Erythritol – friend or foe?

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A new study linking erythritol to heart attack and stroke has been putting the cat amongst the pigeons in recent days since its publication at the end of last month. This was of immediate interest to me as I've used erythritol often as a sweetener since I stopped eating sugar due to a T2 diabetes diagnosis almost 10 years ago.

I don't have access to the paper published nor have I any scientific background that would allow me to analyse it properly anyway, so I've been listening in recent days to podcasts from people who've had both. I've listened to opposing points of view about the validity of the findings. Some find the study deeply flawed and regard the subsequent media coverage as over zealous and misleading, given that questions remain unanswered - (see more below). Others deem the trial methods used good enough and the evidence compelling.

So what form did the study take?

Without reading the research paper directly, this is what I've gleaned from people who have:
The study included several trials in one.
The first showed an association between very high levels of erythritol in body with strokes and heart attack

The second followed up with trials carried out in Europe and US. Participants in both trials already had a significantly heightened risk of a cardiac event (ie half of those studied in both groups had survived a heart attack). These showed the same association.

A further laboratory study tested the possible connection between erythritol and blood clotting or arterial damage and found there was a little of both.

Finally 8 healthy people were given a significant amount of erythritol (30 grams in one go) to consume. The erythritol remained in the body at a high level for 3 days before it left

Both the study authors and commentators point out that the study is not conclusive at this stage.

So what issues need further research before the findings are conclusive?

1. The researchers know that erythritol is also a substance produced naturally by the body for various functions. Two reasons our body manufactures it is to respond to high levels of glucose and high levels of insulin in the body – ***(ie as a result of excess sugar consumption).***

The higher levels of erythritol present in the bodies of those most likely to experience cardiac events in the trial therefore show the following:

i) - that erythritol is either something that can be present in the body as people are heading for a cardiac event (in the way that an ambulance will be there at the scene of an accident)
ii) that erythritol is a direct cause of a cardiac event
iii) some other factor, as yet unknown.

2. The trials carried out so far have not determined if the erythritol present in the participants'

bodies had been consumed or produced by the body.

If it were the case that some of the erythritol present had been produced naturally by the participants' bodies, it might be irrelevant how much had been consumed if the body was producing it to deal with a problem.

3. The laboratory tests showing that erythritol in the blood increased the likelihood of blood clotting could well produce different results when trialled in a human body.

4. The final test gave 8 healthy people large doses of erythritol. This would tell us much more if the participants had been tested for blood clots before and after the erythritol consumption.
Could it also be the case that erythritol remains in the body for a few days because it's less of a priority for the kidneys and liver to remove than other substances in the body that are toxic?

Erythritol – to use or not to use?
It certainly seems that some caution is required before drawing conclusions from this study just yet, however it also leaves a question mark. A question mark that might remain indefinitely. If subsequent trials show the connection between erythritol and heart attack and stroke to be a red herring, I wonder will this grab media interest in the same way as a good fear story? Will you and I ever get to know about it if it does?

If, like me, you want to avoid the very real and proven dangers of refined sugar but for that to be a realistic and sustainable attainment, you want to be able to have a safer sweet treat from time to time, you will probably need to mull where initial findings of this study leave you.

As a T2 diabetic, although my condition is in remission through diet management, I'm conscious that I may still remain at higher risk of heart attack and stroke than someone without the disease. For this reason, for the foreseeable future, I'm choosing to err on the side of caution. Whilst I'm not going to renounce erythritol completely just yet, I intend to make more use of other natural sweeteners available. (Many of which are listed on the cakespirit website: https://www.cakespirit.co.uk/alternative-sweeteners Whether you're a healthy person or a health compromised person like me, you may understandably take the point of view that if we reacted to every food trial the media chose to promote, we'd end up eating nothing. Or alternatively, you may want to give erythritol a wide berth from now on. Hopefully this summary of the study some of the issues will help you decide where you stand and/or whet your appetite to look into the study findings for yourself.

In my recipes, where a granulated sweetener, (as opposed to a syrup) is required, in future, I will suggest a choice. You may need to adjust the amounts used for your taste as not all sweeteners have the same level of sweetness. (Erythritol tends to have less sweetness than some of the others).

With any refined sugar free cooking, I always recommend that you **use whatever sweetener you choose sparingly.** (For example I would use the 30g portion of erythritol given in one of the trials to make somewhere between 6 -10 portions of cake!). If you stop eating highly sweetened food and use spices and flavourings for enhancement, the palate quickly becomes more subtle and we get satisfied with much less.