

With the recent hype about Low Carb High Fat (LCHF) diets, many people have jumped on the “Bantwagon” in the hope of shedding unwanted kilo’s. There have been many success stories of people losing massive amounts of weight whilst consuming delicious foods which include full fat dairy products the likes of milk, yoghurt, cream and cheese. However the converse also holds true and just as many people not only didn’t lose weight but gained some more in the process!

The old idiom “if it’s too good to be true then it probably is” springs to mind. So why did this silver bullet not work its magic on everyone? The answer is not all that straightforward, but one of the major problems is dairy products. Lactose is composed of galactose and glucose and is what gives milk its sweet taste and is the primary carbohydrate in milk of all species. Yes, you read correctly it’s the C word! Approximately 6.5% - 7.5% of milk comprises of lactose, which if your aim is to eliminate carbohydrates or at least keep them to no more than 20g per day becomes tricky as just one cup of milk contains approximately 18g of carbohydrates.

The lactose free variants aren’t any better because they are generally sweetened with sweeteners of some sort. So much for the ‘green’ list! Apart from the carbohydrate content of milk, the stark reality is that about 75 percent of the world's population, lose their lactase enzymes (the enzyme produced by the body to help digest milk) after weaning.<sup>1</sup> This is more prevalent amongst various ethnic groups the likes of Asians, Africans and certain ethnic Jewish populations and to a lesser degree amongst Caucasians. The recognition of this fact has resulted in an important change in terminology: Those who could not digest milk were once called "lactose intolerant" or "lactase deficient." They are now regarded as normal, while those adults who retain the enzymes allowing them to digest milk are called "lactase persistent." The reason why we lose the lactase enzyme is pretty obvious – HUMANS DO NOT NEED TO CONSUME MILK AFTER THEY HAVE BEEN WEANED. In fact no mammal, whether land or ocean based, consumes milk after it has been weaned. Furthermore, the processing that milk legally has to go through before it lands up in a tetrabrick container denatures it to such a degree that it barely resembles its original state. All the goodness has been removed including the live enzymes present in unpasteurized milk which under normal circumstances would assist with its digestion ( [please see the article on lactose intolerance](#) ).

So what is the deal with drinking milk? Because you need calcium for the bones I hear you all shout. What appears to be important in bone metabolism is not calcium intake, but calcium balance. The loss of bone integrity among many postmenopausal white women probably results from genetics and from diet and lifestyle factors. So all you blue-eyed, blonde haired ladies out there from European descent are on the back foot before any other factors are taken into consideration. Research shows that calcium losses are increased by the intake of excess

animal protein, salt, caffeine, and tobacco. Physical inactivity, hormonal imbalance and vitamin D metabolism are also important factors in bone integrity ( [please see the article on Calcium](#) ). The balance of these environmental factors, along with genetics, is clearly as important as calcium intake with regard to the risk of osteoporosis and fracture. For most adults, regular milk consumption can be expected to cause gastrointestinal symptoms, while providing no benefit for the bones. In fact if you believe that you are doing your family a favour by choosing low fat or skimmed 'milk' varieties, you're wasting your time as the fat in milk is crucial for the absorption of calcium.

The reality is that lactose intolerance need not present with any overt side-effects that we would typically ascribe to it such as diarrhoea, cramping, gas and bloating. Many food intolerances go unheeded for years specifically because they are so subtle. I am not only referring to the immediate onset IgE allergic reactions which can cause anaphylactic shock, but to the more insidious IgG delayed onset food allergies that causes your immune system to overreact when you ingest certain foods. Studies reveal that there are more immune cells in the digestive tract than in any part of the body. The important thing to remember with milk allergies is that it's not only the lactose that can cause problems but the milk protein too. This is not to say that if you react to one then you will definitely react to the other. You may be lactose intolerant but present with no evidence of being allergic to the milk protein. So let's say that you are on a LCHF diet and you are consuming a lot of dairy products and you happen to be intolerant to lactose but the symptoms aren't necessarily severe enough to warrant further investigation. Your digestive system will be under strain and there is likelihood that you've developed some degree of Leaky Gut Syndrome.

A leaky gut has increased permeability compared to a healthy one, thus allowing some of the undigested food particles to pass through the intestines and enter the bloodstream. This is where the body's immune system will start 'attacking' the circulating food particle believing that it is a foreign invader. All of this will invoke an inflammatory response as the body releases histamine and other chemicals to cope with the threat. The physical side-effects of this process often lead to significant water retention and excess mucous production. So even if you are not experiencing the more well-known discomforts that are associated with lactose intolerance such as bloating, heartburn, cramping and diarrhoea, your body is still being put through the wringer and you can't seem to lose weight despite being on a LCHF diet. As for other dairy products the likes of yoghurt and cheese, depending on the manufacturing process it was subjected to and the type of product, they may contain less lactose. However, it's like saying that 2 drops of cyanide is safer than 5 drops – it's all relative and if you are lactose intolerant and don't allow your gut to heal, chances are that not only will it get worse but you'll soon develop allergies to other foods too. Cream whether double, single, crème fraiche or Ayreshire should be treated the same way as milk if you are trying to avoid lactose.

If you suspect that you may be intolerant to lactose then a SCIO test will help pin-point the problem. Blood tests are available through MDS laboratories, these will test for IgG antibodies.

There is no point in conducting an IgE test unless you'd like to ascertain the general level of overall allergic reaction present. An IgE test for dairy is unlikely to be useful unless you experience immediate symptoms after consuming dairy products such as itching or difficulty in breathing.

There is no reason for people with lactose intolerance to push themselves to drink milk. Indeed, milk does not offer any nutrients that cannot be found in a healthier form in other food such as green leafy vegetables, broccoli and sardines. Dairy can be avoided very successfully – it is a myth that one needs dairy products for 'good strong bones and teeth'. If we were to consume fresh, unpasteurised milk straight from the cow, there would be a lot less lactose intolerant people out there as raw milk actually contains the digestive enzyme 'lactase' which helps digest lactose – problem solved. So if you are fortunate enough to source some fresh milk from a reliable producer, it may just be a solution.

However, I personally believe that milk is a habit. it is the Alpha of comfort foods, having strong associations to our childhoods. So perhaps its time that we all grew up and break the ties with this cleverly-marketed, insipid. processed abomination that we've been brainwashed to believe is good for us.

1. Hertzler SR, Huynh BCL, Savaiano DA. How much lactose is low lactose? J Am Dietetic Asso. 1996;96:243-246.