most other types of sugar with the exception of the milk sugar, lactose[6].

Lactose is less harmful to teeth than other sugars. Lactose is also usually consumed in milk, which contains other factors that are protective of teeth. Toddlers can drink milk despite the sugar content but, as with other sugars, frequency and length of contact with teeth is important. Toddlers who drink from bottles or sippy cups frequently throughout the day will have more exposure to sugars (from milk or other drinks). Keeping drinks like milk to meal times and offering water in between is a better approach. Advise parents never to let their toddler fall asleep with a bottle of milk as the milk can pool in their mouths leading to an increased risk of tooth decay[2,7].

Talking to parents about sugar and toddlers

Milk and yoghurts.

The sugar that is naturally found in milk and in plain natural yoghurt is fine for toddlers. The sugar that is present in yoghurt is the milk sugar, lactose. If parents choose fruit yoghurts, the sugar content will be higher. This is partly due to the natural sugar in the fruit, but also to the sugar that may be added to make the yoghurt taste sweeter. Encourage parents to check the labels on fruit yoghurts and choose the one with the lowest level.

Vegetables.

Sugar is also found naturally in some vegetables like beans, tomatoes and onions among others and these are fine to use as well. Tinned beans like tinned chickpeas and kidney beans will have sugar on the label, but this is usually just the natural sugar in the beans themselves rather than anything added. Reassure parents these are foods their toddlers can continue to eat.

Fruit.

The sugar naturally found in fruit is also not included in the WHO recommendations to reduce sugar[1]. From the point of view of tooth health, studies show that fruit juice has the same effect on tooth decay as eating whole fruit[7].

Fruit juice.

This is only a concern when it is taken in large amounts, as it is possible for toddler's to take in larger amounts of sugar if they drink fruit juice throughout the day. However, small amounts of fruit juice with meals can provide a source of Vitamin C and count as one of their servings of fruit and vegetables.

Parents need to be clear that added sugars should be limited. Toddler's need a balanced diet in order to get a wide range of nutrients.

QUICK TIP FOR PARENTS 1

Don't cut out foods like fruit, milk or vegetables because of their sugar content; it's not necessary or nutritionally balanced.

Using a label to work out a teaspoon of sugar

4g of sugar is one teaspoon. So if there is 10g of sugar listed, there are 2.5 teaspoons of sugar. To find out if it is added sugar or sugar naturally present in the food, look at the ingredient list. If there is sugar in the list then at least some of the sugar on the label is added. If there is no sugar (or sugary foods, such as syrup or agave) on the label, then any sugar present is natural sugar.

How much sugar is too much?

An easy guide is that 5g of sugar or less per 100g on a label is low in sugar. What is considered 'a lot' varies, but generally anything over 15-22g of sugar per 100g is considered a lot of sugar. Advise parents to check whether it is natural or added sugar. Foods such as fruit, pure fruit juices, smoothies and milk will usually have levels of sugar higher than this. Parents should check the labels of these foods to see whether the sugar present is added or naturally occurring. Refer to fact sheet on 'Suitable drinks for toddlers' for additional information'.

Sugar and toddlers: A quick guide for parents!

When it comes to limiting sugar, encourage parents to look at foods like sweets, chocolates, biscuits and sugary drinks. About 80% of the sugar we eat comes from these foods, so it is an easy way to reduce sugar for toddlers. Treat foods should be treats, not everyday foods.

Parents who are concerned about sugar can also compare the sugar on the label between foods like cereals and flavoured yoghurts and choose the ones with the lower amounts. It is also important to remember that there is no need to ban added sugar: part of how we socialize involves eating sweet foods and the occasional treat really is no harm. The best approach is to follow guidelines for a healthy balanced diet for toddlers, check labels on packaged foods and keep treat foods as treats.

Suitable articles for parents on this topic are available at www.toddlebox.ie/nutrition

References

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