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# IN THIS MENTOR SESSION:

- Aah you've been waiting for this one!
- Yes, there are healthy sweeteners!
- Some sweeteners are so healthy you'll want to eat them straight away!

# Health Mentor Programme

# Sweetening

MENTOR SESSION 18

### Oh the sweetness!

We all use a sweetening substance in some way or another. You might sprinkle it over your breakfast cereal, use it in your tea or drink it in your soft drinks. The point is, we all consume sweeteners in some way or another.

The big question still remains though: which are safe and which are not!?

By now we hope that it is quite clear to you that large quantities of refined sugar is REALLY NOT a good idea and so in this session I analyse suitable sugar replacements and confirm:

- -which sweetening substances are safe to use and
- -which of these sweeteners are best left alone!



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**References** 

(If you still think refined sugar is healthy and that it will give you energy then please read the first 16 sessions of the mentoring programme all over again...!)

### Remember remember!

I can't say this enough.

It's really a great idea to avoid refined sugar and high glycaemic index foods!

Remember that the following diseases are associated with high intake of refined carbohydrates:

- -Heart disease 1,2,3,4
- -Increase in cholesterol levels<sup>1,2,4</sup>
- -Stroke<sup>1</sup>
- -Decreased blood glucose control and diabetes 4
- -Weight gain 4,
- -Less energy and endurance

Let's not forget that refined carbohydrates keep you hungry! That doesn't help much if you want to lose or maintain weight, does it now?



#### Let's take a look at some of the available sweeteners...

# **Xylitol**

#### The road to health is lined with birch trees....

If you've ever wanted a scientific reason to chew gum, then here it is!

Some chewing gum brands use xylitol as a sweetener (be sure to read the labels).

Xylitol is an extract from birch trees that has burst onto the scene over the last few years. It has amazing health benefits and tastes remarkably like sugar!

Xylitol, although having the same sweet taste as sugar, contains 40% fewer calories.

Xylitol can be used as a 1:1 replacement for normal white sugar.

Xylitol has a glycaemic index of 8! 6

That's the same as hummus - my favourite low GI snack. Compare that to refined sugar's GI of 100!





Xylitol helps prevent diabetes due to its low GI.

Xylitol is used as the main sweetening ingredient in some dental chewing gum brands. The reason for this is that xylitol has a proven protective effect on human teeth. <sup>7,8,9,10</sup>

Some studies suggest that xylitol could even protect against osteoporosis. 11,12

Regular xylitol consumption and the use of xylitol in nasal sprays prevents middle ear infection (otitis media). 13





The inside of a healthy mouth

Some studies show that frequent consumption of carbohydrates, such as sucrose, glucose, maltose, or fructose, might represent a risk factor for oral candidiasis. Xylitol has an inhibitory effect on candida (thrush) formation in the mouth. <sup>14</sup>

Note: Xylitol has a laxative effect if taken in too high dosages.

### **Stevia**



#### Stevia is second on my list of healthy sugar alternatives!

Stevia Rebaudiana is a plant that is 30-100 times sweeter than sugar. It also has a very low GI and is widely available in health food stores. (Although a very small amount is needed, it may take time to get used to the potent taste of this herb).

Stevia is also well-researched and we know of more than 128 scientific references regarding this herb!

#### The following are some of the fascinating features of Stevia:

- I. Stevia is a safe, non toxic substance with no allergic responses noted in humans to date.  $^{15,16}$
- 2. Stevia has shown powerful glucose controlling features in type 2 diabetics when administered in high dosage capsule form. <sup>17</sup>(Get this, something sweet that controls blood sugar!)
- 3. In a 2-year study in Chinese patients with mild hypertension, oral stevioside significantly decreased systolic and diastolic blood pressure compared with a placebo (i.e. Stevia was given in capsule form). No significant adverse effects were noted. <sup>18</sup>

# **Honey**



## I like honey, yes I do! Here are a few amazing facts about honey:

There are numerous articles showing the health benefits of honey.

- -Honey has 165 identified beneficial ingredients of which very few are found in refined sugar. <sup>19</sup>
- -Honey exhibits an anti-bacterial effect. 20
- -In a novel study that was done in 2003, people were given honey inhalations and the results showed a lowering of blood glucose levels and high blood pressure. A protective effect on the liver was found as well. <sup>21,22</sup>
- -lt seems that although bees collect nectar from flowers that were sprayed with pesticides, these pesticides (in most cases) do not reach the honey.<sup>19</sup> (Despite this, we recommend that you eat honey that is produced in as clean and organic way as possible).

#### Other research shows honey to:<sup>23</sup>

- -Lower blood fats like trygliserides and LDL-cholesterol
- -Lower C-Reactive Protein (a sign of anti-inflammatory working)
- -Lower homocysteine (more about this in later sessions)
- -Honey causes less of a blood glucose spike than glucose in diabetics.

#### Don't take too much, though!

One tablespoon of honey has the same amount of energy of one fruit and the body usually doesn't have a problem digesting two fruits in one hour. (Interesting fact – one chocolate bar has the same amount of energy as 10 apples<sup>19</sup>)

How should you eat honey?

The absolute ideal is to eat honey from the comb. If you can't do that then make sure your honey is raw, natural honey that is badger friendly.

(A great place to use half a teaspoon of honey is in a nice, strong cup of green tea!)



### **Fructose**

Although fructose (fruit sugar) was advocated in the past as a great sugar substitute, new research over the last few years has shown that the opposite may be true!

Fructose definitely has a very low GI but it seems that's where the happiness ends...

### Here is a list of problems with fructose according to current literature:

I. Most cold drinks are sweetened using high-fructose corn syrup. It is this fructose syrup that is suspected to be the main culprit in the **obesity epidemic**. <sup>24,25</sup>

#### Fructose can thus make you fat easier!

- 2. Fructose can cause excessive fat collection in the liver. 24
- 3. Fructose sugar raises your blood fats (triglycerides) and that is bad news because it dramatically increases your risk for heart disease! <sup>26,27</sup>
- 4. If you're a diabetic, fructose can increase your risk to develop cataracts, kidney problems and other vascular problems. <sup>24,28</sup>
- 5. Fructose has also been implicated as the main cause of symptoms in some patients with chronic diarrhoea or other functional bowel disturbances.<sup>24</sup>



## Confusion...



Over the last 2 decades the issue regarding the safety of artificial sweeteners like aspartame has been a hotly debated controversy, to say the least.

It has also become quite a confusing issue in scientific literature with numerous studies proving artificial sweeteners to be dangerous and numerous studies proving them to be safe. It was however a review that was published in the European Journal of Clinical nutrition in 2007 that raised more concerns about aspartame. The authors of this study concluded that aspartame might be involved in causing certain mental disorders and also in decreased emotional and learning functioning. Recent published findings also links regular consumption of aspartame to the formation of diabetes 10.

There are also conflicting opinions regarding the new generation sweeteners like sucralose and acesulfame K (although I seem to be finding more positive safety data on these).

At this stage I would advise that you try and stick to one of the principles of the mentoring programme when deciding if you want to use artificial sweeteners or not:

Really now, if you have xylitol, stevia and honey why bother with anything else!?

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# Kathy's kitchen



### Citrus and almond cake

#### **CITRUS AND ALMOND CAKE**

#### **Ingredients:**

2 whole oranges

I whole lemon

500ml water

21/2c whole almonds

250ml castor sugar...this is where the experimentation starts. Try xylitol in place of the castor sugar.

45ml maizena

5ml baking powder

2,5ml salt

6 large eggs

5ml vanilla essence

- 1. Boil the oranges and lemon in water. Allow to slow cook for one hour with lid till soft. Take out of water and leave to cool. Throw away the water.
- 2. Grease a 20cm cake pan and line with baking paper.
- 3. Pulse almonds in food processor till fine. They must look like coarse maize meal.
- 4. Add fructose, maizena, baking powder and salt and pulse until well mixed.
- 5. Slice fruits into smaller pieces with the peel, and remove all pips.
- 6. Add fruit pieces to mixture in food processor and pulse until well mixed.
- 7. Add the eggs one-by-one and pulse thoroughly after adding each egg.
- 8. Add the vanilla and pulse well.
- 9. Spoon the mixture into the cake pan and bake at 200°C for one hour or until golden brown and firm (test for firmness by pressing softly in the middle of the cake.)

Leave to cool and sieve icing sugar over the top of the cake. Serve with thick cream or mascarpone.

This recipe was adapted from a recipe by Mary Ann Shearer.

I strongly recommend her recipe books as they provide much-needed recipes that have been tried and tested.

**About Kathy:** Kathy de Bruin is a qualified home economist from Pretoria and mother of three busy/hungry boys! She presents classes on how to make healthy home cooking practical. <u>kathydebruin@gmail.com</u>

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# **About Dr Anton**



Dr Anton Janse van Rensburg is a practising medical doctor who has devoted himself to the study of unique, scientifically sound solutions to modern diseases. He is also a qualified metal toxicologist and has a master's degree in Applied Human Nutrition.

He has written on a variety of wellness topics for numerous South African magazines and newspapers and in 2009 co-authored the book 'Diamonds in the Dust – crafting your future landscape'. Dr Anton is no stranger to radio and has been able to guide scores of listeners with his passion for wellness education.

Dr Anton is an established public speaker and is also a wellness coach to company executives. He specialises in motivating people to adopt healthier habits through well researched lifestyle and food approaches.

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