

IS THE KETO DIET SAFE OVER 40?



For many years the ketogenic diet has been used clinically for young children suffering from epilepsy (1). For this reason, amongst others, people over the age of 40 have been nervous to try a ketogenic diet, thinking that it was only effective for children.

However, because of the success in children there have been studies into whether or not a ketogenic diet could be effective in an adult population. Research into the safety of the keto diet in overweight adults (2), people suffering with type 2 diabetes (3) and those going through the awful effects of polycystic ovarian syndrome (4) have shown positive results with no adverse effects. Yet people over 40 are still hesitant to have a go at losing weight with this diet.

So, is it safe to start a keto diet when you're over 40? The answer is yes! Ketogenic diets are considered to be safe for most adults when they are used correctly and monitored by a physician. So why is there confusion? There is a lot of conflicting advice regarding this diet. So, you need to do some research. But hopefully this article will help point you in the right direction.

The most important thing for people over forty to consider is their current level of health. If they have a chronic illness such as diabetes, cardiovascular disease (high blood pressure and cholesterol levels etc.) or kidney problems, it is highly likely that they were caused by diet and lifestyle in the first place (5). So, when starting the keto diet, you do not want to make these conditions worse.

The keto diet is high in fat so it would be a good idea to get your cholesterol checked before starting this diet. This is because a lot of fat in your diet can increase cholesterol levels in the body (6). The possibility of having increased cholesterol is more likely as you move into middle age (7) so this is definitely something that you need to be mindful of when thinking about the safety of the keto diet.

For years the advice from the so-called experts was that all fat is bad. However, many of our organs are made up of a large percentage of fat. In fact, the dry weight of the brain is made up of 50% fat (8).

The outer layer (or membrane) of every single cell in our body is also made up of fats called lipids (9).

So, it makes sense that we need fat in our diet to survive and maintain the healthy function of our body, all through our life.

As you go into your 4th decade memory issues start to raise their head. People following a keto diet think they can just gorge on all fats with no ill effects. However, keto diets are often high in a type of fat called Omega 6. These fats are inflammatory and known to cause neurological problems (10).

However just to add to the confusion, the brain has been shown to function better on ketones (the energy from fats) than glucose (the energy from carbohydrates) (11). I did warn you there was a lot of conflicting advice!

Having said all that Omega 6 fats are essential as the body does need them, for the reasons outlined above. The problem is when too much of this type of fat is eaten. This is when it can cause inflammation and contribute to heart disease, cancer and dementia. These are the type of diseases that the 40-something man/woman can suffer from, especially after years of poor lifestyle choices. Omega 6 fats are found in vegetable oils so keep fried foods to a minimum in the keto diet.

But it's not all bad news. Omega 3 is the good (anti-inflammatory) cop and as long as there is a healthy balance between the two Omegas – all is good. Foods such as oily fish, especially mackerel and salmon, walnuts, seed oils, chia and flax. All of which are allowed on a keto diet. Thankfully our tastes change as we age, so even if you didn't like mackerel or sardines as a child give them another try.

As we age our metabolism slows down (12) which makes it harder to burn fat. One of the dangers of the keto diet is that it is high calorie. This is because fat has over twice the number of calories of carbohydrate and protein (13). This is another reason why you should not fall into the trap of thinking you can eat copious amounts of fat; such as adding full-fat cream to your 6 cups of coffee a day! Just because you are on the keto diet, doesn't mean you shouldn't be keeping an eye on calorie intake. Eating less calories than you burn is the only way you will actually lose weight (14).

As we age we start to lose muscle mass and this starts to become more apparent in our 40s (15). When following the keto diet don't just focus on fat, protein is incredibly important too.

We need protein to repair our muscles and organs, especially following exercise (16). The danger is when you have too much protein, which is pretty likely when you are eating a diet so high in meat. Too much protein can be just as dangerous as too little. Eating lots of meat, poultry, fish and eggs can make you feel tired most of the day which is not great when you are trying to run a house, care for your family and hold down a job. It can also affect your kidneys, lower your mood, and make you constipated (17).

By way of reassurance with regard to the keto diet; when you search 'danger of the ketogenic diet' in Pubmed (the main directory for scientific research) only 7 results are found. Four of those results focus on just one person who suffered severe adverse effects rather than large groups of people (18).

This is a much more reliable source of information than other websites that are based on hearsay. So, the takeaway from this is that done with care and under the supervision of a doctor there is no reason why it should not be safe for people over 40 to follow the keto diet.

References

1. A modified Atkins diet is effective for the treatment of intractable paediatric epilepsy <https://pubmed.ncbi.nlm.nih.gov/16499770/>
2. Efficacy and safety of very low calorie ketogenic diet (VLCKD) in patients with overweight and obesity: A systematic review and meta-analysis <https://bit.ly/3Clf4PK>

3. Effect of the ketogenic diet on glycaemic control, insulin resistance, and lipid metabolism in patients with T2DM: a systematic review and meta-analysis <https://pubmed.ncbi.nlm.nih.gov/33257645/>
4. Dietary Interventions: A Promising Treatment for Polycystic Ovary Syndrome <https://www.karger.com/Article/FullText/519302#ref81>
5. Origins and evolution of the Western diet: health implications for the 21st century <https://bit.ly/3b8fiOe>
6. Fats, Cholesterol, And Chronic Diseases
<https://www.ncbi.nlm.nih.gov/books/NBK235018/>
7. High levels of bad cholesterol in early middle age are linked to CVD risk decades later, study finds <https://www.bmj.com/content/367/bmj.l6814>
8. Lipid Processing in the Brain: A Key Regulator of Systemic Metabolism
[https://www.frontiersin.org/articles/10.3389/fendo.2017.00060/full#:~:text=Lipids%20and%20lipid%20intermediates%20are,brain%20dry%20weight%20\(9\).](https://www.frontiersin.org/articles/10.3389/fendo.2017.00060/full#:~:text=Lipids%20and%20lipid%20intermediates%20are,brain%20dry%20weight%20(9).)
9. The Lipid Bilayer
<https://www.sparknotes.com/biology/cellstructure/cellmembranes/section1/>
10. Health Implications of High Dietary Omega-6 Polyunsaturated Fatty Acids <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3335257/>

11. Effects of beta-hydroxybutyrate on cognition in memory-impaired adults
<https://www.ncbi.nlm.nih.gov/pubmed/15123336>

12. Why metabolism slows as you age
<https://www.piedmont.org/living-better/why-metabolism-slows-as-you-age>

13. Fat and Calories
<https://my.clevelandclinic.org/health/articles/4182-fat-and-calories>

14. Caloric Deficit: What to Know
<https://www.webmd.com/diet/calorie-deficit#1>

15. Preserve your muscle mass
<https://www.health.harvard.edu/staying-healthy/preserve-your-muscle-mass>

16. Protein Consumption and the Elderly: What Is the Optimal Level of Intake? <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4924200/>

17. 6 Signs You Could Be Eating Too Much Protein <https://www.eatingwell.com/article/291875/6-signs-you-could-be-eating-too-much-protein/>

18. Danger of ketogenic diet <https://pubmed.ncbi.nlm.nih.gov/?term=danger+of+ketogenic+diet&filter=simsearch2.ffrft>