### Dr. Malcolm Kendrick

Scottish doctor, author, speaker, sceptic



# Why saturated fat cannot raise cholesterol levels (LDL levels)

3rd July 2018

"Explanations exist; they have existed for all time; there is always a well-known solution to every human problem — neat, plausible, and wrong.' H.L. Mencken.

Of all the flaws of the human mind, the number one must be the overwhelming desire to find simple, easy to understand answers – to everything. I think this is why my favourite film of all time is Twelve Angry Men. It was a stage play first.

A black youth is accused of killing his father. The evidence that is presented by the prosecution seems utterly overwhelming. A unique knife is used for the murder, one that the youth was known to carry. He was seen leaving the apartment after shouting 'I'll kill you' and suchlike. Most importantly, however, he was a young black youth, and young black youths are widely considered to be the sort of person who do such things.

In the film, prejudice presses down heavily on most of the jurors. Some of them, it is hinted, would have found him guilty no matter if there had been any evidence, or not. Here we have all the worst aspects of human decision making on show. Confirmation bias, prejudice, gathering together only the evidence that supports a case, the desire to 'get on with it' and not hang about listening to people who just want to make things complicated.

In my mind, for many years, I have changed 'black youth', into the word 'cholesterol' as I watch the 'heart disease jurors' in action. A suspect was found, fitted up, put on trial and found guilty by people who were just desperate to get on with it. At the very first congressional meetings on dietary guidelines, any attempts to wait until there was sufficient evidence, were railroaded.

'When the US government introduced "Dietary Goals for the United States", they did not have unanimous support. The guidelines, which urged the public to cut saturated fat from their diet, were challenged by a number of scientists in a Congressional hearing. The findings were not based on sufficient evidence, they argued.

They were ignored. Dr. Robert Olson recounts an exchange he had with Senator George McGovern, in which he said: "I plead in my report and will plead again orally here for more research on the problem before we make announcements to the American public." McGovern replied: "Senators don't have the luxury that the research scientist does of waiting until every last shred of evidence is in.'1

Senator McGovern might as well have said. 'Listen son, we know that saturated fat raises cholesterol and causes heart disease, we don't need any damned evidence.' Of course, they didn't have any evidence at all. None. But they still managed to find saturated fat and cholesterol guilty. Some people would call this proper leadership. Make a decision and go with it.

I would call it monumental stupidity.

As you can see I am stepping back in this blog to look at saturated fat – again. Because I am going to share some thinking with you, which I have not really shared before. Some of you will know that I am a 'first principles' kind of guy. I take very little at face value, and I am certainly highly critical of accepted wisdom: I usually translate it, in my mind, into accepted stupidity.

So, I am going to try and explain to you that saturated fat cannot raise blood cholesterol levels. By which I mean low density lipoprotein levels (LDLs) as this is the substance which someone or another ended up calling 'bad' cholesterol. It is the lipoprotein that is thought to cause CVD.

However, LDL is not cholesterol, it never was. We do not have a blood cholesterol level – but we are seemingly stuck with this hopelessly inaccurate terminology for all time.

Anyway, the idea that saturated fat raised cholesterol was driven by Ancel Keys in the late nineteen forties. The first point to make here is that, when Keys first started his anti-fat crusade, no-one knew that there was such a thing as LDL. You took a blood test, gathered together all the lipoproteins you could find (good, bad, and indifferent) and measured them all. Quite what they were measuring is a good question.

Despite this rather important gap in his knowledge, Ancel Keys was able to create an equation to exactly predict the effect of saturated and polyunsaturated fatty acids in the diet on serum cholesterol levels.

Change in serum cholesterol concentration (mmol/l) = **0.031(2Dsf – Dpuf)** + **1.5√Dch** 

[Where Dsf is the change in percentage of dietary energy from saturated fats, Dpuf is the change in percentage of dietary energy from polyunsaturated fats, and Dch is the change in intake of dietary cholesterol].

This became the accepted wisdom. You could believe, given the apparent precision of this equation, that he did some proper research to prove it was true. Frankly, it seems bloody unlikely, as the equation contains the 'change in dietary cholesterol' as a key factor in raised blood cholesterol levels. It is now accepted that cholesterol in the diet has no significant impact on blood cholesterol levels. Keys even knew this himself.

To quote him from a paper in 1956:

'In the adult man the serum cholesterol level is essentially independent of the cholesterol intake over the whole range of human diets.'

In 1997 Keys wrote this:

"There's no connection whatsoever between cholesterol in food and cholesterol in

blood. And we've known that all along. Cholesterol in the diet doesn't matter at all unless you happen to be a chicken or a rabbit." Ancel Keys, Ph.D., professor emeritus at the University of Minnesota 1997.

More recently, the fact that cholesterol in the diet has no impact on 'cholesterol levels' or CVD was reaffirmed. In 2015, the Dietary Guidelines Advisory Committee in the US, having reviewed all the evidence made this statement:

"Cholesterol is not considered a nutrient of concern for overconsumption." <sup>2</sup>

This was even supported by the likes of Walter Willet and Steven Nissen:

'Nutrition experts like Dr. Walter C. Willett, chair of the Department of Nutrition at Harvard School of Public Health, called the plan a reasonable move. Dr. Steven Nissen, chair of cardiovascular medicine at the Cleveland Clinic, told USA Today "It's the right decision. We got the dietary guidelines wrong."

Anyway, Keys had started out with a hypothesis that cholesterol in the diet raised cholesterol levels in the blood but discarded it after feeding eggs to volunteers (eggs contain more cholesterol than any other food) and finding that their cholesterol level remained stubbornly unchanged.

Undaunted, he did what no scientist should ever do. He simply changed the hypothesis. The nutrient of concern was no longer cholesterol, it was saturated fat. So, what is it about saturated fat that can raise LDL? I wanted to know the exact, proven, mechanism.

We start with the certain knowledge that the body is exceptionally good at keeping all substances in the blood under strict control. If the level of something rises too high, mechanisms are triggered to bring them back under down, and vice-versa. The entire system is known as homeostasis.

Thus, if saturated fat intake really does cause LDL levels to reach damaging levels, it must be overcoming homeostasis, and breaking metabolic and physiological systems. How does it do this?

To try to answer this question we should look at what happens to saturated fat when we eat it. The first step is that it binds to bile salts in the bowel. Bile salts are a form of mildly adapted cholesterol, synthesized in the liver and released from the gall bladder. Without bile, fat cannot be absorbed well, if at all, and simply passes through the guts and out the other end.

The absorbed saturated fat is then packed into a very large lipoprotein (known as a chylomicron). Once a chylomicron is formed it travels up a special tube, called the thoracic duct, and is released directly into the blood stream. It does not, and this is important, pass through the liver.

Chylomicrons then travel around the body and are stripped of their fat, shrinking down until they become about the size of an LDL. At which point they are called chylomicron remnants. These are absorbed back into the liver – using LDL receptors – and are then broken down into their constituent parts

Therefore, a small amount of fat that you eat will end up in the liver. However, the vast, vast, majority will go straight from the guts to fat cells (adipose tissue). Whereupon they are stored away for later use.

In fact, this is the fate of all types of fat: saturated, polyunsaturated, or monounsaturated. There is nothing unique about saturated fat in the way that it is absorbed and transported around the body. Anyway, as you may have noticed, none of this has anything to do with LDL whatsoever. Nothing. Ergo the consumption of saturated fat, or any fat, can have no direct impact on LDL levels.

I suppose the next question to ask is simple. Where does LDL come from? LDL is created when VLDLs (very low-density lipoproteins) shrink down in size. VLDLs are the type of lipoproteins that are synthesized in the liver, then released into the bloodstream. They contain fat and cholesterol and, as they travel around the body, they lose fat and become smaller and smaller, until they become an LDL -which contains proportionately more cholesterol.

Almost all LDL molecules are removed from the circulation by LDL receptors in the liver. They are then broken down and the contents used again. Some LDL continues to circulate in the blood, and cells that need <a href="more">more</a> cholesterol synthesize an LDL receptor to bind to LDL molecules and bring the entire LDL/LDL receptor complex into the cells.

Just to re-cap. Saturated fat (any fat) is absorbed from the gut and packed into chylomicrons. These travel around the body, losing fat, and shrink down to a chylomicron remnant – which is then absorbed by the liver. There is no connection between chylomicrons and LDL.

Instead LDL comes from VLDL. VLDLs are made in the liver, they contain fat and cholesterol. VLDLs leave the liver, travel around the body and lose fat, shrinking down to become an LDL.

As the only source of LDL is VLDL, this leads to the next obvious question. What makes VLDL levels rise? Well, it sure as hell isn't fat in the diet. What causes VLDL levels to rise is eating carbohydrates. The next quote is a bit jargon heavy but worth including.

'De novo lipogenesis is the biological process by which the precursors of acetyl-CoA are synthesized into fatty acids [fats]. In human subjects consuming diets higher in fat (> 30 % energy), lipogenesis is down regulated and extremely low; typically < 10 % of the fatty acids secreted by the liver. This percentage will increase when dietary fat is reduced and replaced by carbohydrate.'4

To simplify this as much as possible. If you eat more carbohydrates than your body needs, or can store, the liver converts the excess (primarily fructose and glucose) into fat in the liver. This process is called de novo lipogenesis (DNL) The fats that are synthesized are saturated fats, and only saturated fats. Once synthesized they are then packed into VLDLs and sent out of the liver.

In short, if you eat fat, the VLDL level falls. If you eat carbohydrates the VLDL level rises. Which is pretty much what you would expect to see.

Moving the discussion on, as VLDLs are the only source of LDL. you now have a conundrum to solve. How can you connect saturated fat intake to a rise in LDL levels, when saturated fat consumption reduces VLDL synthesis? What is the mechanism? The mechanism does not exist!

You could counter by saying, what of the many studies that have shown a fall in LDL when saturated fats are replaced by polyunsaturated fats? Well, this seems to have been shown often enough for me to believe it may even be true.

The explanation for this finding is most likely the fact that, in these studies, saturated fats were replaced by polyunsaturated fats, from plant oils. Plant oils contains stanols (the plant equivalent of cholesterol).

Stanols are known to lower LDL levels, see under Benecol and other suchlike 'low fat' spreads. Because stanols compete with cholesterol for absorption there is an impact on the 'measured' LDL levels. What this means, in turn, is that the studies that demonstrate a lower LDL, with a reduction in saturated fat consumption, fall foul of the two variables problem.

Namely, if you change two variables in an experiment at the same time, you cannot say which of the variables was responsible for the effect you have seen. Was it the reduction in saturated fats, or the increase in plant stanols, that lowers LDL?

This is all tacitly accepted in this Medscape article – again heavy on jargon: 'Saturated Fat and Coronary Artery Disease (CAD): It's Complicated.'

'In a meta-analysis of over 60 trials, higher intakes of saturated fat were associated with increases in both LDL-C and high-density lipoprotein cholesterol (HDL-C) and decreases in triglyceride levels [VLDL}, for a net neutral effect on the ratio of total cholesterol to HDL cholesterol.

Although saturated fats increase LDL-C, they reduce the LDL particle number. Total LDL particle number quantifies the concentration of LDL particles in various lipid subfractions and is considered a stronger indicator of CV risk than traditional lipoprotein measures.

As for stearic acid, the allegedly non-cholesterol-raising fat, while it appears to lower LDL-C relative to other SFAs, one analysis concluded that it raised LDL-C, lowered HDL-C, and increased the ratio of total to HDL cholesterol in comparison with unsaturated fatty acids. And this is one of the confounders of much nutrition research —observations about a given nutrient are highly dependent on what you compare it to.'5

Which is a long-winded way of saying that everything we have been told about saturated fat, its impact on LDL, and its impact on CVD is – frankly – complete bollocks. And if it is complete bollocks, the Keys equation – which has driven all research in this area for seventy years – is also bollocks.

In truth, all possible combinations of LDL going up, down, and staying the same have been found in dietary studies. But I would like to focus on the most recent study. It formed the basis of an episode of a programme called 'Trust me I'm a doctor', on the BBC. Researchers studied the impact of different types of saturated fat on LDL and

HDL levels.

'For the experiment, the team recruited nearly one hundred volunteers, all aged over fifty. They were split into three groups and every day for four weeks each ate fifty grams of coconut oil (about two tablespoons), or fifty grams of olive oil – an unsaturated fat already known to lower bad LDL cholesterol – of fifty grams of butter.

This amount of coconut oil contains more than forty grams of saturated fat, twice the maximum recommended daily amount for women, according to Public Health England, but is the level previous research has revealed is necessary to show measurable changes in blood cholesterol over a four-week period.

Before the experiment, all the volunteers had their bad LDL and good HDL cholesterol measured, as well as their height, waist, blood pressure, weight and body fat percentage. Four weeks later, these tests were repeated.

The group who ate butter saw their bad LDL levels rise by about ten per cent, as expected. But the olive oil and coconut oil saw no rise in bad LDL – despite coconut oil having more saturated fat than butter.'

Even more surprisingly, while butter and olive oil both raised good HDL cholesterol by five per cent, coconut oil raised it by a staggering fifteen percent, meaning that it seemed to have a more positive effect on cholesterol related health than olive oil.' 6

It is worth pointing out that this was the largest study of the kind ever to have been done. This may surprise you, but in many nutritional studies the number of subjects is often in single digits. In case you are thinking we can simply ignore a study done by the BBC, it was carried out to high standards, and has since been published in the BMJ. Equally I can see no reason why the BBC would have any desire to bias the conclusions in any direction.<sup>7</sup>

What they found was that coconut oil, containing the highest percentage of saturated fat, had absolutely no impact on LDL. But it did raise HDL (so-called 'good' cholesterol) by 15%. Which is no surprise. If VLDL goes down, HDL goes up. And in this experiment they kept everything else the same, but just added saturated fat. A single variable.

Anyway, the thing that interests me most, and the reason for writing this particular blog is that I have come to the realisation that the best way to find the answer to a scientific question is to immerse yourself in the science. I would like to believe the published research, because it would be lovely if you could look at a study and believe it to be correct/true/unbiased. But that is no longer possible, most especially in the connected fields of heart disease, and nutrition.

'It is simply no longer possible to believe much of the clinical research that is published, or to rely on the judgement of trusted physicians or authoritative medical guidelines." Marcia Angell – long-time editor of the NEJM.

'The case against science is straightforward: much of the scientific literature, perhaps half, may simply be untrue...science has taken a turn towards darkness.' Richard Horton – editor of The Lancet.

'The poor quality of medical research is widely acknowledged, yet disturbingly the leaders of the medical profession seem only minimally concerned about the problems and make no apparent efforts to find a solution.' Richard Smith – long time editor of the BMJ.

It is always, of course, risky to base your thinking and conclusions on what is known about the basic science. New facts can come along to upend your thinking at any time. However, with mainstream medical research in such a corrupt mess, I do not know how else to do it. The basic research tells us that there is no mechanism whereby saturated fat can raise LDL levels, and the research, such as it can be disentangled, appears to fully support this.

I looked at this blog again, and again, and I thought: Why did I write it...for sure? I wrote it because I wanted to make you aware of three things. First, how powerful a thought can be. Saturated fat raises the LDL level, and how difficult this is to shift. The power of a simple idea.

Secondly, so that you can see that the truth is out there. It is not to be found amongst the experts in the field. It cannot be found by reading the research, or the guidelines. But it is out there, if you look hard enough.

Third, the mainstream just will not change its mind. A recent conference in Switzerland, organised by the BMJ, and others, tried to discuss the dietary guidelines and the role of Saturated fat. I was invited, but did not go, as I was working. Zoe Harcombe went, and wrote a blog about it.<sup>8</sup> As she wrote about the conclusion of the conference:

'At the recent Swiss Re/The BMJ Food for Thought conference, the closing speakers tried to find some agreement on dietary fat guidelines...

Fiona (Fiona Godlee, editor of the BMJ) started with: "The point about saturated fat is: the evidence is now looking pretty good, but the guidance hasn't shifted... there doesn't seem to have been an enormous 'mea culpa' from the scientific community that we got it so wrong. That does surprise me."

Salim replied: "We got brainwashed by a very questionable study, called The Seven Countries Study, many years ago and it was ingrained in our DNA and generations of us were brought up with that... Somebody said that you need to wait for guidelines committees to die before you can change the guidelines committees"!

Fiona then said: "Maybe one outcome of this meeting would be for this meeting to say 'that's gone now', the science has changed. Am I right Salim? Am I right Dariush? It seems to be that should be an outcome of some sort from this meeting."

Alas, the UK guidelines committee shows no signs of such change, let alone the 'mea culpa' that Fiona suggests might be in order.'

1: https://www.diabetes.co.uk/in-depth/every-last-shred-evidence-low-fat-dietary-guidelines-never-introduced/

- 2: http://time.com/3705734/cholesterol-dietary-guidelines/
- 3: https://www.health.harvard.edu/blog/panel-suggests-stop-warning-aboutcholesterol-in-food-201502127713
- 4: https://www.ncbi.nlm.nih.gov/pubmed/12133211
- 5: https://www.medscape.com/viewarticle/839360
- 6: https://www.pressreader.com/uk/daily-mail/20180109/282643212945759
- 7: http://bmjopen.bmj.com/content/8/3/e020167
- 8: http://www.zoeharcombe.com/2018/07/saturated-fat-consultation-sacn-myresponse/

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I am pedantic too but trying to give it up, not easy but I get fed up of seeing myself do this.

Reply



hm120748 on July 3, 2018 at 1:57 pm



Hi, I don't understand why you said that the bbc group who ate butter had higher LDL levels "as expected" as butter is mainly saturated fat whereas the coconut oil group had no increase?

Reply



Dr. Malcolm Kendrick on July 3, 2018 at 2:49 pm



All groups were given fifty grams of: butter, olive oil and coconut oil. Coconut oil contains the greatest percentage of saturated fat of all. So, whatever caused the LDL to rise in the group eating the butter it cannot have been the saturated fat. The 'as expected' comment is based on the current dogma that saturated fat raises LDL. Clearly, however, it does not.

Reply



Frederica Huxley on July 3, 2018 at 9:38 pm



It may possibly depend on the source of the butter. It is my understanding that butter from grain/soy fed cows is very different from butter from grass fed cows.



puddleg58 on July 3, 2018 at 10:24 pm



The subjects ate the fat however they wanted, and you could see the butter group eating extra bread and potatoes to take it in, whereas the other groups stirfried etc.





# croydonkev on July 5, 2018 at 3:41 pm



Dr Kendrick. Did they find out what it was about the butter group that caused the 10% increase.

Should we be concerned about eating butter?



## LA\_Bob on July 5, 2018 at 8:57 pm



I'm guessing someone could argue (and probably will) that since coconut is paleo and butter is not, the lauric acid content of the coconut (almost 50% of total fat) simply must be superior to the comparable myristic-palmitic acid content of the butter. A vegetarian might jump on this one, too. But then, of course, they have to prove it.

This study from 1995 with a whopping 15 "healthy young women" doesn't appear to help their case.

https://academic.oup.com/jn/article-abstract/125/3 /466/4730712?redirectedFrom=fulltext

Who knows what else the women ate?



### Topsygirl on July 3, 2018 at 1:59 pm



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Thank you for this wonderful post, I will go through this again but the one thing I am glad about is that possibly like yourself I have a mind and thinking processes that cause me to question accepted 'wisdom' in all sorts of areas, I was brought up in a farming community so no matter what so called evidence said I have just continued with butter, olive oil, good dairy all my life and while I have clearly inherited 'good genes' at 72yrs and wonderful health but it has been aided by being too stubborn to change the habits and diet of a lifetime. My brother was pushed on to statins a few years back unlike me he caved and suffered the consequences he said to me I have to take them these are saving my life, apart from the effects (I have stopped prefixing this with

side for all pharmaceuticals) but worse than that they masked another serious condition until he became very ill now he is told he cannot take statins ever again (whatever happened to the threat "You will die if you don't take these" out the window clearly. He is one of those who has no cardiac history never having had even the smallest issue with his heart, his cholesterol level has hardly changed since he was 18yrs he has his complete records having served in the military.

In fact it was being stubborn over soy being advised that this was the best thing for us all to be eating and drinking which led me to Joe Mercola and he recommended your book and here I am and of course I never joined the soy folk.

As a member of our little community said a while back 'evidence based, eminence based and avarice based so we have the last two which might explain some or all of the reason no back-flips on this issue. I guess it is the old hand washing thing all over again.

My brother was referred to the doctor who put him on statins by another doctor and one of the reasons (clearly too many doctors) he caved was that he was informed that this doctor had just completed the gerontology course clearly he is nothing like me I would have bolted I do not consider myself old enough for a gerontologist and my brother is considerably younger than me I feel that I would have had the same feeling of panic if I have gone to work and found I was confronted by a herd of human resource folk or OH&S types or arrived home to find the place had been taken over by dieticians or a gaggle of falls risk personnel having a meeting over my bath mat. I must keep up with my keep fit program keep walking quickly. I think the ticket here is to keep one good length in front. Thank you again I may send this link to my brother last time I did that he said I don't read blogs if I want to know something I only look at well respected medical journals and the research contained within, he really needs to read your book/s.

Reply



John Patchett on July 3, 2018 at 2:12 pm







I read this with great interest and understanding Malcom until I got towards the end where you were summarising the BBC experiment. Earlier in your blog you said, quite rightly in my opinion too, that eating fats of any kind causes VLDL levels to fall and hence LDL levels and eating excess carbohydrates, the opposite to occur. Then you said that those who ate the fifty grams of butter (a saturated fat) in the experiment, saw their LDL levels rise by 10%, as expected. I would have thought it would have had a similar effect to the coconut oil.

Has all this hot weather caused me to miss something somewhere. 😂





Martin Back on July 4, 2018 at 7:15 am







87 percent of coconut oil's fats—or 12 grams per tablespoon—is saturated fat. and. 51 percent of the fats in butter—or 7 grams per tablespoon—is saturated fat — http://www.eatingwell.com/article /283864/this-or-that-butter-vs-coconut-oil/

Butter also contains milk solids. Maybe they should have used ghee (butter without milk solids) instead.





Mark on July 3, 2018 at 2:13 pm





Hi Malcolm.

I've got a lot to learn. I've read so much now, I'm honestly getting lost. I'm totally with you on the fact that LDL is not cholesterol and that The LDL mechanism is via carbohydrate and that LDL only damages the endothelial wall if it gets through and it is oxidised. The hole in the wall could be caused by a number of factors but the fact that atherosclerosis rarely/never happens in a vein unless it's used as a heart bypass suggests that the damage is caused by all things that inc blood pressure. So my one dilemma is when people are dissected after heart attack, the plaques are filled with cholesterol. It seems as though it's trying to patch the hole and becomes implicated but because it is there and helps create a large foam cell, then is it not the case that having low cholesterol is a good thing! My cholesterol is at 8 most days it goes up I'm direct correlation to eating eggs. When I stop having eggs it goes down. I am not and will never take a statin as they would like me to as I am lean and have no other risk factors but my cholesterol is high and it is found in a plaque so surely the lower the better?

Reply



BobM on July 3, 2018 at 4:07 pm





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Mark, blood "cholesterol" is much more complex than just eating eggs. See:

http://cholesterolcode.com/

I can make my total "cholesterol" and LDL-C go up and HDL-C go down by not eating for a while (days). I can do the reverse by eating, especially high (animal) fat (which is a combination of saturated and unsaturated fats). If you look at that website, he change change his cholesterol values a lot in a few days by following certain protocols.

For you to test whether eggs are the culprit, that's a very difficult test. You have to have everything but the cholesterol be the same. That's tough to do. What happens, for instance, if you eat shrimp (also "high" in cholesterol)?

By the way, if you are lean, are you also active? If so, read the LMHR (lean mass hyper responder) at that link.





### David Bailey on July 4, 2018 at 8:41 am



How do you get to measure your cholesterol on a regular basis like this? Do you get the blood tests done privately – it must cost you a fortune!

I do remember someone on here pointing to a paper which tested the repeatability of cholesterol testing (I I can't remember if it was LDL or total cholesterol) using parts of a single blood sample. There was a huge spread in values.

When I started taking my own BP at home, I also noticed how the numbers varied. It is awfully easy to mentally fit a pattern to what is, in reality just random noise!



Gary Ogden on July 3, 2018 at 2:15 pm



Thank you, Dr. Kendrick. Much of this I did not know, but your clear explanation makes it easy to understand and easy to remember.

Reply



Celia on July 3, 2018 at 4:53 pm



I totally agree Gary. I found this Dense but easy to understand with concentration. How sad to get to the end and find the usual answer - nothing has changed, we have to wait till the old guard die off and the next generation take over...

Reply



DV on July 3, 2018 at 2:17 pm







Insightful. I recently did a "cheat test" to see how my cholesterol levels would be improved and was amazed at the results. Dr. K, have you looked at the CholesterolCode website? There's description of how cholesterol lab results can be changed (for many people but not all people) based on eating much more fat and fewer carbs for the 3-5 days before the test. In my case, this was a dramatic difference (and got my doctor off my back). In my husband's case, it didn't work for him.

➡ Reply



Bill In Oz on July 3, 2018 at 2:19 pm







Malcolm thank you for all the effort & energy you have put into this post. I have not read all of it just now. It is near midnight & I need a good sleep. I will come back to it again tomorrow. But already I know that your conclusion and logic is completely sound..

umm I think I will make some rye bread toast with lots of butter on it..  $\ensuremath{\mathfrak{C}}$ 



Reply



dearieme on July 3, 2018 at 2:31 pm









Kendrick fought the battle of BMJ, BMJ, BMJ, Kendrick fought the battle of BMJ,

And the walls came tumblin' down.

Or not, as the case may be.

All power to your arm, doc.

Reply



Dr. Malcolm Kendrick on July 3, 2018 at 2:50 pm







16 👎 0 0 Rate This

The walls are now, at least cracking.



### Christopher Palmer on July 3, 2018 at 3:52 pm



Oh, I hope so.

And let's drive home those wedges whenever and wherever we can.



Bill In Oz on July 4, 2018 at 3:23 am



Ummmm Any signs of cracks in Oz yet?



Socratic Dog on July 12, 2018 at 6:59 pm



Maybe not too many cracks in Oz, if the link below is illustrative.

https://www.naturalnews.com/2018-07-11-renowned-academic-brags-about-suppressing-information-on-the-deadly-effects-of-pfas-in-3m-chemicals.html

Malcolm wrote that he is so disillusioned with the scientific literature (I am paraphrasing) that he is essentially ignoring it, and returning to first principles, immersing himself in the physiology to try and work out what is happening. I find this deeply disturbing. On the one hand, with highly complex systems, living organisms for example, figuring out what will happen if a certain input is changed can be close to impossible. Recall the widely-quoted butterfly flapping its wings in Peking leading to a hurricane a couple of weeks later in the Caribbean, or whatever. Changes in multiple inputs? Forget it. On the other hand, the research literature, which should be enlightening us on actual observed effects and consequences, is totally corrupt (thus the link), and cannot be relied upon.

I've mentioned this one before, but anyone who has any interest in the scientific literature cannot ignore it. Conversely, anyone who quotes the literature at you and is not familiar with it is not worth listening to:

Ioannidis, 2005, Why Most Published Research Findings Are

False. Easily found online.

This has the markings of a scientific dark age. The anti-Enlightenment is upon us.



Gay Corran on July 3, 2018 at 2:34 pm





♠ 4 ♥ 0 ♠ Rate This

So that is that. I wish this could be distributed to every "health centre" in the land, and that every GP, nurse, and dietician would read it.

➡ Reply



Vanessa on July 3, 2018 at 7:11 pm





4 👎 0 0 Rate This

I keep hearing how busy general practitioner doctors are, but for a number of years I have been reading books about wheat, grains, cholesterol and the microbiota, some of which is only discovered about 10 years ago. The local doctor doesn't even know what I am talking

Don't they have to update their knowledge now and then? And I do not mean by being bribed and lied Toby big pharma.

Reply



Jennifer on July 4, 2018 at 7:49 am









Vanessa, I would say that some practitioners do read these wonderful papers and books that we on this blog have followed and benefitted from. But the fact remains that the NHS quidelines on nutrition and use of pharmaceuticals ties their hands behind their backs, and does not permit them to advise anything other than what is the outdated status quo. I gave up talking to my GP about such matters five years ago, as the reponse was so rude and intimidating. I put it down to cognitive dissonance ...the evidence conflicts with long held beliefs, and causes stress to the practitioners. Believe me, Continuous Personal Development has declined into yet another ticky-box exercise.



Gary Ogden on July 4, 2018 at 2:11 pm



Vanessa: Here in the U.S. doctors have CME requirements, as far as I know, but all of it is now conducted by Pharma. I was the one who educated my physician about the research I had done, and she was receptive to learning, but I suspect too many are too arrogant to even listen.



Tim in Oz on July 4, 2018 at 10:08 pm



It's up to us to update them. In his article Kendrick makes it clear you can't trust anyone. If your GP won't listen to you, change them. We have an excellent GP (that makes two in the world). My wife has post-surgery epilepsy, the origins of which are unknown. Every neurologist we've seen admits that. So there's no point in paying £150 a visit to be told to "try this drug", on the basis of them having heard half her symptoms whilst answering another phone call. We look up the various options, assess them ourselves as to their suitability, present the case to the GP who gives us a prescription. She listens to us on cholesterol, vaccines, sunscreen etc., pushes nothing and knows how healthy the whole family is.



Gary Ogden on July 5, 2018 at 11:45 am



Tim in Oz: Absolutely right. We must educate them. Most of them mean well. I say, never give up educating each and every one of them, regardless of whether or not they appreciate it.



James DownUnder on July 6, 2018 at 5:30 am



Pity I can't post a picture here... Walking into Royal Perth Hospital, (DownUnder) there are FOUR huge vending machines, selling everything from flavoured to sugar to artidicially sweetened waters to nuts and chocolates... Just beyond is a \*hospital\* staffed 'Barista' also selling bakery items like slices (110grams) of Carrot cake... made with FORTY

% 'sugar'. (53% carbs.)

And canola oil, and margarine... and 3-digit chemicals...plus, thankfully, 17% 'carrot'. But couldn't see any 'butter' on the label. 

The coffee was both quick and Flavoursome. − No sweeteners, of course!

➡ Reply



Jennifer. on July 6, 2018 at 7:16 pm



OMG. Shamed to say my local hospital on the other side of the globe, looks the same.



Topsygirl on July 22, 2018 at 2:10 am



Same here James, our large public hospital where I work made a great fuss about 4 years ago about staff bringing in boxes of chocolate frogs to sell on behalf of their kids for scouts etc. 'these must not be displayed where the public and patients might be encouraged to get one which would not be beneficial for their health' so they had to put them under the desks out of sight; we also had a café run by our volunteers who did the food management course and sold sandwiches, local pies and pasties, small selection of cakes and some fruit again from local suppliers and good coffee, then we closed that and got a barista in with all the carbs, and who knows what else at twice the price. We still have all the vending machines with drinks and snacks everywhere. So I am guessing the only issue for people's health are these pernicious chocolate frogs no wonder folk are confused if things are available in a hospital shouldn't they be healthy?



Sue Richardson on July 3, 2018 at 2:59 pm



Thanks for your brilliant research Dr K. Thank goodness someone is doing it! Regarding the mainstream not changing its mind, it might not be just yet, but I do think 'ordinary' people are beginning to think. The other day a friend told me that her husband was reading an article (I think in the Daily Express) and shouted: "hey this article is saying exactly what Sue has been telling us for years". It was an article about carbohydrates. I tell them stuff I pick up from

this blog. I do think the cholesterol hypothesis is still deeply ingrained – it must be if even doctors can't get their heads round it. So it may take a bit longer. Some older folk may remember a programme with David Jason in it years ago called 'A Short Intake of Breath'. That's still often the reaction when I timidly suggest to friends the level might not matter too much. I watched that BBC programme too. There have been others.. Let's hope there are more, and one day cholesterol will be found Not Guilty.

➡ Reply



James DownUnder on July 6, 2018 at 5:35 am



"... and one day cholesterol will be found Not Guilty...

Only when all members of the jury are . . . departed.

- 'Science advances, one funeral at a time.'

Reply



JDPatten on July 3, 2018 at 3:01 pm

Doc.

This research paper, that you were a party to, suggests that, in the elderly (what number defines that?), higher LDL results in extended life:

https://bmjopen.bmj.com/content/6/6/e010401

Does that mean that in order to gain a bit more healthy Time we might be advised to do what it takes to up LDL? Eat more carbs?

Reply



Frederica Huxley on July 3, 2018 at 9:50 pm



I would have thought that Thanks to homeostasis, and cholesterol levels haven't been artificially lowered, there is no need to eat more carbs.

Reply



AnnaM on July 3, 2018 at 11:51 pm



Maybe the elderly with higher cholesterol live longer because they are

the ones not on statins. Reply



JDPatten on July 5, 2018 at 11:20 am

Nope.

Lower LDL levels get you a shorter life, statistically, whether those levels are because of statins or not. The article is really very interesting.



Celia on July 5, 2018 at 5:09 pm

o 📭 0 🚺 Rate This

JDPatten, or maybe just avoid statins?

Reply



Janet on July 6, 2018 at 5:40 am

o 🕴 0 🕶 Rate This

JDP,

"64" and "No..."

– just stop bothering about the numbers... The older you are, the more birthday cakes / glasses of wine you need to consume, so it sort-of selfregulates.

'Self-fulfills' – if you must be pedantic.

➡ Reply



JDPatten on July 6, 2018 at 11:37 pm

if 1 👎 0 0 Rate This

Given, per Dr Kendrick: "LDL is created when VLDLs (very lowdensity lipoproteins) shrink down in size. " and "What causes VLDL levels to rise is eating carbohydrates."

And then, given, from the above article: "Our review has shown either a lack of an association or

an INVERSE ASSOCIATION between LDL-C and both all-cause and CV mortality." (My emphasis.)

Therefore, eating carbs inverses association with mortality.

Seems logical. It's an interesting theoretical proposition, isn't it? Would Goran object, I wonder?

No numbers; no statins. Just a nice Viennese nusstorte every year; a good California red Zinfandel with each salmon dinner. (Jeez, 64 is so very specific!)



Janet on July 8, 2018 at 9:07 am



... A big YES, – for Wild caught Salmon, (Not farmed) and alas, this week the 64 becomes 65.



JDPatten on July 9, 2018 at 12:14 pm

Of course. Sockeye; Coho.

65! Congratulations and salutations. Now you're only nine years behind me in seniorness.

Ah, nostalgia. I'd do a thing or two a bit differently, had I to do those years over again.



Richard Michael Zabrodski on July 3, 2018 at 3:02 pm



Well done. Your blogs continue to inspire me

□ Reply



Neil Upton on July 3, 2018 at 3:16 pm



Excellent as ever Malcolm. Thankfully your not alone but progress is slow.

➡ Reply



seabreezecafe160478431 on July 3, 2018 at 3:28 pm



Great article. We've been following your blog for 3 years and for that time have been low carb broadly in line with your suggestions (along with Aseem Malhotra, David Unwin and others). Lots of Vallee des Baux olive oil, salmon, tuna, oceans of tomatoes, all colours of veg – supplemented with high dose

K2 and vitC and no pharms. We are nearly 70 & hoping to continue following you for the next 70 years

Reply



Jennifer. on July 3, 2018 at 3:29 pm





📫 8 👎 0 🏮 Rate This

Gay, they may well read it, and even privately accept it, but NHS guidelines will not permit them to advise anything different to what they have been dishing out for years. I know, because I have family members of all ages from mid-forties to mid-eighties, who are being pestered week in and week out:-

- 1) to eat a low fat diet
- 2) to eat plenty of carbs
- 3) to take statins
- 4) to take B/P meds
- 5) to understand that they are type 2 diabetic and need medication to control it.

My input falls on frightened ears, because we are hard wired to put our faith in the NHS.

I am sorry to say that I am now disillusioned with what I had always felt was 'the best medical service' in the world.

Shame on the politicians of the last 30 years, (the demise of the NHS started in the late '80s, and it was hell on earth by the mid '90s). So, shame on us oldies, who failed to realise that the original concept of the NHS was being dismantled under our very noses.

Reply



Celia on July 3, 2018 at 5:03 pm







4 👎 0 0 Rate This

Jennifer, I don't know if I was lucky or unlucky to have had a very nasty reaction to statins. this caused me to do tons of research and get off all my meds, change my diet to do the opposite of the guidelines and get healthy again. Here's to lots of organic veg, few carbs and plenty of coconut oil!

Reply



🕯 Jennifer. on July 3, 2018 at 5:58 pm





6 🖣 0 0 Rate This

Exactly! Off all meds for over 5 years now. Took B/P at weekend, and at 140/80 I reckon I am doing fine.

Having put 3Kg organic, cold pressed virgin coconut oil into my store cupboard, along with organic nuts and seeds, I am in agreement with you. Opened my next big jar of red sauerkraut, made last February, and now in the process of teaching myself how to make organic kvass. I have started a new sourdough with organic, stoneground English wholewheat, after a break of a few months. And we have a dose or 2 of mother, organic cider vinegar in the course of the day.

The inspiration I have learned over the years from this magnificent blog has been absolutely life enhancing. Thank you Dr Kendrick and all those who add to the inspiration. Smuq? Moi? YES!



Gay Corran on July 3, 2018 at 5:09 pm



Jennifer, I too am being pressured to take all those drugs pushed at your family, for the same reasons. The cardiologists I saw recently wanted me on a "proper therapeutic dose" of statins, "(as your cholesterol is a bit high") and BP drugs, but I have kept my blood sugars at a non-diabetic level for years with a LCHF diet, and have reduced my blood pressure to below the 90/40 level with magnesium, hawthorn, beetroot, and vits E, D3, K2 and C, plus L arginine and one or two other nitric oxide enhancers, such as garlic and pomegranate. I am, however, still overweight, even though I eat a truly low carb diet. No one is interested in how or why my diet has helped, saying only, "well, if it works for you..." You are right: the NHS is corrupt, and the Pharma companies own it. Very sad indeed. It is still good in emergencies.

Reply



Jennifer on July 3, 2018 at 6:49 pm



Gay, I do believe there are still excellent aspects of the NHS, such as emergency treatment which you cited. But Big Pharma has interfered too much, in the name of prophylactic anticipation of yet-to-be-diagnosed conditions which they frighten us into believing we will succumb to. And then the medical profession are intimidated into accepting via the NHS guidelines. As to your weight. May I suggest that you look up the history of the Body Mass Index? It was introduce in the 1930s, I understand, by an actuary sussing out major risks associated

with premature death. He extrapolated his findings for life insurance purposes. It did not take into account the health of the individuals, just their BMI. The health and beauty industry latched onto it, yet it was about as scientific as the barmy use of statins to reduce cholesterol levels. Who on earth thought lowering cholesterol was a good idea?

I am not suggesting that obesity ought to be ignored, but there is more to a healthy weight than insisting we fall between the 20-25 parameters of the BMI Index.



slowcamperoz on July 4, 2018 at 9:28 am



Try reading Dr J Mercola's book Fat For Fuel. It may help in switching up your metabolism.



Gay Corran on July 5, 2018 at 11:50 am



Thanks to you and Jennifer for your suggestions. Very helpful – will do.



Frieda Paton on July 3, 2018 at 3:34 pm



Fascinating! Once again. I battle sometimes to get my head around all the science and how bits from different sources link together. Have you followed any of the studies, originally N=1, done by Dave Feldman, a systems engineer? He started when the doctors wanted to put him on a statin. A quick summary here: https://www.dietdoctor.com/citizen-scientist-crackcholesterol-code

Reply



David on July 14, 2018 at 11:56 am



Some may find his interviewer quite (exceptionally) irritating. The first step it to use this link:



same video but with normal pause/fast forward controls. The second is to go straight to Feldman's website: http://cholesterolcode.com/

♣ Reply



David on July 14, 2018 at 5:54 pm



Sorry about that, I meant this link.



And cholesterolcode.com for Feldmans's own site.



Christopher Palmer on July 3, 2018 at 3:49 pm



Therefore, a small amount of fat that you eat will end up in the liver. However, the vast, vast, majority will go straight from the guts to fat cells (adipose tissue). Whereupon they are stored away for later use.

Reply



Christopher Palmer on July 3, 2018 at 3:53 pm

An excellent assessment and discussion of lipoproteins. I'll be reading it many times over to take it all in. Thank you.

But.

Of late I have been reading into the matter of obesity, Malcolm, and how people become obese. Adipocytes (fat-cells) have a part to play in this, and

what's more it is a simple relationship. The 'fatter' a persons may fat-cells become then the more adipose or obese an individual will appear.

There may seem to be the order of 50 billion fat-cells numbering amongst the estimated 14 trillion cells it takes to create a typical adult human. Any endeavours to be precise about the numbers amount to a non-trivial exercise. Adipocytes are intriguing for being the masters of hypertrophy. Their size can vary and the reason for such variance is the volume of lipids (fatty-acids) they each may retain in store within them.

A person who is of ideal weight and is therefore of normal size has adipocytes that might be deemed to be of normal size too. But adipocytes can shrink to less than that size, or they can increase significantly beyond it.

The term hypertrophy applied to adipocytes emphasises this capacity to increase in size. One could play with some party balloons filled with measured quantities of water to grasp the significance of hypertrophy, something I did as a child, though I never saw it as a demonstration of hypertrophy back then.

Adipocytes can increase in size to dimension are four times bigger than normal size, and their mass will increase too. A person becoming adipose or obese is the net-result of adipocytes undergoing appreciable hypertrophy (ie their fat-cells become filled with more fatty acids).

From what I have found in the literature it is deemed the case that concentrations of insulin regulate the degree of hypertrophy exhibited by adipocytes. Insulin is thought to target control of genetic expression and in so doing high concentrations of insulin facilitate increased conversion of glucose to fatty acids (the process termed lipogenesis).

Little more than 100 years ago when the pancreatic cells gave up producing insulin it meant a certain death for type 1 diabetics. There was no treatment. They would waste away to become emaciated, suffer organ failure, and a certain death. This 'wastage', as I understand it, would be led by adipocytes trending to extreme hypotrophy. When it became possible, being able to prescribe insulin was a life-saver.

Untreated T1 diabetics waste away irrespective of what or how much they eat. So from this I consider it plausible and reasonable to judge that the degree of adiposity arising in a person is a reflection of the chronic mean levels of insulin that have persisted over time. With treatment T1 diabetics have to be careful to balance the amount they eat (emphasis upon the carbohydrate quotient) with the amount of insulin they inject. Too much of either and they may gain weight.

Because of insulins leading causal involvement over lipogenesis and the degree of hypertrophy exhibited by adipocytes (how big and fat fat-cells may become), and because hyperglycaemia is the accepted driver of hyperinsulinaemia in healthy persons I have adopted a stance that the fatty acids to be found in adipocytes will largely be those formed by the process of lipogenesis (they were formed from surplus glucose).

From an outlook of engineering and systems analysis this stance seems justified, but of course I ought not overlook any physiological possibility that fatty acids from chylomicrons can be directed to, and accepted within, the adipocytes present in adipose tissues. The effect of the HFLC diets upon the overweight (who may successfully lose weight) supports my view my stance on adipocytes is essentially correct.

### When you write:

"Therefore, a small amount of fat that you eat will end up in the liver. However, the vast, vast, majority will go straight from the guts to fat cells (adipose tissue). Whereupon they are stored away for later use."

it's not something I would dispute or

challehttps://publichealthmatters.blog.gov.uk/2018/03/06/why-we-areworking-to-reduce-calorie-intake/nge, but I it's not something I can easily take at face value either. Examples from nature indicate the release of fatty acids from chylomicrons may be under some degree of physiological control. That's to suggest that they are only released when required and those fatty acids thus released may be directed towards the pathway of ketosis thus supplying ketone bodies to most other cells and cell-types with the fuel they need to remain viable (and if correct, then under those conditions of hypocortisolaemia and hypoinsiulinaemia).

If you could offer some direction(s) that could help indicate the mechanism at work behind that I'd be gracious.

People, including experts, so readily think that the fat content of any food, meal, or diet automatically finds its way to our adipose tissues. Include PHE and NHS in this. But all while the pressure has been on to consume less fat people themselves have trended to fatter resulting in a pandemic of obesity the authorities are keen to reverse. Now a minority of others is becoming increasingly concerned that the low-fat 'experiment' has been ineffective at least, and has very likely taken the problem it has tried to address and jolly well made it a darned sight worse.

The notion that the fat content of our food goes straight to our adipose tissues has the look of a myth. It rather looks to me that the most highly glycaemic carbohydrates and sugar are resposnsible through their capacity to leverage insulin secretion.

Like the Berlin wall, peoples lives may enhanced greatly when the myth falls.

Reply



Socratic Dog on July 12, 2018 at 7:16 pm



I do suspect Malcolm is wrong on this one. And that you are right. In terms of the end results, anyway, the mechanisms I don't understand well enough to judge. My biochemistry learning was too long ago. As I mentioned above, complex systems are difficult to figure out from first principles. But I think it's fairly clear now, based on observation (going back hundreds of years), that high-carb makes us fat (which Malcolm did mention, and which gave me pause after his earlier treatment), and high-fat doesn't.

→ Reply



toddhoff on July 3, 2018 at 3:58 pm



Ron Krauss and Peter Attia dropped a podcast I thought you may find interesting: https://peterattiamd.com/ronkrauss/

It's all very confusing, but this seemed up your alley:

"What if statins reduce events, but not by lowering LDL? Maybe the benefits come from the endothelial health and/or inflammatory reduction?"

Reply



James DownUnder on July 6, 2018 at 5:48 am

Yes todd, the 'other' effects of statins can be useful. Inflammation – reduction is one, and 'blood thinning' / anti-clotting is another;-http://atvb.ahajournals.org/content/25/2/287

'Placebo' has to rate a mention also.

Reply



biddy99 on July 3, 2018 at 4:11 pm

d 0 ₹ 1 Rate This

Good

Reply



Bill Logan on July 3, 2018 at 4:28 pm

1 0 • Rate This

Another great blog. Thank you.

Reply



N.

1 0 • Rate ThisDr. Kendrick, I have two questions. First, as my daughter admitted her husband thinks I am "a little out there" because I so often find mainstream beliefs wrong, how have you made peace with conventional wisdom = conventional stupidity? It does seem to be the pattern and I was upset myself when I noticed some years ago my tendency to delve into questions and find the mainstream wrong. Always by reading people like yourself who delve and delve.

Two, what about we low carbers being told that fat does not make you fat but carbs do? Apparently both can be stored as fat, but what is the role of both in creating overweight people?

➡ Reply



Harry de Boer on July 3, 2018 at 5:52 pm



I'm not 'a' doctor, let alone 'the' doctor you are asking this, but I might try to chime in here.

The problem with carbs, especially fructose, as you can here from Dr. Robert H. Lustig, is that the increased insulin production has all kinds of effects, including suppression of satiety signals and activitaing hunger feelings. This can lead to a daily overeating of 400 kCal which obviously will raise your weight.

When on a low carb high fat diet, the idea is that it's much easier to control your energy intake as you don't feel hungry and craving so much anymore.

However, if one doesn't watch his/her intake on a LCHF diet, one still can eat too much and grow in weight, if done continuously.

Reply



Harry de Boer on July 3, 2018 at 5:53 pm

typo: ...as you can hear from...



rockingbass on July 4, 2018 at 5:49 am



Hi Anna for an explanation to your Ist question read Uncle Wolfi's Secret -A tribute to Dr Wolfgang Lutz by Valerie Bracken





jvikse58 on July 3, 2018 at 5:12 pm



Researching this for many years the mechanism they refer to is downregulating the ldl receptors. Do you have any comment on that ?

□ Reply



JR62 on July 3, 2018 at 5:22 pm

This is so good. Thank you for your effort to dig up all this and share it to us.

Reply



JanB on July 3, 2018 at 5:59 pm

📫 2 🧖 0 🏮 Rate This

So good. Thank you.

➡ Reply



Mark on July 3, 2018 at 6:39 pm

Thanks Bob,

I'm very active and work in a health gym where I can regularly test my cholesterol. Yes I respond to prawns as well so I am a hyper responder for sure and that's what I was meant to say. Some definitely get cholesterol from the diet. I have a very staple diet. I'll take a look at that link. Thanks

Reply



Lisa on July 3, 2018 at 7:55 pm

This post is actually so simple. But SO GOOD.

This is one my favourite parts: "It is always, of course, risky to base your thinking and conclusions on what is known about the basic science. New facts can come along to upend your thinking at any time. However, with mainstream medical research in such a corrupt mess, I do not know how else to do it. The basic research tells us that there is no mechanism whereby saturated fat can raise LDL levels, and the research, such as it can be disentangled, appears to fully support this."

You are right that all we can do sometimes is use our understanding of "basic

science" in order to decide if something really makes sense or not. Especially when research is such a mess. But what might even be more shameful than the state of research is the fact that the majority of healthcare professionals lack the time, desire, energy and/or intelligence to "go back to basics" and actually THINK about a problem in this way.

Reply



Tom Welsh on July 3, 2018 at 8:10 pm



"You took a blood test, gathered together all the lipoproteins you could find (good, bad, and indifferent) and measured them all. Quite what they were measuring is a good question".

From memory, this all happened immediately after someone invented and began selling a machine to measure "blood cholesterol". It was about the first component of blood that doctors could measure, and as measurement is scientific they were keen to do so. Oddly enough, the manufacturers' salesmen were also keen to shift their stock and earn bonuses.

➡ Reply



Binra (@onemindinmany) on July 4, 2018 at 10:21 pm



PR campaigns are not a conspiracy so much as a manipulative distortion or disinformation to undermine rivals and capture both market share now called mind-share and gain regulatory protections.

One can lament the lack of moral scruple in but one can also see that some believe they are naturally and justly predators and that lies and dirty tricks are simply another kind of weapon for achieving dominance and protection from the law.

Along with this is the self interest of not being penalised or trashed as a result of speaking out, and the act complying and conforming with 'dodgy or false agenda' effectively sells everyone downstream the false belief that it is all scientifically sound and trustworthy.

So Corporate PR shifts to war propaganda.

"No one understood better than Stalin that the true object of propaganda is neither to convince nor even to persuade, but to produce a uniform pattern of public utterance in which the first trace of unorthodox thought immediately reveals itself as a jarring dissonance." ~ Alan Bullock, in Hitler and Stalin: Parallel Lives





Gary Ogden on July 5, 2018 at 11:40 am



i 1 ♥ 0 • Rate This

Binra: Good quote. Our own CDC has taken a page from Stalin's playbook. They learned it well. Since they are infested with military types, called, quaintly, the "Public Health Service," but better characterized as the "Let's Experiment on the Public without their Knowledge or Consent Service," they have a military objective, which is war, war on their own citizens, with vast resources to conduct it.



Randall on July 3, 2018 at 9:13 pm



if 3 9 0 Rate This

A little expansion of what you wrote. I watched the video 2 days ago, over 6 hrs. At the recent Swiss Re/The BMJ Food for Thought conference, Professor Salim Yusuf (Cardiologist) on Saturated Fat "We got brainwashed by a very questionable study, called The Seven Countries Study, many years ago and it was ingrained in our DNA and generations of us were brought up with that... Somebody said that you need to wait for quidelines committees to die before you can change the guidelines committees"! https://www.youtube.com /watch?reload=9&v=Yyhx3C1paA0

➡ Reply



Frederica Huxley on July 3, 2018 at 9:33 pm



📫 2 🥊 0 🏮 Rate This

The mea culpa will never happen, alas – too many vested interests in the food and pharmaceutical industries. Within the last two years, a highly educated, very aware man in his late 30's was appalled to see that we only have olive and coconut oils in the house. "Coconut oil will cause plaque in your arteries; it will kill you!" It was impossible to change his mind.

➡ Reply



Frederica Huxley on July 3, 2018 at 9:46 pm



♠ 0 ♥ 0 ■ Rate This

Apologies – must have not ticked box for receiving comments.

Reply



Mr Chris on July 5, 2018 at 12:12 pm





Nor did I

Thanks for all your work Malcolm

Reply



SW on July 3, 2018 at 10:26 pm





if 1 👎 0 0 Rate This

Bravo Bravo, Dr K! Such a great article on so many levels! I knew your 50th would pack a punch in so many ways! As usual, I could read your writings forever! Thank you, SW

➡ Reply



puddleg58 on July 3, 2018 at 10:30 pm





My explanation goes something like this – saturated fatty acids cannot be as easily stored as unsaturated fatty acids, there is more need to use them for fuel within a short time. So they are more likely to come back to the liver from chylomicrons and are then sent out in a way that tends to inhibit their return (with downregulaton of LDL receptors). The more efficiently SFAs are removed from VLDL, the more cholesterol is left in LDL. Therefore, we only see the SFA->LDL effect in lean healthy volunteers.

https://www.bmj.com/content/361/bmj.k2139/rr-4

Reply



Gary Ogden on July 4, 2018 at 2:02 pm





1 👎 0 0 Rate This

puddleg58: Thank you very much for that reference. Powerful evidence to confirm the healthfulness of the dietary changes many of us have made, i.e., to reduce carbohydrates and replace them with the only thing possible, fat. I do miss my home-made sourdough rye toast with butter as thick as the bread, but I can live (and may live longer and better) without it.

Reply





George,

That's an interesting idea. Your BMJ article is interesting as well as the links in the post. Especially interesting is getting Krauss, Taubes, and Willet all on the same paper (Ref 1).

Does your explanation imply that someone with triglycerides of just over 70 and a TG / HDL-C ratio of less than 1 is an efficient fat burner? Sounds like a good place to be, even with LDL-C of 255.

Of course, Dr K has convincingly argued that other factors are more important in CVD than diet and lipids, so I would never imagine that any ratio makes me "safe".





puddleg58 on July 9, 2018 at 3:04 am



Yes, TG/HDL is as good an indication of fat burning as you can get from cheap tests.

As far as I know, there is no form of clinical dyslipidemia (causing or associated with disease) that features low triglycerides or a low TG/HDL ratio. HDL can be genetically low with no risk (ApoA1 Milano) and TG can be affected by imperfect fasting before test, so the TG/HDL ratio should be more accurate than either alone, even though they are closely related. If anyone knows of a clinical hyperlipidemia associated with low TGs, post here or tag me on twitter @puddleg



chris c on July 8, 2018 at 7:58 pm



Yes I'd go along with that, any effects of fat on LDL are not about particle creation but about uptake and utilisation of the LDLs and their contents.

Anecdotal but many similar anecdotes – when the dietician put me on a low fat diet "for my cholesterol" my LDL increased. I was then accused of "failing to comply with the diet" which is their typical get-out clause.

When I ACTUALLY stopped complying with the diet, my HDL doubled, trigs fell through the floor and LDL stayed about the same (by then I was taking a statin).

At the time it appeared that when I ate more saturated fat, my LDL dropped and HDL went up by an eerily similar amount. In retrospect though, this coincided with when I stopped losing weight (the only reason I had weight to lose was that infernal dietician!)

It seems to be common that active weight loss increases LDL, as does fasting. As I recently discovered, hyperthyroid dropped my LDL by about as much as the statin I no longer take, and when overtreated to the extent it went hypo, my LDL shot back up.

Especially following Dave Feldman's research

### http://www.cholesterolcode.com/

I am seeing the various lipoproteins implicated in energy transport.

Most of the "saturated fat is harmful!!!" research comes from adding it to a high carb diet. Well in that context it may be as harmful as adding more carbs, I'm not sure. But in the context of a low carb diet which requires fat to be metabolised, not just stored, everything works differently. Just like it used to do during all of human evolution.

I also ponder the effects of different fats when incorporated into the cell walls. Probably one factor in the dangers of industrial trans fats, and very likely also their current and future replacements. Basically the body doesn't know what to do with pseudo-food, and also with the current massive overdose of Omega 6 oils when it is expecting ancestral doses of saturated, and monounsaturated fats and a better balance between 06 and 03. Correct that along with the overdose levels of carbs and especially fructose and the lipids do what they are meant to do.

Reply



Andy S on July 9, 2018 at 5:24 pm



cris c: re PUFA's in cell membranes

https://www.sciencedirect.com/science/article/pii/S0005273612000156

Fatty acid composition of membrane bilayers: Importance of diet polyunsaturated fat balance

"Recommendations by the American Heart Association to increase n-6 PUFA intake have been met with considerable concern from some researchers [see Ref. 41] and it has since been shown that in fact, increasing linoleic acid intake without combined increases in n-3 PUFA intake may actually lead to

higher risks of coronary heart disease and death [42]. This further emphasises the importance of improving the balance between n-3 and n-6 PUFA in the modern human diet.

Diet SFA content had no influence whatsoever on membrane composition in the present study, so any potential health effects are not likely to be associated with membrane fatty acid composition."



chris c on July 10, 2018 at 7:16 pm







ue 0 🖣 0 0 Rate This

Thanks, interesting! Especially this

"The tissue most highly responsive to low diet PUFA balance is

heart (slope 1.47). At diet PUFA balances below 10%, heart membrane

lipids are gaining n−6 PUFA at the expense of n−3 PUFA to a greater degree

than the change in diet PUFA balance (i.e. a 100% change in diet

PUFA balance results in a 147% change in membrane PUFA balance)."

Part of what I was remembering I think was this

"The earlier work by William Lands established that acyltransferases

catalyse the incorporation of n-3 and n-6 PUFA into the sn-2 position

of the membrane phospholipids during membrane remodelling, and although

they have a very high preference for PUFA, they do not discriminate

between n-3 PUFA and n-6 PUFA [29]. The relative abundance of

these two types of polyunsaturates in the diet will likely therefore strongly influence the balance between them in membrane lipids. This

may provide an explanation as to why the balance between the

and n-6 PUFA in the diet (i.e. PUFA balance) has the greatest influence

on membrane fatty acid composition."

and also some work on the incorporation of trans fats.

Yes either way the sat fats are resoundingly not guilty. Again.



Eric on July 9, 2018 at 12:59 pm





u 0 🖣 0 0 Rate This

The thing I don't get: Why are you saying sat fats cannot be stored easily? They don't spoil as readily as PUFA. Also, the liver converts excess carbs into sat fats for storage in apodicites.

Reply



puddleg58 on July 10, 2018 at 12:04 am







We store fats as triglycerides, and mammals cannot make a TG from 3 saturated fats. Interconversion of SFA to UFA is one pathway allowing storage on pure SFA diet (as with coconut island diets or high carb -> SFA diets), the ability to do this varies genetically, but adding UFAs to SFAs in cell culture promotes storage, see the end of this and the comments. https://hopefulgeranium.blogspot.com/2018/04/uncouplingsaturated-fatty-acids-and.html



## annielaurie98524 on July 4, 2018 at 1:49 am







Thank you, thank you, many times over, for this blog, Dr. K. First, for my artsy side, for referencing Rose's drama 12 Angry Men. I believe in the original, the accused young man was Puerto Rican, but modern performances cast him as black, thanks to the hysteria over groups like BLM. So many life lessons in that bit of literary craft. Next, for my scientific side, for encouraging folks to go rooting around in science to find answers in the tangled, contradictory mess that passes for modern dietary research (OK, maybe that's for my ultranerdy side). Also, for my scientific side, for citing Angell and Horton, and for adding Richard Smith.

You are yet another credible voice of encouragement for me to continue what I am doing in regard to my lifestyle (eating and other aspects). I credit you and similar science-based health experts (that are really deserving of that term) with my reaching 72 recently with none ever of the health issues so prevalent today — for staying within a few pounds of my weight in my college years, for having had a symptom-free, almost unnoticeable menopause; for BP below "normal" (even if they lower the levels again, I'm not concerned); and so many other things that enable me to enjoy life. And, no, in answer to some commenters, I do not feel like a fraud being a member here despite not having had any CVD issues. I also subscribe to blogs on cognitive issues, autoimmune conditions, etc. – better to learn how to keep that barn door shut than wait for the horse to make his escape.

With so many strident voices of what one wag termed "eminence-based medicine" spouting their mythical party line, it's golden to find someone that promotes scientific skepticism and encourages us all to seek the truth. Our lives depend on it. BTW, rooting around in the science is a good form of brain exercise, and that can't hurt you, either.

□ Reply



Old fogey on July 4, 2018 at 2:43 am



Many thanks for making everything so clear. I will be sharing this post with the whole family and with friends who worry too much about such things.

Reply



rockingbass on July 4, 2018 at 5:55 am

if 1 🔽 0 0 Rate This

Excellent

→ Reply



Göran Sjöberg on July 4, 2018 at 6:12 am

Thank you for this truly great summary of the nonsense which has been ruling the "medical research" for now more than fifty years now and where greed seems to have been the main driving force.

Now talking about our present hope for a fundamental change of the basic "medical science" reminds me of the ground breaking thoughts by the philosopher of science, Thomas Kuhn, expressed about the same time in his seminal book 'The Structure of Scientific Revolutions'.

https://en.wikipedia.org/wiki/Thomas\_Kuhn





➡ Reply



Mark Regan on July 4, 2018 at 7:29 am



Many thanks Malcolm – very interesting. But I don't follow why, in the BBC survey, eating butter caused their LDL levels to rise by 10%, given that you say "Ergo the consumption of saturated fat, or any fat, can have no direct impact on LDL levels." I must have missed something?

➡ Reply



easylocarb on July 4, 2018 at 8:32 am



I was reading with pleasure the latest article until I got to the bit about the Swiss:Red BMJ Food4Thought conference. It turns out I was there. I think they invited me, a keto podcaster from Australia, by accident. But I wasn't turning down an opportuynity to be in the room when Gary Taubes and Walter Willet and Ron Krauss present a paper they co-authored.

I was also in the room during the closing when Dr Mozzafarian gave his thought provoking defense of epidemiology and prof Yusif gave a rejoinder how epidemiology can't help you draw a line between an apparent association between a nutrient and a biomarker, and a biomarker and a disease. Prof Yusif example was Salt -> BP and BP -> CVD risk.

And then [surprise] in the Q&As I was called on to ask a question and I was curious how these two men would respond to Dr Yusifs finding in the PURE study of a non-correlation between saturated fat intake and CVD risk.



It turns out PURE is just the 17th study to have shown no association between SFA intake and CVD risk. The myth that Saturated fat causes CVD risk appears to be a zombie influence on our [Australian] dietary guidelines that is just unkillable with evidence.



#### BobM on July 5, 2018 at 6:45 pm



One of the 2 keto dudes graces us with his presence? Nice to see you here. Was looking forward to going to KetoFest in CT this year, but this coincides with a family (Catholic) retreat, and my wife wants to go to that instead. Was there last year for Science Sunday, though, and it was great.

My wife just got me a "Show me the Science" poster for my office and a T-Shirt of "Keep Calm, Keto On". (I do think you should add the "...and fast when you can", though.)

Did listen to your podcast where you presented this great news about the "experts" and their views on saturated fat. It's going to take a while to trickle down to the rank and file in the US, though, as I was counseled not long ago to avoid saturated fat. The conversation went like this: Dr's Assistant: "You're watching your saturated fat intake?" Me (been on low carb since 1/1/14 and keto most of that, eat nearly all meat now, down around 50 pounds): "Absolutely!" 😉 (Seriously, I know of only a handful of doctors in CT who are low carb. ALL the rest are low fat. This particular group would FREAK if they knew what I ate: eat few if any vegetables; rarely eat fruits and only berries when I do; eat mostly meat, many meals are ONLY meat; eat in order of best to worst beef, fish/seafood, pork, chicken; add salt to everything; avoid Omega 6 oils as much as possible, about to try no olive oil and using tallow instead.)

Concerning: "Prof Yusif example was Salt -> BP and BP -> CVD risk." Really? That was the example? That's not a great example. I've increased my salt intake quite a bit, have 5+ years of blood pressure data, and don't see much of a gain if there is any in BP. Of course, keto helps clear salt, so maybe that's why my (ostensible) increase in salt has not done anything for my BP.

Thanks for gracing us with your presence. Keep calm and keto on...and fast when you can. 🧐

Reply



LA\_Bob on July 5, 2018 at 10:21 pm



Great! Thanks for this.





Stephen T on July 7, 2018 at 11:14 am





1 0 Rate This

Thank you for the excellent link and for your work.

Fiona Godlee is an outstanding figure in her profession.

Reply



Gary Ogden on July 8, 2018 at 1:30 pm





o 👨 0 🕡 Rate This

Stephen T: I beg to differ with you. Were she to right a terrible wrong, I would hold her in esteem, but she has never done so.



Lee on July 4, 2018 at 8:33 am





♠ 1 ♥ 0 ● Rate This

I remember I was going to have a cholesterol test done. They forgot to tell me to fast. About four hours before the test I ate a whole pepperoni pizza and two peanut butter and jelly sandwiches. My cholesterol came back as being low and they recommended I increase my cholesterol intake. I was already eating three eggs for breakfast quite often and when I would buy meat I chose the meat with the most fat. I was thinking how in the world could I possibly increase my cholesterol intake? Turns out I had Lyme, every since I got treated for it my cholesterol has been normal. My body must have been using the cholesterol to protect me. Ironic thing of it is I no longer have to consume as much food to get energy now either. I eat 1/4 of what I used to have to eat.

Reply



Charlers on July 6, 2018 at 11:58 pm







o ♥ 0 Rate This

You might be interested in Dan Webb's Facebook group. He has heaps of info on the benefits of non-oxidized cholesterol for Lyme, Auto-Immune issues and general health. https://www.facebook.com/groups

/448750418613708

/?hc\_ref=ARQLumZdZGNJ6t1RUvpQ\_X4btFJzaXbFkJddOR71sTvlPzSVyb Q9IKNKdoEMEHZQqgI

Reply



Charles Edward on July 4, 2018 at 9:14 am







I have been reading these posts for some time and find them very informative and interesting as I have a long standing cholesterol 'problem'. I used to take statins but gave them up about 2 years ago.

One concern I have not seen mentioned on these posts is the question of Xanthelasma. These first appeared for me under one eye at about age 20. After a few years I had them surgically removed, but now aged 65 it has started to re-appear under one eye and also at the side. Whilst not excessive, I do find these markings unsightly and can never seem to find out if I should be concerned about them, what causes them, Is it high cholesterol? and what I can do about them.

Any suggestions would be much appreciated.

Reply



# Andy S on July 5, 2018 at 1:19 pm







Hi Charles: suggestions and opinions about Xanthelasma from an exengineer

The problem: modified (glycated, oxidized) small dense lipoproteins plus macrophages and resulting foam cells

Observation: Pus (foam cells) can accumulate in arteries or anywhere else in the body including eyelids

Solution: Avoid excess PUFA that can turn LDL rancid. Excess carbs will produce small dense easily glycated and oxidized LDL's.

TG:HDL ratio in an indication of size distribution of LDL particles, lower is better

High LDL-C is good only if LDL particles are big and fluffy

➡ Reply



Mark on July 4, 2018 at 9:46 am





o 👎 0 🕛 Rate This

I may have missed something. If denovo lipogenesis synthesises carbohydrates into only saturated fats. Then when in the liver wouldn't the saturated fat form a chylomicron as per the saturated fat intake route discussed. Why is it now that the saturated fat instead goes down a route of forming a VLDL?



#### Dr. Malcolm Kendrick on July 5, 2018 at 10:29 am





1 P 0 Rate This

Because the liver does not synthesize chylomicrons, only VLDLs and (maybe) some LDL. Not sure why this is, I am sure evolution worked its magic over the millenia

Reply



John Barr on July 4, 2018 at 10:58 am





Bill in Oz

Don't think there is much sign of Oz changing yet.

All the young doctors are fed the same B/S as I was fed, and are putting patients with normal cholesterol on statins. The problem with waiting for the old committees to die off, is that their places at the table are being taken by younger people who have exactly the same delusional ideas, and have never even looked at their own patients.

I have numbers of 90 + year-old patients with high cholesterol, and the younger doctors have as well. There are significant numbers of black swans swimming around out there, but they are ignored or viewed as having swum through black paint, rather than being looked at as proof that the cholesterol theory might, God forbid, be wrong. Remember, high cholesterol makes you die young (not).

Reply



Andy S on July 4, 2018 at 11:04 am







Benefit of avoiding saturated fat and consuming corn oil instead: avoid death due to CVD.

# https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4624753/

Polyunsaturated fatty acids trigger apoptosis of colon cancer cells through a mitochondrial pathway

"Apoptosis plays a crucial part in maintaining cellular homeostasis [11]. The MTT assay detects necrotic and normal cells. To confirm that PUFAs induce apoptosis of LoVo and RKO cells, we performed flow cytometric analysis with Annexin V and PI double staining. These results showed that PUFAs (ALA, EPA, DHA, LA, GLA and AA) and 5-FU induced apoptosis of LoVo and RKO cells. As expected, PUFAs-treated cells showed a significant increase in the

accumulation of lipid droplets compared to 5-FU supplemented and control cells. These results suggest that supplemented PUFAs accumulate in the form of triglycerides in the cells. This is probably in addition to their incorporation in the cell membrane lipid pool."

Probably PUFA's will kill a lot of normal cells as well, go easy on nuts.

➡ Reply



Jennifer. on July 6, 2018 at 6:53 pm





1 0 Rate This

Andy, I think I follow your meaning, as I dislike PUFAs in the form of oils. However, I believe that whole, organic nuts and seeds containing PUFAS, must be eaten frequently (in moderation as with all foods), and as such are necessary. The whole foods contain excellent quality macros and essential nutrients. Depends on what you mean by 'go easy'. I reckon 30g – 60g daily is about right for optimum nutrition.

Reply



Aileen on July 4, 2018 at 12:36 pm







Dr Kendrick, some years ago you wrote a post called "how to kill a hypothesis". The final commenter (Spokes) foreshadowed this post by suggesting that instead of arguing against it, you teach the basic science so that the hypothesis becomes untenable. Spokes ended by saying "I suppose this would have to be done in schools". Yes, but ...

My daughter has just done biology GCSE. A standard question is about the role of statins in CVD (in the mock, at least, she replied that it was an anticoagulant - she had just read The Great Cholesterol Con!).

I am left wondering – when did statins become basic biology, to be taught presumably to most teenagers? And just who has exerted influence on the examining boards, or was none needed?

(I love your blog BTW. Came across it rather late in the day, and am slowly working my way through the old posts.)

Reply



chris c on July 8, 2018 at 8:05 pm







Horribly sad, or SAD. Just like teaching the "Eatwell Plate" to junior



Reply



Socratic Dog on July 13, 2018 at 1:23 am



o ♥ 0 Rate This

I'd call it truly evil, not sad.



chris c on July 14, 2018 at 9:53 pm





Agreed, but then the pun doesn't work . . . if I wrote what I really think I'd probably be deleted. King disgusting comes close.



bilton21 on July 4, 2018 at 1:09 pm



Brilliant.... again!

When is your next book out?

Can't wait!

Reply



Robert Robertson on July 4, 2018 at 1:22 pm





Always look forward to your updates on the cholesterol myth. I have been following for some time now but I can't recall ever having seen you comment on the work of Broda Barnes, way back when. As I'm sure you know he was an evangelist for the under diagnosis of hypothyroidism, a skeptic of the cholesterol hypothesis and a fervent believer in the connection between low thyroid function and many ailments, including CVD. It is many years since I came across his work during my doctoral studies, and unfortunately the details have largely been forgotten as my studies shifted from neuroendocrinology to other fields What I do remember is the the link between low thyroid function and elevated blood cholesterol, raised blood pressure and increased blood clotting, all of which responded to thyroid therapy. What happened to these ideas, have they been subject to further scrutiny or have they been forgotten? Apologies if you have already covered this topic.



1 P 0 Rate This

Low thyroid function IS common and missed because about 4 decades ago we changed how we measured/understood/diagnosed it.

The TSH test and levothyroxine took over.

These were fundamental mistakes.

You can add this to the other mistakes being discussed on this site. In rodents, their thyroids contain more MK-4 than in any other tissues by a lot. This MK-4 is made via vitamin K3 – created in the gut when all

forms of dietary vitamin K are cleaved to become K3 and which is then packaged and carried by chylomicrons to tissues throughout the body which coverts K3 into MK-4 by the enzyme UBIAD1 in these body-wide tissues.

UBIAD1 also controls cholesterol and calcium in cells.

Thus, these mechanisms are HUGE in CVD, calcium and cholesterol management as well as many other diseases.

CAC is the single best biomarker of risk of death by all causes. A CAC =0 indicates a 15 year warranty from death by all causes.

No CAC is acknowledged by even cardiologists as indicated for NOT prescribing statins, which ironically make CAC.

And CAC begins as microcalcifications.

Vitamin K status appears to be fundamental to whether CAC (or those beginning microcalcifications) happen.

And vitamin K status appears to be involved in thyroid functioning. Statins impair K status.

➡ Reply



JDPatten on July 4, 2018 at 3:09 pm



No, really!

If we can depend on carbs to increase our serum LDL as Doc K indicates, and if increased LDL in those of us who might be trending "elderly" is a GOOD thing,

https://bmjopen.bmj.com/content/6/6/e010401

then.

might a LCHF or keto diet be counterproductive?

Eat it bit more carb in senior years??

➡ Reply





And this:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5396102/





Binra (@onemindinmany) on July 4, 2018 at 3:36 pm



I never did accept the 'expertise' of top down demonisations of things people had eaten for mostly as long as people have been, but then I don't stand first in scientific 'explanations' as the basis of deciding or choosing or leaving unchosen. I see science as a dalek's eye view of life – and often coupled to a very similar disposition. I don't see wisdom as being in the scientific toolset – excepting to learn from mistakes rather than learn how to hide mistakes and seem to get away with it.

The use of Ancel Keys as a PR campaign on behalf of cartel interests that also fit into social re-engineering agenda of pharmed and managed people units can also be see in the 'wrong turns of history' as the selection and promotion of the ideas or theories that most serve the interests of the power establishment of the day – who have the means to induce acceptance through all channels of influence – such as Keys onto the front of Time magazine.

Invested interests regard themselves too big to fail or rather – convince others that if they go down, the whole economy will crash with them. And in a sense it is true, because once the lie is out, it soon becomes apparent that it is not merely a mistake or a bad apple but a pervasive and systemic corruption of such a nature as to be unaddressable in its branches.

But I do feel for a simpler answer than anything the 'problem' defines or frames as narrative reality believed, and that is to identify it where where it is and own it there, as the first step in seeing and acting differently. The scientific disposition as I see it, is aligned in the externalisation or dissociation and displacement of the spiritual, psychic and emotional to the physical. This is also the 'chemistry' of persistent fear. Fear that is largely hidden and wanted to be hidden – with great investments in anything that can serve to keep it hidden – ie fear and sickness management Inc.

Giving authority away neglects that no matter who tells you what, the final test of truth is your own heart's acceptance. The contract of 'trust' that is blind to or seeking to evade its own innate responsibility can be called lazy, gullible, wilfully ignorant etc – but is largely habit of an automatic set of reactions in place of a living curiosity and discernment. It is said that most people demand unconsciousness and are kept in such by their own consent But where there is a lack of light of transparency and accountability – ie

genuine relational communication, there is corruption or self-interest at the expense of the whole. 'Communication breakdown – It's always the same'.

I see nature, life, biology as a total communication that we have barely scratched at because we regard communication in concepts that are twice removed from reality, being symbols of symbols. Life is energetic communication that includes processes that operate millions or billions of times per second. We (daleks) package this up in linear models and processes that limit where we can move while rejecting or exterminating anything that doesn't serve our 'control' or the attempt to dominate and possess whatever life is left – ie it operates an anti-life agenda as a 'survival' or defence script.

The attempt to coerce, control or manipulate evokes a feeling in my gut – if not also in my heart and mind – but the nature of any apparent information or communication is not merely its presented form – but the context of its purpose. I don't need to be a scientist to smell a rat or pick up on deceits intended or relayed unawares. But I do need self-honesty – because we are 'hacked' through our own 'investments' in wanting things to be true that are not, (or not true that are). Negative or fearfully defined self interest results in a world of errors and terrors – but then I add that once we are awake to deceits we also see that they effectively run their people. But we want to see it the other way around in personal guilt and blame trading because we want to believe we are free.

Symptoms are not problems so much as messengers serving a communication who we are initially perhaps very disinclined to listen to and then only tend accept messages that protect the problem. How else would sickness management usurp healing? Science does not deal with matters of the heart's knowing and so they are embarassing or and thus distantiated. However scientists are of course human beings and are not confined to a toolset unless they choose to be so.

I walked a lot in the Alps a month ago in such a way that if my heart function was dodgy I would have died or at least collapsed. I also had an insight to a specific quality of stress that I associated with the prelude to certain kinds of chest pain – which is very welcome as that is within the realm of responsibility. The stress we are not aware of because we feel we are doing what is good or necessary and give all attention there is the danger of any 'calling' that becomes automatic instead of a present checking in. Checking in at heart of course – where else will balance within a wholeness of being be recognised?



0 P 0 Rate This

Especially thanks for your great reflections. I wanted to comment that I understand that approximately 60% of LDL is produced directly in liver and the remaining 40% would be derived from VLDL, which in any case would not stop it from being a bit simplistic and ridicule the lipid hypothesis in my opinion. A greeting.

➡ Reply



Göran Sjöberg on July 4, 2018 at 9:19 pm



Yes, the fake story about the connection between cholesterol and CVD is indeed old and utterly based on the corruption of the medical research.

Searching my book shelf for some "refreshment" on this issue I pulled the book "THE GREAT DRUG DECEPTION – LESSONS FROM MER/29 FOR TODAY'S STATIN AND DRUG CONSUMERS – WHAT YOUR DOCTORS MAY NOT KNOW" by an appellate judge, Ralph Adam Fine. This is true "horror reading" for any sceptic of what medical corporates are willing to do for profits.

By coincidence, through inside information, it was revealed to FDA how Merrell had manipulated the data on which FDA 1960 approved their "successful" cholesterol lowering drug MER/29.

Reply



Martingale on July 5, 2018 at 10:13 am

♠ 4 ♥ 0 Rate This

Excellent post. About the paragraph "Therefore, a small amount of fat that you eat will end up in the liver. However, the vast, vast, majority will go straight from the guts to fat cells (adipose tissue). Whereupon they are stored away for later use."

I waited for someone else to pick this up, but not apparently so far. It clearly had to be simplified or the post would probably stretch into 50+ pages, but maybe a little extra detail here could be useful to avoid confusion in people's minds because the paragraph on its own would suggest that LCHF doesn't work and is a bad idea.

The extra detail here would be that the adipocytes need to receive a high enough insulin signal to store the fat. Without that, they won't. So you have to consume enough carbohydrates at the same time as consuming fat to raise insulin enough for this to happen, which is why LCHF does actually work.



Göran Sjöberg on July 5, 2018 at 6:15 pm





📫 2 👎 0 🎐 Rate ThisI think you are right.

Keep away from the carbs and "stay lean" seems to work for most people (but not all). But basically I see LCHF as a means to regain health – weight loss is a bonus if you like to see it this way.

➡ Reply



JanB on July 5, 2018 at 10:20 am





if 3 9 0 Rate This

Brilliant and reassuring. Thank you. But even more than that thank you for introducing me to H.L.Mencken, one of whose quotations you kicked off with this time and there's a whole website dedicated to his amazing wit and devastating candour.

Your blog is the one that never fails to inform and educate. Aren't we all lucky who follow.

➡ Reply



Andy S on July 5, 2018 at 1:50 pm







JanB, replacing "people" with doctor, researcher, scientist etc. might be applicable to this blog

"I am suspicious of all the things that the average people believes."

— H.L. Mencken

➡ Reply



Bruce Dakers on July 5, 2018 at 11:07 am





i 6 ♥ 0 • Rate This

Brilliant as always. I read extensively about the lipid hypotheses and realised how totally wrong it was. After having heart bypass surgery 3 years ago my cardiologist insisted I go on a statin. I asked him why. He said to lower my cholesterol. I told him my cholesterol was normal going into the surgery and explained to him what I had read and that CVD and cholesterol have nothing to do with each other. He got angry and told me if I want to debate lipids I should go to a biology class at a university, he was not interested in my view. Talk about resistance to change!! I have not taken any of the medications he recommended but have followed a low carb regimen and my health and all my relevant bloods are excellent. Thank God for people Kendrick, Harcombe, Noakes et al. They save lives, not the likes of my cardiologist with his rigid



Celia on July 5, 2018 at 6:01 pm







Bruce Dakers, I assume this surgeon didn't actually check your cholesterol levels. I wonder how many heart surgeons actually do this before prescribing statins. A cousin of mine who works as an emergency room doctor says he can find no correlation between cholesterol levels and patients who come in with heart attacks.

Reply



Frederica Huxley on July 6, 2018 at 8:46 pm







I would imagine very few. Both my husband, after his AF ablation and myself after an MI had high dosage statins foisted upon us, without any knowledge of our excellent 'normal' cholesterol levels. And no, senior cardiologists do not take kindly to being gainsaid.



Göran Sjöberg on July 6, 2018 at 9:10 pm









" no correlation between cholesterol levels and patients who come in with heart attacks."

This is a well known truth since many years.

And it was true in my case 1999 so they did not prescribe statins to me – lucky me!

My last cardiologist thoue noted my low cholesterol values and told me that he didn't prescribe the statins to reduce these cholesterol levels but to reduce "inflammation". The times they are changing! Well, he was actually not interested in any "discussion" – he was the one who knew! It was an aggressive conflict from the very first moment of contact and he first of all stated that "You can talk anyone over but not me!"

And he knew I would never touch whatever he prescribed which did not refrain him from prescribing, whatever.



Andy S on July 8, 2018 at 1:36 pm







i 0 ♥ 0 • Rate This

Goran,

Statins reduce inflammation, everyone should take take the medicine. But doctor have a look at this:

## http://columbiapain.org/how-statins-inhibit-stem-cells/

"The researchers were interested in the fact that macrophages (the body's natural cellular "scrubbers"), which are responsible for the artery plaque rupture that leads to heart attacks, were less likely to be created by MSCs in the presence of statins. Since fewer macrophages could mean less plaque ruptures, this could be a potentially good thing to prevent heart disease. However, what other effects do statin drugs have on MSCs? Regrettably the researchers also found that the drugs hurt the MSC's so that they could no longer differentiate into bone and cartilage cells. Statin drugs also increased the aging and death rate of MSCs and reduced DNA repair abilities of the stem cells. Basically, statin drugs were a kind of stem cell poison."



Stephen T on July 8, 2018 at 7:35 pm







Celia, in America of 137,000 people, in 541 hospitals, who'd had a heart attack, 78% had below average cholesterol. (American

Heart Journal, 2009.)



Göran Sjöberg on July 6, 2018 at 6:07 am









Bruce,

I could just copy-paste your comment for my own part here though I refused the bypass surgery and all the medications already 1999. With my first cardiologist there was no conflict, he was accepting what I was doing, while I could hardly say the same about the last one I met who seemed to be of the same type as the one you now met.





Bruce Dakers on July 9, 2018 at 1:50 pm





Wish I could go back. Knowing what I know now I would have declined the surgery. Good on you



goransjoberg2015 on July 10, 2018 at 8:10 pm





Bruce.

There are few "CVD – victims" who shortly after a MI dare challenge the cardiology "experts". Often, as with myself, you don't have the knowledge, as you now evidently have acquired.

It was my first reasonable cardiologist who, when I "interrogated" him about the benefits with the comprehensive CABG suggested, told me that in a case like mine the risk of dying in a second MI within a year would be reduced from 12 % towards 8 % and since I was only 52 at that time and the statistics evidently covered the whole age-span of the CVDgroup I reckoned that I was in a much better position than a man of my present age of 72. So, actually, I took a calculated risk 1999 but though based on little specific knowledge.

However, with my accumulated knowledge since then I now realize it was probably the best decision of my life.



Doug on July 5, 2018 at 4:34 pm







Love that movie, 1957 version.

I was a juror in a murder trial. I don't recommend the experience.

It's surprising what goes on in that room. As an FYI, never admit to anything, even if you're found over the victim with the weapon, never admit to anything. Much like Big Pharma, never admit your guilt.

Reply



Randall on July 5, 2018 at 7:54 pm







From many studies the blood test a person wants is – the NMR (Nuclear

Magnetic Resonance) Lipoprofile is a cholesterol test which provides more information than a standard Lipid Panel. One of the tests is lipoprotein particle number (LDL-P); particle concentration and size (lots of small LDL is bad) and oxLDL and Apo B should be done. Researchers noted that elevated small LDL particle count alone can raise heart attack risk by up to 300%. https://drjockers.com/nmr-heart-disease-risk/

Reply



Andy S on July 7, 2018 at 11:25 am



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Randall, looks like healthy LDL's are the key to avoiding CVD. In other words diet is important. Eating carby foods will result in fatty liver and a lot of sdLDL particles.

Reply



Charles Gale on July 6, 2018 at 10:30 am

Air pollution and CVD

It's off topic for this instalment but has featured in Dr Kendrick's blogs before and our comments.

I've just had an email from the British Heart Foundation to take part in an air pollution survey and its correlation to our health. The following link was provided in their email:

https://www.bhf.org.uk/airpollution

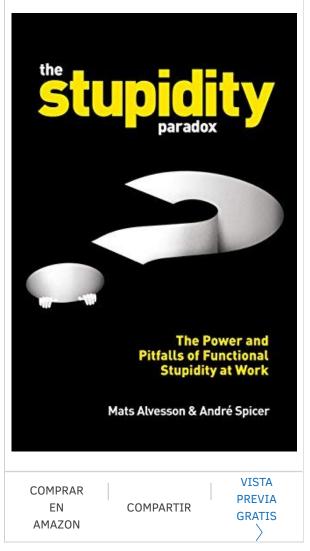
It's a quick read and explains, for example, how pollution affects the heart and circulation and how to minimise risk.

Reply

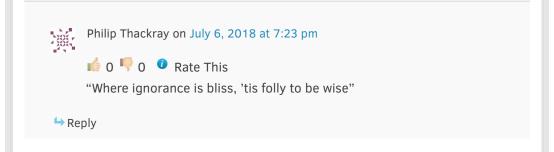


Håkan on July 6, 2018 at 1:59 pm

Malcolm, I think you would like the book "The Stupidity Paradox -The power and pitfalls of functional stupidity at work" by Mats Klvesson and André Spicer. It is about how it may be beneficial to be stupid in the short run, but not in the long run.



Reply





Jennifer. on July 6, 2018 at 7:33 pm

Such a wonderful posting this week from Dr Kendrick. Thanks to i-pad, I am able to enjoy footie and get educated at the same time. (Multi- tasking with the washer as well).

I just do not understand why NICE and the medical profession are not taking on board all the data regarding the attributes of saturated fat consumption. There again, it has taken 40 odd years for the sugar message to get through. How long before the PUFA discussion is highlighted?





#### thestrangerismeblog on July 7, 2018 at 10:36 am





Do you think there is a minimum amount of carbs we should eat?

➡ Reply



Mark on July 8, 2018 at 10:24 am







We need to keep the carb thing in perspective. It is the body's preferred fuel source especially for activity. So carbs need to be activity based. Processed foods has no place in our diets except pleasure. Any other carb unrefined etc has to be based around activity. If one sits on ones backside all day then they need to consider the amount of carbs that they take in. If one is physical or works out to create a lean healthy body then again perhaps they can consume more carbs. Of course the body can run on ketones as well but a nice bowl of oat and yogurt will Rt you through a decent resistance training session!

Reply



KidPsych on July 9, 2018 at 2:05 pm







I agree with your comment about having a balanced perspective about carbs. The last line in your post caught my eye because of the experiences I've been having since adopting a lower carb/intermittent fasting life. I've found that I can perform heavy lifting even at the end of a fast (typically no longer than 18 hours). There's a slight boost from eating carbs prior to lifting, but I find the change in my body's response to exercise rather remarkable. From a personal perspective, I've found the change rather liberating in that I feel confident that I don't really need to eat within any given 24 hour window, even when tasked with heavy physical demands.



Göran Sjöberg on July 8, 2018 at 7:28 pm







As far as I understand we don't need to eat any carbs at all.

The liver produces through its gluconeogenesis the amount of glucose we need and here our brain requires about 25 % of it's energy from the blood glucose. Fat and ketones are otherwise our preferred metabolic foods although the brain seems to prefer ketones as it's "superfood".

Reply



Mark on July 9, 2018 at 10:12 am







All true.

Carbs are non essential as you rightly say it can make sugar. However if you are active and into performance then carbs is far more efficient. Problem being humans aren't active as they used to be and are still eating the carbs. I've been 70kg since the 1990's still eating a moderate carb diet, enjoying food, lots of energy, no issues. Touching wood when I've said that.



goransjoberg2015 on July 9, 2018 at 8:39 pm



if 0 👎 0 0 Rate This

Mark, as I use to say.

It is not until you have hit the "metabolic syndrom" (excess blood triglycerides, overweight, T2D, CVD ...) you need to seriously consider the carb part of your food intake. You may then consider yourself as "carb intolerant". Though, it seems that half of the world population is there today.



Dr. Malcolm Kendrick on July 9, 2018 at 10:03 pm



I would recommend that everyone reads this blog on the Tim Noakes affair. All rather depressing.

http://foodmed.net/2018/07/wits-ethics-chief-dhai-right-nailnoakes-lchf/#more-2812



LA\_Bob on July 10, 2018 at 12:31 am









Dr K,

Was there a link to the Tim Noakes situation I'm not seeing?



Dr. Malcolm Kendrick on July 10, 2018 at 7:03 am







Yes, sorry it was in Goran's post and I did not put it in my reply

http://foodmed.net/2018/07/wits-ethics-chief-dhai-right-nailnoakes-lchf/#more-2812



Philip Thackray on July 9, 2018 at 10:37 am









Yes, we don't need to eat any carbohydrates. Google gluconeogenesis, there are many pathways that the body can use to make any required carbs without eating carbohydrates. For example the glycerol molecule that forms the "backbone" of the triglyceride molecule can be converted to glucose (two triglyceride molecules required).

Phil

Renfrew, PA USA





TS on July 7, 2018 at 12:52 pm







We have been out walking and just met a really beautiful golden Labrador dog. I thought he was young. He had a perfect figure, coat, gums, teeth, tongue...(He was also extremely well behaved and had a lovely and happy nature.)

I was so surprised to learn he is over 11 years old that I asked the owners (aged 60+ at a guess but slim themselves) what they fed him with. (Never in my life have I been prompted to ask such a question of a dog owner before.) They said, "Always raw food – meat, bones, etc., sent away for and delivered frozen. We only give him natural food."

It is not just humans that are being abused by the corporates but pets too and the vets are as quilty as medics and supermarkets in selling or promoting fake stuff. My cynical side (perhaps my only side really) thinks the sicker the animal the more income for the vet. Perhaps it's in the vets' subconscious - I hope so.



Jennifer. on July 8, 2018 at 8:58 am







TS. We have noticed the decline in the health of society's pets, and the proliferation of pet 'clinics' up and down the country. I have looked at the ingredients in their food being sold from the supermarket shelves. and it is little wonder that they are having similar ailments as we humans who depend on denatured, processed concoctions. As to their coats, I relate dull, lifeless hair as a direct result of poor diet, or as I have found out to my own consternation, my continuous hair loss coincided with the 10 years I was taking statins. Now I have never heard of pets being prescribed statins (God forbid), but since eliminating them from my own diet, my hair thickness and lustre have very slowly returned, (over 5 years), to acceptable levels. Just a thought.

➡ Reply



Martin Back on July 9, 2018 at 10:01 am







My nephew owns a dog grooming parlour. He markets his own brand of raw pet food. I occasionally dog-sit his animals. They are in the peak of condition — white teeth, full of energy, well-behaved, with silky coats. The food is rather ewwww! to humans, but the dogs love it. Ground-up veg and offal, stored in the freezer and mixed with a bit of warm water to serve.

But unfortunately many pet owners won't draw the obvious conclusion and give their dogs raw natural food. They would rather buy "scientifically formulated" pellets made with lowest-cost ingredients, and put up with the vet bills that result.

Reply



Jean Humphreys on July 9, 2018 at 3:06 pm





I want to jump in this pet food canter: I have been saying for years that they ought to sell mouse-flavoured cat food, rather that all the guff they put on the package, just to woo the people that are buying it, I have revised my suggestion – just make it

tinned mice. Or frozen, if you wish.



Janet on July 10, 2018 at 12:13 am





📫 2 🥊 0 🍑 Rate This

There is an attractant in tinned cat food, else why would mine prefer the slop over fresh mince?

Also, he usually eats the brain, rarely any other parts.



Gary Ogden on July 10, 2018 at 2:17 pm







Janet: My cats' favorite food is liver. I cannot get any out unless they're outside or fast asleep. They can smell it from quite a distance, and demand a portion immediately. Vociferously demand a portion!



shirley3349 on July 11, 2018 at 2:15 am







My great-uncle's dog always ate raw meat. It was dyed green to show it was unfit for human consumption, which impressed and rather worried me as a child. The dog didn't mind a bit; I gather dogs are red/green colour blind so it would have matched the blood; and the dog lived to be 17, a ripe old age for a dog.



David Bailey on July 9, 2018 at 10:48 am







We had two cats that died of kidney disease – one rather young. Since then we have fed our cats 'Hill's Science Diet' with added treats. The results have been very good, so at least as compared with standard supermarket cat food, I would recommend the Science Diet.

Reply



KidPsych on July 9, 2018 at 1:59 pm







if 3 👎 0 0 Rate This

That's interesting. I have a friend whose cat was recently diagnosed with diabetes. Last year my own cat had been diagnosed with a mega colon and had recovered (and become much slimmer) when fed a completely carnivore diet (no kibble, just high quality meat in a can). When I told my friend about this, she stated that her vet's advice had been that the meds were actually cheaper than the high quality food. Now, this is likely true, but wow, what a perfect example of how completely out of whack things have become in regard to diet and meds.

➡ Reply



Göran Sjöberg on July 7, 2018 at 8:37 pm



Here is another disgusting story about the corruption in medical research.

http://www.sciencemag.org/news/2018/07/hidden-conflicts-pharma-payments-fda-advisers-after-drug-approvals-spark-ethical?utm\_campaign=news\_weekly\_2018-07-06&et\_rid=112451559&et\_cid=2167359

➡ Reply



Soul on July 8, 2018 at 9:45 am



Saw last night on TV the old Henry Fonda movie Twelve Angry Men was being shown. I recorded it. I'll likely watching it today. Glad it didn't have Henry Fonda's daughter Jane in it. She's known historically for saying over the top outrageous statements, enough to give one a heart attack.

Reply



Janet on July 8, 2018 at 9:53 am

We are not the least bit surprised, sadly, at the depths of depravity Big Pharma – And their acolytes, will descend to.

Down Under here, there's a company which sells (dog/cat) pet food called 'B.A.R.F. – Biologically Appropriate Raw Food. Our Retriever is fed raw minces / meats /bones and garnished with raw egg, with 'dry' food only as a treat. She is not diabetic, overweight or requiring statins...



'The poor quality of medical research is widely acknowledged, yet disturbingly the leaders of the medical profession seem only minimally concerned about the problems and make no apparent efforts to find a solution.' Richard Smith – long time editor of the BMJ."

I think those two somewhat understated comments seem worth repeating, because I feel this is the heart of the problem – Malcolm is trying to do science, his opponents are engaged in a weird joust using scientific facts as weapons to bludgeon their way.

When I first became aware of the scandal at the heart of 'climate science', I thought that physicists would soon back away from supporting this supposed science. I communicated for a while with an academic physicist who had actually stood up against one particularly absurd claim. He clearly didn't want to push his luck any further.

That told me that the corruption in science generally has become a bit like giant hogweed in the garden – it may not yet have smothered every other plant, but it has the potential to do so. It isn't that some branches of science are corrupt, and others scrupulously honest, it is that as soon as scientific evidence gets in the way of one of the eminences, or some bloated financial transaction, it is stiffed.

Reply



Frederica Huxley on July 8, 2018 at 10:48 am



There are none so blind who willfully will not see – especially when their reputations and greed are at stake.

https://articles.mercola.com/sites/articles/archive/2017/07/05/aha-avoid-saturated-fats.aspx?utm\_source=facebook.com&utm\_medium=referral&utm\_content=facebookmercola\_ranart&utm\_campaign=20180707\_aha-avoid-saturated-fats

Reply



smartersig on July 8, 2018 at 10:58 am



Excellent blog entry, many thanks







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Thank you, Dr. K, for your passion and determination to find the truth.

I had a CT Scan when I was 40 years old and received a very high score. A few days ago I received a calcium score of 979 and received a strong positive on a treadmill stress test. I recently came off a 10 weeks keto diet and dropped my weight from 162lbs to 152lbs. Age 62 LDL 257 HDL 57 TRI 78 LDL/HDL Ratio 4.50 TRI/HDL Ratio 1.37 CHOL/HDL Ratio 5.8 Glucose 83. I did go on statins for 2 weeks out of fear!!! (Atorvastatin 40mg). My cardiologist wants me to have a Cardiac Catheterization. I have never had any symptoms (chest pain or shortness of breath). I suspect I have a form of Familial hypercholesterolemia (Dad died of heart attack at 57- Brother had a stroke at 35). If I have the Cath Angiogram, I'll probably end up with a bunch of stents (I have found evidence that stents are overused and not always protective). I'm not a doctor, engineer or a medical investigator ..... but I am extremely motivated to discover a strategy for moving forward. I don't want to make a decision that takes me in the wrong direction.

➡ Reply



# David Bailey on July 9, 2018 at 10:35 am







I am not a medic, and I don't even totally understand all you have written. However, we are all in the same boat - we will all die of something eventually, and it is perhaps more logical to think of medicine at our age (I am 68) as a balancing act - keeping the body going as long as possible, while not messing it up in other ways!

Unfortunately, Malcolm has explained on a number of occasions that he can't make suggestions based on medical descriptions written here.

I was given statins on a purely preventative basis – my only 'symptom' was/is hypertension, and from personal experience, the side effects don't always start at once, and can all too easily be confused with some other diagnosis – I have never come across anyone who would describe them as 'muscle pains' – which sounds like the effects of a long hike. Some people report that the damage they do is not fully reversible – though it did reverse in my case. Obviously I don't take statins any more!

More generally, I think that since you have no symptoms, I'd talk it all over with your partner, and at least consider just leaving well enough alone – I have become extremely suspicious of the whole process of treating seemingly well people!

I am sure there are others who will offer more specific advice.

Reply



Stephen T on July 12, 2018 at 7:22 pm





I agree. If I don't have symptoms, I stay well away from the medical industry. I'd recommend reading 'Overdiagnosed' by Dr H Gilbert Welch



Nancy Rothwell on July 8, 2018 at 7:23 pm



I am beginning to research the role that a statin played in my mothers deteriorating health and death from the early 1990's to 2006. Within a couple of years of starting on a statin for slightly elevated cholesterol she developed Parkinson's Disease. Then a few years after that she developed severe Rheumatoid Arthritis. With each new disease came a slew of new prescription medications including sinemet, elavil, prednisone, vioxx, and methotrexate among others. In 2011 researchers published a link between statins and RA and then in 2017 Penn State published a link between fat soluble statins and onset of parkinsons. I have requested my mothers medical history. Any insight you can share would be appreciated.

➡ Reply



Eric on July 9, 2018 at 10:12 am







Excuse my ignorance on basic anatomy, but after a series of posts by Peter at hyperlipid blog this spring exploring the realtive roles of subcutaenous vs. mesenteric fat, I was under the impression that FFA absorbed by the gut pass through the portal vein into the liver.

How does this rhyme with your statement?

" Once a chylomicron is formed it travels up a special tube, called the thoracic duct, and is released directly into the blood stream. "

➡ Reply



Dr. Malcolm Kendrick on July 9, 2018 at 2:54 pm







I do not know what Peter is saying exactly. But FFAs do not travel from

the gut to the liver (perhaps a few stray Fatty acids do this, but it is not the route). Essentially, the liver does not need to do anything with absorbed fats/fatty acids, so the body does not bother sending them to the liver.

Reply



Göran Sjöberg on July 9, 2018 at 5:58 pm



As far as I have understood the absorption of fat through the intestine epithelia of the triglycerides in the food they are first turned into free fatty acids by enzymatic actions of the bile and enters into "bile micelles" which are easily dissolved in he chyme of the intestines; the micelles work as ferries for the fat. Then free fatty acids are able to pass through the endothelium to join again into triglycerides in the interior of the cells and subsequently be released in the form of chylomicrons through the base of the epithelial and then to flow through the thoracic lymph duct to be released into the blood stream.

Short an medium-chain fatty acids (e.g. from butter or coconut oil) though may, due to their higher water solubility, be absorbed directly into the portal blood.

Guyton and Hall "Textbook of Medical Physiology" explains this in an understandable way for a "lay person".

➡ Reply



Charles Gale on July 9, 2018 at 10:40 am



Phil – CT scan and Familial Hypercholesterolaemia (FH)

You stated you had a high calcium score at age 40 and a few days ago a calcium score of 979.

If you don't mind me asking, was the 979 higher or lower (or perhaps the same) than the calcium score you had at age 40?

Also, you state you think you may have (a form of) FH. If it's a concern, why not get it tested? I went down that route (my family thought it might be an issue). There are certain criteria to meet and your GP is the 1st port of call (in England).

Zoe Harcombe did a good blog on FH the other year – might be worth a read. Here is the link and includes comments arising from my FH testing

experience:

http://www.zoeharcombe.com/2016/11/familial-hypercholesterolemia-fh/

Reply



Phil on July 9, 2018 at 5:45 pm



I don't remember the score but I remember they said my calcium score age was 62. I found out recently that atherosclerosis can increase 30% per year. I got it tested when I was 40, the only advice I got was ...... eat a low-fat diet. I didn't find out about FH until recently. Thanks for the link. Any help is much appreciated.

Reply



goransjoberg2015 on July 9, 2018 at 10:02 pm

Here is more, and a very interesting reading, about how corruption of the ethics of medicine may materialize in the hands of medical communities. This specific case is about the preposterous trial against Prof. Noakes who though came out as the victor and a "hero" of science against dogma.

http://foodmed.net/2018/07/wits-ethics-chief-dhai-right-nail-noakeslchf/#more-2812

Reply



Mark Heneghan on July 10, 2018 at 9:27 am

I am a GP and I feel that our hands are tied a bit by the 'guidelines' but I work around it by quoting them, but if I disagree I say that I do and why, often quoting from the NNT website when appropriate.

Reply



Frederica Huxley on July 10, 2018 at 4:41 pm

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Thank you!

🤲 👍 0 👎 0 🆸 Rate ThisMark,

That sounds great! I wonder if that leads on to a discussion that would overflow the 10 minutes – discussing how it can be that the medical guidelines don't correspond to the evidence! Maybe you also offer them a link to this blog.

You are not alone. I chatted to a woman, probably in her fifties, who was learning to ice skate at our local rink. She told me that she had had a stroke (I was impressed that she chose that time to learn to skate!) so I warned her to beware of statin side effects. She immediately said she herself was a doctor, and that she too was wary of statins!

→ Reply



Sasha on July 10, 2018 at 9:31 am



Thank you

Reply



Charles Gale on July 10, 2018 at 2:24 pm



By coincidence, I've just spotted this on Dr Matthias Rath's website (no, I don't work in his publicity dept!):

https://www.dr-rath-foundation.org/2018/07/how-to-lower-high-cholesterol-levels-naturally-without-drugs/

It explains where cholesterol comes from and why it might be high:

- liver and intestines produce approx. 80% of the body's cholesterol
- only approx. 20% comes from food.

What to treat – symptoms or causes? Conventional medicine treats the symptoms with medication but if your lipid profile is high it could be in response to arterial damage and you need to treat the cause of this damage. No damage then no repair then no need for these repair substances like lp(a) and levels should lower.

Reply



Janet on July 11, 2018 at 2:00 am



Thanks, brilliant explanation. So logical when you realise that our RDA

Vit. C. is the same as a morbidly obese, smoking Guinea Pig. (90 mg/ day, + 35 mg for the cigarettes.)

Reply



David Bailey on July 11, 2018 at 8:18 am





That does sound like a very plausible explanation for why high cholesterol in younger men is correlated (I seem to remember) with heart disease – and offers zero justification for taking cholesterol lowering medicines! Medical theory seems to take little notice of the fact that almost everything in the body is regulated by complex feedback loops.

Reply



Andy S on July 12, 2018 at 11:20 am





if 1 9 0 Rate This

The body is self healing, we just have to provide the right conditions.



Mark on July 11, 2018 at 8:08 am







Like this. This is my thinking. Cholesterol is higher because the endothelial cell wall needs repair. Target possible causes of the damage is the right way. Lifestyle medicine

Reply



Mark Heneghan on July 11, 2018 at 11:53 am





i 2 ♥ 0 • Rate This

For this that may struggle with the molecular/cellular science, have a look at the Number Needed to Treat website http://www.thennt.com and look at primary prevention of heart disease with statins, and while you're there look at treatment of mild to moderate hypertension – their conclusion is NOT to do either.





Katherine Taylor for The New York Times

# **Dying Organs Restored to Life in Novel Experiments**

By GINA KOLATA

July 10, 2018

An unusual transplant may revive tissues thought to be

Reply



garnetheartstrings on July 12, 2018 at 3:45 pm



With LDL being created and returned to the liver, it seems that high LDL problems could be caused by a fatty liver, correct? A lot of fat transporting from the liver in LDL and all the LDL liver receptors already being taken/filled would mean more circulating LDL.

So maybe the link between heart disease and LDL is fatty liver, which can be caused by too much fat/choline deficiency, I believe. I think I also saw research on pubmed about copper being somehow involved in fatty liver disease as well.



Randall on July 12, 2018 at 5:15 pm



It's going mainstream. Carbohydrates are killing us For decades, doctors and nutritionists prescribed low-fat diets to people trying to lower their risk of heart disease. Saturated fats in meats and dairy products were thought to clog our arteries. A growing body of research suggests this advice was wrong. Every 40 seconds, someone in the United States has a heart attack. https://www.washingtontimes.com/news/2018/jul/8/fatty-foods-dont-cause-heart-disease-bread-and-pas/

→ Reply



Janet on July 13, 2018 at 5:33 am



It's only a matter of time – till the low fat / hi carb pushers have their heart attack and leave the way clear for 'real' science!

→ Reply



Gary Ogden on July 13, 2018 at 4:31 pm



Janet: Better a Damascus moment, or an Archimedes moment, if you prefer. A heart attack cannot be too pleasant.



James on July 14, 2018 at 3:06 pm



I suspect Janet is thinking of that saying, "Science advances – one funeral at a time" being the demise of those who resist change / Truth. – Nothing can be changed or will change while they're still alive.



David Bailey on July 15, 2018 at 10:13 am



I don't think I would assume they practice what they preach - I'll bet some of them eat a low carb diet, but keep quiet about it.

Also, the idea that science clears out one generation and the

next changes things, isn't necessarily true. The next generation may have become indoctrinated by their elders, or seduced by big pharma. There is one Nobel prizewinning physicist who has lectured against the concept of climate change – Ivar Giaever – and he is retired, and so beyond the reach of academic spite.



chris c on July 12, 2018 at 7:52 pm

♠ 1 
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"Every 40 seconds, someone in the United States has a heart attack."

They should find that man and cure him.

Sorry, couldn't resist.

Seriously though, while CVD rates may have dropped how much has this been offset by the massive increases in obesity, diabetes and other metabolic diseases, many of which result in . . . CVD

Reply



James on July 14, 2018 at 3:16 pm

i o ♥ 0 Rate This

CVD / 'Heart Disease is inextricably linked with 'T2Diabetes / Insulin Resistance.

A doctor told me that "99% of diabetics die of heart disease, and a falling grand piano takes out the remainder..." Not exactly 'scientific' but a good illustration!

Fixing the root cause is so much cheaper & easier than band-aiding the end result.

→ Reply



Göran Sjöberg on July 15, 2018 at 6:59 pm

u o ♥ 0 Rate This

Dr. Kraft had an extended clinical knowledge of diabetes and studied the connection between plasma glucose and the connection with the plasma insulin levels (hyper-insulinemia) on 40 000 patients which he documented in his book.

He stated that "anyone with heart disease which has not been diagnosed as a diabetic is just undiagnosed".

http://www.thefatemperor.com/blog/2015/5/10/lchf-the-

genius-of-dr-joseph-r-kraft-exposing-the-true-extent-ofdiabetes



Göran Sjöberg on July 15, 2018 at 7:56 pm







Just to be correct – Dr. Kraft examined 14 000 patients.



chris c on July 16, 2018 at 9:35 pm







Yes it's a big factor, though as Malcolm has shown far from the only one.

Thanks to Medical Twitter, a couple of examples where the "cure" of avoiding saturated fats makes things worse

Changes in consumption of omega-3 and omega-6 fatty acids in the

United States during the 20th century 1–3

Tanya L Blasbalg, Joseph R Hibbeln, Christopher E Ramsden, Sharon F Majchrzak, and Robert R Rawlings

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3076650 /pdf/ajcn9350950.pdf

Saturated fat, carbohydrates and cardiovascular disease

http://www.njmonline.nl/getpdf.php?id=1095

One from 1967 I haven't read yet

https://www.nejm.org/doi/pdf/10.1056 /NEJM196701052760107

They knew a lot of stuff in the olden days which has since been forgotten.

The trouble is finding the root cause is less profitable. Sales of all those expensive drugs and "low fat" foods would tank.



Gary Ogden on July 14, 2018 at 3:40 am







We checked "Twelve Angry Men" out of the library and watched it this evening. What an extraordinary display of human nature, with all its warts. This had to be one of Lee J. Cobb's greatest performances ever. Thank you, Dr. Kendrick, for making us aware of this exquisite work of art. I was only eight when it was released, so I never saw it or heard of it before.

→ Reply



Bill In Oz on July 14, 2018 at 9:26 am



o ♥ 0 Rate This

Gary I saw 12 Angry Men when I was a teenager on TV here in Oz..A long time ago now but it has stayed in my mind....There are so many films I simply avoid nowadays.. Childish & boring...

Reply



Gary Ogden on July 14, 2018 at 12:20 pm



Bill in Oz: Yes, most Hollywood films today are the circuses part of "bread and circuses," and not worth the price of admission. The three most recent films I recall seeing in the theater are the Jane Campion Keats film, the Coen brothers' "True Grit" (a masterful parody), and Vaxxed. About twice a decade I go to the theater.



paul on July 20, 2018 at 10:05 am





o 📭 0 0 Rate This

All the more poignant an example considering Cobb's treatment during the House of unamerican activities and the pressure that was brought to bear upon him:

When the facilities of the government of the United States are drawn on an individual it can be terrifying. The blacklist is just the opening gambit —being deprived of work. Your passport is confiscated. That's minor. But not being able to move without being tailed is something else.

After a certain point it grows to implied as well as articulated threats, and people succumb. My wife did, and she was institutionalized. The HUAC did a deal with me. I was pretty much worn down. I had no money. I couldn't borrow. I had the expenses of taking care of the children. Why am I subjecting my loved ones to this? If it's worth dying for, and I

am just as idealistic as the next fellow. But I decided it wasn't worth dying for, and if this gesture was the way of getting out of the penitentiary I'd do it.

I had to be employable again.

➡ Reply



JDPatten on July 15, 2018 at 1:45 pm



Yet another blood lipid "paradox"!

Or, is it simply another black swan??

https://www.ncbi.nlm.nih.gov/pubmed/29685574?dopt=Abstract

➡ Reply



Bill In Oz on July 15, 2018 at 11:52 pm



JD P, A whole great flock of black swans are flying here...



Reply



chris c on July 16, 2018 at 9:36 pm



Here

http://sci-hub.tw/10.1016/j.amjcard.2018.03.024

you're welcome (dammit another paper to read!)

➡ Reply



JDPatten on July 15, 2018 at 2:04 pm



Anti-coagulants:

If you must be on one, you might make your decision on which one based on

the newer anticoagulants are associated with a much lower risk of MI than warfarin.

https://www.ncbi.nlm.nih.gov/pubmed/29957227?dopt=Abstract

➡ Reply



Randall on July 15, 2018 at 6:05 pm



Ron Krauss, M.D., is recognized globally for his research into lipidology and has worn many hats in his career, including clinician, lipidologist, nutrition, genetics, and drug researcher. The interview is long and technical but worth it. I liked the part if statins fail give Niacin. Atherosclerosis begins in childhood. https://peterattiamd.com/ronkrauss/

➡ Reply



Martin Back on July 16, 2018 at 7:33 am



Seriously, is there a need for lipidologists? There seems to be no undisputed body of knowledge concerning fat, whether consumed in the diet or circulating in the bloodstream. Some people drop dead with lots of fat, others with no fat.

For myself, I trust that my body knows what to do. I eat moderate amounts of fat and refuse to get my blood tested, because I know they will find something wrong and prescribe medication which I won't take.

Reply



Randall on July 16, 2018 at 11:04 pm



Maybe watch the video



Gary Ogden on July 15, 2018 at 10:23 pm



Dairy fat has been exonerated for the hundredth time:

http://www.sciencedaily.com/releases/2018/07/180711182735.htm

Reply



Martin Back on July 16, 2018 at 12:00 pm



Regarding the endothelium: It seems to me the most vulnerable period must be when we are young and growing. Endothelial cells have to move apart to make room for additional cells to increase the endothelial surface area. Yet this is when we have no plaque problems.

Also, how do old endothelial cells die off and get replaced by new cells without the endothelial layer developing leaks?

➡ Reply



David Bailey on July 16, 2018 at 5:31 pm



A bit higher up the page, Stephen T mentioned the book: "Overdiagnosed' by Dr H.Gilbert Welch.

I was not sure whether this book would tell me anything fresh, but at less than £3, the Kindle book seemed worth it!

It turns out that Dr Gilbert works in medical statistics, and also does some work as a GP. The book is a must read, in particular the sections about cancer screening. It would seem that screening detects vast numbers of minute cancers that for some reason (not understood) never develop. This is particularly true of the prostate and thyroid, though the same pattern applies to many other cancers. He points out that for cervix and colon cancers, it is common to treat precancerous lesions (cervix) and polyps (colon). In total, this results in a vast amount of over-diagnosis and treatment of cancer.

He starts out his book, explaining that although he is a doctor, he avoids being a patient as much as possible – a sentiment I can certainly endorse!

Thanks Stephen, I'd strongly recommend that people read this book.

Reply



AnnaM on July 18, 2018 at 8:45 am



My best working hypothesis is that cancer is actually at root a microbial infection. So it does make sense that the immune system takes smaller cancers out. I am hearing this in particular about over diagnosis and treatment of breast cancer. There are several / 8 / characteristics of cancer but I think they all fit with the microbial infection better than other causes, in other words the characteristics are all sequelae after the infection.

Reply



Andy S on July 18, 2018 at 10:49 am



AnnaM, this might be of interest

### https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4958360/

Endocannabinoid system as a regulator of tumor cell malignancy – biological pathways and clinical significance

"This review focused on current literature concerning ECS expression and the influence of its activation on cancer cell biology. As demonstrated earlier, CBs and other molecules closely related to ECS display a heterogeneous pattern of expression in human oncological pathologies, which probably impede its exploitation as prognostic markers in these diseases. Nevertheless, the fact that CB receptors are overexpressed in malignant cells compared to their non-transformed counterparts encouraged scientists to evaluate the influence of their ligands on several hallmarks of cancer. Indeed, synthetic and plantderived cannabinoids, as well as endogenous compounds, exert a wide range of anticancer effects, including induction of autophagy and apoptosis, inhibition of proliferation, and reduction of metastasis outgrowth via antiangiogenic and antimigratory activities. They have also been found to stimulate immune response against cancer through enhanced recruitment of immune cells and, on the other hand, decreased migration of tumor-associated macrophages (particularly, protumorigenic M2 type) to the tumor microenvironment. Clearly, cannabinoids possess strong antiproliferative, proapoptotic, and antimetastatic properties, which have been confirmed in in vitro studies and in animal models. Despite a large amount of promising evidence for cannabinoid-induced antitumoral action, there is a lack of clinical research addressing this issue. Currently, cannabinoids are used clinically only in palliative therapy in cancer patients owing to antiemetic and analgesic properties of these compounds."



Sasha on July 18, 2018 at 1:05 pm



What is that hypothesis based on? If you don't mind sharing



JDPatten on July 18, 2018 at 2:47 pm



This Ravnskov letter might be of interest to you.

Higher cholesterol results in less cancer, the theory being that cholesterol is a direct antibiotic and reduces the viruses that are

responsible for cancer. No need to mention what statins do to this relationship

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5396102/



Göran Sjöberg on July 18, 2018 at 9:42 am





David.

I found the book well worth the reading a couple of years ago.

It exposes the "fishing activity" going on through clinical "standard tests" and here we can find the industrial interests rather than any health interests of todays medicine.

Reply



Mr Chris on July 18, 2018 at 10:51 am



u o 👎 0 🕡 Rate This

Göran

Yes, I havé just bought it it looks interesting.

Now, sort of off topic, but there is an article in today's Guardian on new research which proves fish oil IS á waste of Time. Here is á quote:

Fish oil supplements made no difference to the risk of death or heart attacks or strokes, the Cochrane researchers found. Eating more ALA from supplemented margarine or walnuts did convey a small benefit, but the reduction in cardiovascular events was very small.

Why did they give cold liver oil to people during the war?



Jean Humphreys on July 18, 2018 at 6:48 pm



Why did they give cod liver oil to people durng the war? As a necessary supplement, because the diet provided by rations was so absolutely complete, and the nation had never been healthier - and the band played "Believe it if you like"







Mr Chris on July 18, 2018 at 8:58 pm



My question on why did they give cod liver oil, a component of fish oil I imagine, was rhetorical, it served some purpose. When I read that that there is no advantage in consuming fish oil capsules, I am astounded. Even my lipidist with whom I fell out over statins, said it mopped up nasty stuff from the arteries.



Sasha on July 19, 2018 at 4:32 pm



By what mechanism?



Jean Humphreys on July 18, 2018 at 9:38 pm



Yes indeed, and there was the "Weifare Foods Concentrated Orange Juice" too, for Vit.C - very tasty it was too, as I remember. Also, the Welfare Food powdered baby milk, all of this for children. Rationing worked very well, given the circumstances. and a lot of the poorer people got a much fairer share than previously. We just forget how well off we are for range and chioce of foods we are now, compared to back then.



JDPatten on July 18, 2018 at 8:11 pm



Actually, not so much.

Cod liver oil has too much retinoic acid, or vitamin A, for the D to be of much benefit.

Details, scroll a bit:

https://www.vitamindcouncil.org/newsletter-vitamin-a-toxicity /?highlight=cod+liver+oil



chris c on July 18, 2018 at 9:47 pm





o 👎 0 🗸 Rate This

My suspicion – anatomically correct quantities of Omega 6 and Omega 3 are essential. We evolved with a ratio somewhere between:1:2 and 4:1 but modern diets are more like 20:1 (and in Israel and I think Bulgaria over 30:1 - look at their CVD numbers).

When you have that level of excess of Omega 6, all the Omega 3 in the world won't help you. Cut the O6 and the fish oil works. Context often gets lost in metastudies.



Martin Back on July 16, 2018 at 8:46 pm



1 9 0 Rate This

Paleo people, take note.

At an archaeological site in northeastern Jordan, researchers have discovered the charred remains of a flatbread baked by hunter-gatherers 14,400 years ago. It is the oldest direct evidence of bread found to date, predating the advent of agriculture by at least 4,000 years.

"Bread involves labour intensive processing which includes dehusking, grinding of cereals and kneading and baking. That it was produced before farming methods suggests it was seen as special, and the desire to make more of this special food probably contributed to the decision to begin to cultivate cereals." — https://phys.org/news/2018-07-archaeologists-bread-predatesagriculture-years.html

Reply



Andy S on July 18, 2018 at 9:57 am







A wise decision to throw the flatbread into the fire. We should follow their example.

Reply



Martin Back on July 18, 2018 at 11:05 am







📫 2 👎 0 🍑 Rate This

Proof that humans have been burning the toast for 14,000

years.



Janet on July 18, 2018 at 1:21 pm







TWO inventions on the same day, bread and toast(er) :))



Philip Thackray on July 18, 2018 at 3:14 pm







You guys ARE funny!

Phil

Renfrew, PA USA



chris c on July 18, 2018 at 9:49 pm







Paleo people would probably have eaten everything they could get their hands on, including seeds – but in season, not for three meals and three snacks per day.





annielaurie98524 on July 17, 2018 at 12:44 pm







A bit off-topic, but hoping it will shed more light on the main topics when it arrives. I just was informed by Amazon that my order of "Statin Nation" is delayed because the book is not yet available. Is there a revised publication date? Thanks!

Reply



Dr. Malcolm Kendrick on July 18, 2018 at 7:08 am







Not sure yet. There was a problem with the legal people worrying about potential libel, which caused delay





## JDPatten on July 18, 2018 at 12:46 pm





o 🖣 0 🕡 Rate This

Here in the U S the book was released July 12th. I just ordered from Amazon.com, no prob.

Check the title. Dr Kendrick's book is "A Statin Nation".

If you drop the "A", you get a different book.

If you're in the UK and eager, try the same URL, except change .co.uk to com

and have it sent across the Water.





Bill In Oz on July 19, 2018 at 10:56 pm





o 👎 0 🗸 Rate This

Malcolm, when is the estimated date of publication for your new book now is the UK?



Dr. Malcolm Kendrick on July 20, 2018 at 7:25 am







Late August



JanB on July 20, 2018 at 7:32 am









It's ordered. Can't wait.



Frederica Huxley on July 18, 2018 at 12:57 pm







Splashed across the papers, and social media today is the latest pronouncement that Omega 3 is useless. Needless to say, Sir Rory Collins has his fingerprints over this meta analysis that was woefully lacking in substance. The researchers used dosages that were clinically insufficient, the people in the studies were already ill, the testing and follow on times were far too short. Why is it so important to tell us that Omega 3 is a scam? https://www.bbc.co.uk/news/health-44845879



Charles Gale on July 18, 2018 at 5:09 pm





if 1 👎 0 0 Rate This

This blog on cholesterol...Frederica's comment reporting claims that Omega 3 is useless all ties in with this I've just found on youtube from June 2018:



It's a talk and QandA from cardiologist Dr Peter Langsjoen, the CoQ10 guy. He will be familiar to many regulars here and for me (and others) is one of the good guys.

It clocks in at 1hr and 23 mins and is split as follows:

1 to 16 mins = talk by Dr Langsjoen

16 mins to end = QandA

There is plenty going on in this 1hr 23mins and here are some extracts:

#### THE TALK

(incl some anatomy, fish oil, stress and cortisol, vit C and D3 and CoQ10, incorrect vilification of cholesterol and statins)

The heart is a violent organ...24/7 pumping...1st 2 arteries off aorta are the right and left arteries where damage occurs. Don't get blockages at extremity of arterial tree e.g. fingers or feet.

Big main arteries get abuse and trauma over time and hardening of arteries increases with age. Can't not have it.

Trauma worse with high blood pressure.

Arteries have to be flexible to cope with pounding. Omega 3 essential for flexibility of arteries.

No atherosclerosis in pulmonary arteries (to lungs) cos lower blood pressure.

Avoid anything which suppresses immune system – stress most common. If intermittent we can handle, if constant then high cortisol level.

Make sure not deficient in some critical things: vit C (critical for immune

system and arterial integrity), D3 (immune function) and CoQ10 (energy production and immune system).

Achilles Heel of heart transplant – getting blocked up again

Cholesterol hysteria. Unfairly vilified. 1st line of defence.

QANDA (incl stress and chol levels and a few minutes on THINCS at 1 hr 1 min!)

There are loads of questions (some of which are hard to hear) but Dr Langsjoen's answers are audible.

A few (!) topics:

Can you clear out plaque? Not sure – the carotid artery can get better but not sure why. Maybe Restore water?

Omega 3 and 6

Any meds justified?

Statin side effects?

Do statins break down arterial wall? Not sure but they increase calcium score.

Medical propaganda influences doctors

Hypertension and causes and blood pressure meds.

Red yeast rice

Statins – \$60,000 bonus for prescription targets

Chol – what is too high? What about bad chol? Answer includes FH, clots leading to strokes and heart attacks, chol deposits around eyes and knuckles (nowhere else to go). Bad chol – they made it up and the reason why.

Does chol rise with age?

Stress increases chol levels cos we make stress hormones from chol and chol levels can come down when stress has gone (personal note: which is what I have been saying was the root of my CVD incident all along!)

More on Restore

Sugar intake and sources. Any impact on arteries? Glycation and diabetes.

Chol particle numbers and particle size getting through arterial wall. Anything in this?

Tryglycerides and diet: up with sugar and carbs, not with fat.

Chol and diet – diet not a factor (theme of this blog by Dr K)

CVD – the silent killer. What tests – how do we know? Dr L didn't think the calcium scan was useful! Stress test maybe. How do you feel?

More on vit C for healing and the bad advice of the food pyramid.

Wine - good for you?

1hr and 1 min – THINCS gets a mention. A collection of scientists and physicians who are "really, really great".

Alcohol again - what's acceptable?

Stents and by-pass? Won't prevent another attack or prolong your life but they relieve bad symptoms. They have a role in symptom relief.

Vit D3 and raised calcium levels – when to check.

CoQ10 - what's best?

Phew!

There is more and I reckon everything has appeared on Dr Kendrick's blogs over the years and the comments generated. Should be something of interest for all of us.

Well worth 1hr and 23 mins of your time and I didn't have to scroll forward once.

Reply



Charles Gale on July 18, 2018 at 5:15 pm



P.S. to my posting of the link to Dr Langsjoen's talk.

Can anyone decipher the comment at 56 mins 32 seconds when he's discussing testing:

He says "if you hear a br???? on your carotid you can usually get an ultrasound".

A what on your carotid?

➡ Reply



Dr. Malcolm Kendrick on July 18, 2018 at 5:17 pm



Bruit. Medical name for a burring noise, which means blood is being

compressed to go through a narrower tube. At least I am assuming that is what is he talking about.

➡ Reply



James on July 19, 2018 at 9:57 am



It occurred to me that IF you have a 'God', then it follows you would have an opposite, a Satan (the word means one who opposes. resists etc.) and in the religion of Cholesterol, one of Satan's horde would be vitamins, such as C and E.

These needs be hated with a passion, and a quick googling shows this may be the case. Vit E comes in EIGHT variants, each different in behaviour and value. ...

This may explain why one study reported a 13% INcrease in heart failure in a 5+ year group who took vit. E

https://www.webmd.com/food-recipes/news/20050315/vitamin-e-harms-more-than-helps#1

Yet other studies have previously shown benefits.

http://www.doctoryourself.com/heartdisease.html

the, ah, Devil is in the Detail!

Reply



Göran Sjöberg on July 19, 2018 at 8:54 pm



Natural vitamin E comes with all these eight variants and that is what I take to keep (at 2400 IU) my angina at bay. In the Big Pharma trials intended to show the how "dangerous" vitamin E is, it is, as far as I have seen, the synthetic (one component) vitamin E that has been used.

So, you are right, the "devil" is in the details.

If you want to dig deep into the issue of vitamins I recommend the orthomolecular web site (Linus Paulings "baby").

https://www.isom.ca

→ Reply



### http://orthomolecular.org/resources/omns/

The field of finding "real knowledge" in "medicine" is for sure immense but as Malcolm points out it is easy to fall into the tempting trap of looking for one simple cause and this is actually the driving force behind the "evidence based" pharmacological approach of modern medicine but where it is heavily abused as I can see with my present holistic eyes.

➡ Reply



James (the downUnder one) on July 20, 2018 at 10:24 am



Göran, A thousand thanks! Pure gold in that second link. (Yet to open the first one).

– Doubly so because so much agrees with what I'm doing anyway !  $\ensuremath{\mathfrak{U}}$ 

I think that's an example of 'Confirmation Bias'. – Guilty as charged.



AnnaM on July 22, 2018 at 8:38 pm

i 0 ♥ 0 • Rate This

Hi Goran.

Just thought I would let you know that I am visiting your fine country, where all dogs are beautiful, and excellently behaved. Only problem it is difficult to find distilled water.



Göran Sjöberg on July 23, 2018 at 9:17 am

You for sure picked the right sunny summer for a visit to Sweden since usually we have rather unstable weather here.

But I don't understand why you need distilled water.









if 0 ♥ 0 • Rate ThisCVD in lupus can be treated with bone-builder.

Really?

Doc Malcolm, what do you think?

" Conclusions

This study provides some preliminary evidence to support the use of combination therapy with bisphosphonates and vitamin D to prevent atherosclerosis in patients with SLE. Both bisphosphonates and vitamin D supplementation are already recommended for osteoporosis, and their combination may prevent the development and progression of atherosclerotic plaques better than either agent alone. Further large-scale prospective studies are warranted to confirm the results of this analysis."

https://www.medscape.com/viewarticle/896994\_1

⇒ Reply



Dr. Malcolm Kendrick on July 20, 2018 at 7:26 am





Sounds intriguing. Will look into it.

Reply



Mr Chris on July 20, 2018 at 8:06 am





I thought bisphosphonates are not that great for you?

Reply



Dr. Malcolm Kendrick on July 20, 2018 at 8:16 am







They are not, but SLE is most certainly worse.



Andy S on July 20, 2018 at 12:13 pm





An effective way of increasing sales of a dubious medication by pairing it with a beneficial natural ingredient. Apparently entire skeletal structure is turned over every 10 years, interfering with this process might have repercussions.









Both statins and bisphosphonates inhibit vitamin K2 actions. This has many devastating effects on many different tissues and cells to actually create disease because these K2 actions are widespread and essential. This study is re-evaluating all the drugs that have been invented and trying to jam them into helpful results...but it is ignoring the mechanisms of ALL the various diseases being discussed here (SLE, fracture, atherosclerosis) and delving into these drugs to the exclusion of understanding the role of nutrients/hormones as actually involved in etiology and treatment of these diseases.

## http://www.asbmr.org/Meetings/AnnualMeeting

/AbstractDetail.aspx?aid=c2b01dc2-a02d-4e1c-88dd-f8f83332ebe7

Statins and Bisphosphonates Inhibit Menaquinone-4 Biosynthesis in Bone

(It is unfortunate that they end with this: "Therefore, it is suggested the combination use of statins and bisphosphonates with vitamin K during the treatment of osteoporosis." But who can take on pharma? Too scary, so the suggestion is to throw these nutrients at the side effects of Rx drugs that mess with these nutrients/hormones. Duh.)

The mechanisms of inhibition of essential pathway(s) affect more than just bone...and the fundamental role of vitamin K2 in calcium regulation is what connects the weaker bones and calcified arteries and... according to my hypothesis, calcium signaling, which is among the things that go awry in SLE. Calcium in hydroxyapatite is important and easily measured via CT scan or DEXA for atherosclerosis and fracture risk, respectively, but calcium signaling is also important and appears to be affected by vitamin K status, but this area is less studied (or almost not at all).

While MK-4 is a hormone (endogenously made in tissues throughout the body via the enzyme UBIAD1, it binds SXR), so is vitamin D. The vitamin D folks have been very vocal and are widely heard, but a fact of vitamin D is that it is essential in humans to make osteocalcin, a vitamin K-dependent protein in bone (and other tissues), so it is also involved in calcium regulation. Mostly, we hear that more D makes more calcium absorption in the gut, but humans need enough D to make the protein osteocalcin, which then needs the created MK-4 to activate it and deposit calcium as hydroxyapatite to make strong bones and also to prevent CAC, which reflects another vitamin K-dependent protein's activation: matrix gla protein. There is also evidence that this osteocalcin is involved in insulin sensitivity. Thus, diabetes is involved in these mechanisms that require D and K2. And we know that statins

increase diabetes risk. And they also deposit calcium in arteries (increase CAC).

Bisphosphonates make lousy bones – denser, but more brittle – but measuring density is the incorrect way we have measured bone strength/health. K2, along with D, makes stronger bones as well as better collagen/tendons, prevents CAC, helps with insulin sensitivity and also inhibits inflammation. We should look more into these fat soluble nutrients/hormones and understand their mechanisms instead of stomping in pathways with these toxic drugs with widespread unintended consequences.

Search for publications from Harumi Okuyama, a Japanese lipid pharmacologist, and see what I am talking about. He and his colleagues are voices in the wilderness.





Gary Ogden on July 20, 2018 at 2:34 pm



Micki Jacobs: Thank you for this information. Everything I've read since I gave up my last drug has reinforced my conviction that it is best to avoid them altogether, if possible, and that the way to health consists of living fully and well, avoiding toxins as much as possible, and sticking with wholesome food. I've nearly reached the end of "The Constant Gardner." Fiction, yes, but true to life fiction. An astonishingly gifted writer.



Göran Sjöberg on July 24, 2018 at 5:58 am



Micki Jacobs

I read your interesting post while sipping on my daily strong vitamin-C drink and at the same time looking out through my bedroom window where I can see the result of my latest carpenter activity – a wooden 5 m bridge connecting an island in a large pond with the rest of the garden.

When you are pulling the web of intricate physiological interactions, as you do now, and start thinking about the how little we really do understand of these important, but often subtle, interactions it is in my eyes quite natural to arrive at the conclusion to which Gary Ogden and myself have arrived at -

Stay away from corrupt Big Pharma!

Why should we believe in the very sophisticated criminal activities of this "Maffia"?

And with Weston Price think about the nutrition – especially the micro-nuitrants your body really need to stay healthy, like the K2 and D3 you mention.



Bill In Oz on July 20, 2018 at 9:01 am



Good to hear that it will be out in late August.. Will buy it!

I am pre-occupied what with being involved ina national by-election for my area. Our member was declared a 'Dual Citizen" British & Australian by the 'wise' bloody lawyers on our high court. Which is forbidden by those same wise lawyers.. So I am busy helping re-elect her. But it ends on the 28th of July.. And should be able to pay more attention here after that.. In the meantime I am just doing a watching brief.





Lisa Callahan on July 20, 2018 at 4:15 pm





TOTALLY off topic. However I cannot ignore your reference to "smoking" as being a "risk factor"! I am in NO WAY denying your conclusions, I just question this . NOT unlike previous conclusions. As a Geneticist, I ask myself frequently if I am not letting my education block me! Alas, I cannot ignore my "Practical" experience! As YOU must KNOW!

So, I am saying THIS

EVERYDAY, I have to deal with health professionals and lay people.

I repeat to myself...

WE DON't KNOW

WE DON'T KNOW

WE DON"T KNOW

I have followed your blog for MANY years, and respect you mightily!

My ONLY point is that regardless of "OUR" education, WE still DON'T know!

So, my final comment has to be...Profound,I hope

Don't give any credence to "Authority", and work hard to make things right

for yourself!

Not foolishly, Please!

But with wisdom and reverence!

If "smoking" killed the number of people we have been led to believe, how could those reprobates possibly be ruling all of our countries?

If alcoholics died early, how could there be so many in positions of power?

And if The mentally ill were attended to, why do we still have ALL the issues previous generations have grappled with? ON top of the positions most of them have....

I am reiterating what the good Doctor has already stated...

Non of us get out of this ALIVE!

I KNOW BTW, I come from a family with CF....

I was the lucky one out of 4, hence my profession!

Sometimes, despite genetics I don't feel so lucky!

And, alas...all the research and education lead you to my earlier conclusion

WE STILL DON'T KNOW!

Reply



Dr. Malcolm Kendrick on July 20, 2018 at 5:27 pm



I shall now utilise the term 'propensity altering factor'. It is the term I would like to use it all the time. We live a sea of differing propensities which can only expose themselves after the event. Super short synopsis of Popper's the Poverty of Historicism. My job is to help people alter propensity in a positive direction – at least I see that as my job.

Reply



Gary Ogden on July 20, 2018 at 4:54 pm



Interesting editorial in today's Lancet: "UK life science research: time to burst the biomedical bubble."

Reply

In the real world, it exhibits itself as the extraordinarily grandiose structures I find outside my general hospitals. The western general in Edinburgh has a glamorous research unit at its front gate while its ugly sisters (in an inversion of cinderella) behind have to get on with the work. The new royal infirmary (which was obviously inspired by 80's bus stations) has a similarly divorced life science campus.

They fight to retain these alien structures will be fought far more keenly than any effective local provision will have the resources to.

➡ Reply



paul on July 20, 2018 at 10:56 pm



What I meant to type:

The fight to retain these alien structures will be fought far more keenly than any effective local provision will have the resources to.

There is a lot of sunk costs and careers in these citadels, purposely so.

Those that walk in and out have no desire to get 'j lee cobb'ed by those that created them.

Reply



David Bailey on July 21, 2018 at 1:28 pm

if 1 👎 0 0 Rate This

I haven't a clue what you are talking about – are you sure you are replying to the right blog?

Reply

Paul,



paul on July 21, 2018 at 8:00 am

d 0 ♥ 0 Rate This

and I would add this

<a href="https://www.huffingtonpost.com/robert-david-jaffee/witness-to-a-persecution-\_b\_2735083.html?guccounter=1"

The same propensities to re/maintain the status quo are as strong as ever.

Reply



Topsygirl on July 22, 2018 at 4:23 am



Just completed reading the link re: details of the situation with Prof. Noakes thankyou for that Dr K very interesting their attitudes to these issues of compassion, ethics truth and self interest are damning. Clearly eminence based and avarice based and what about the public in general obviously no care about the confusion for them about what they should eat. There is only a constant worry to protect their industry ties (and the pots of money, prestige etc.) and shows a total loss of conscience you can study ethics but surely if you do not apply what you have learned to yourself and your activities it is only letters after your name.

The fact that the complaint was lodged so quickly shows that the complainant was just waiting and watching no different than what happened to Gary Fettke their stubborn refusal to even look at anything else shows a pompous ignorant spirit these folk are consulted regarding the appropriate diets for hospitals, cancer treatment, and many other health issues and what do we get to eat in hospital well absolutely nothing I would eat at home, my friend just rang me to say she had to be admitted with what turned out to be a SBO she has a cancer which is untreatable so is managing it with diet and supplements and was offered green jelly (full of sugar and preservatives) which she refused explaining not good for cancer. – another industry link?

Reply



Göran Sjöberg on July 22, 2018 at 7:08 pm



Topsy girl

As far as I understand a ketogenic protocol is a good alternative since cancer cells do not like absence of glucose.

When you enter the alternative medical route there is a lot you can add to he protocol which makes sense.

Reply



wcmozart on July 22, 2018 at 7:58 pm



Re LDL metrics

I have a friend with diagnosed 2nd stage cardio-vascular disease who just picked up a number of stents to fix up several very badly blocked arteries. They just had an NMR Lipoprofie done, and here are the results:

Cholesterol Total 201 mg/dL Ref: 100-199

LDL-P 1684 nmol/L Ref: <1000 LDL-C 140 mg/dL Ref: 0-99

Small LDL-P 577 nmol/L Ref: 20.5

HDL Cholesterol 43 mg/dL Ref: >39 HDL-P (Total) 29.1 umol/L Ref: >= 30.5

Triglicerides 91 mg/dL Ref: 0-149

Their Drs are urging them to radically lower their cholesterol .. in particular, to lower their LDL-C cholesterol level to 70 or less.

My questions are as follows:

- 1. are the standard popular cholesterol metrics above justified and therefore which of the above cholesterol levels would be putting my friend at risk
- 2. they have tried statins and have experienced muscle and back pain problems, so the Drs have highly recommended Repatha as a solution .. what are the real liabilities associated with this drug
- 3. if any of the above cholesterol levels are putting my friend at risk, what are various options available for dealing with the problem

a million thanks for your input

-WCM

Reply



wcmozart on July 22, 2018 at 8:06 pm



correction to above

somehow an error re the reference for Small LDL-P popped up .. it should be

small LDL-P:577 nmol/L Ref: =20.5

-WCM

➡ Reply



wcmozart on July 22, 2018 at 8:08 pm



another addendum .. somehow the posting procedure is leaving things out

this was left out:

LDL Size 21.0 nm >20.5

-WCM

Reply



wcmozart on July 22, 2018 at 8:11 pm

again the posting procedure is faulty — the correction was not properly posted

here it is:

Small LDL-P 577 nmol/L Ref: <=527 nmol/L

-WCM

Reply



wcmozart on July 22, 2018 at 8:15 pm

i 0 ♥ 0 • Rate This

quite frustrating .. LDL Size should be

LDL Size 21.0 nm Ref: >20.5

thanx

-WCM

Reply



Pierre MD on July 23, 2018 at 9:32 am



Hi Malcolm,

Just a thought/question about the association between apirin and PPI (-prazole). They are often associated to prevent gut bleeding but isn't that ridiculous for CV prevention considering the PPI increase very significatively CV risk while aspirin decrease this CV risk moderately. Sounds that combined, CV risk is increased altogether !! So you have some data on this hypothesis?

➡ Reply



Dr. Malcolm Kendrick on July 23, 2018 at 3:12 pm



Well I know that aspirin reduces CV risk by around 13%. PPIs increase CV risk by 100%. The maths are not difficult.





Pierre MD on July 24, 2018 at 1:29 pm







Unbelievable cardiologists and MD like me continue to associate both these drugs...

➡ Reply



Dr. Malcolm Kendrick on July 24, 2018 at 3:25 pm



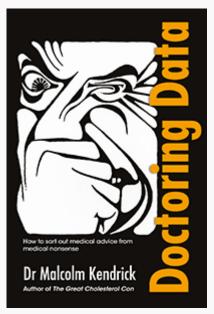




Hardly any cardiologists, or MDs, are even aware that PPIs can create significant CV problems.

Reply

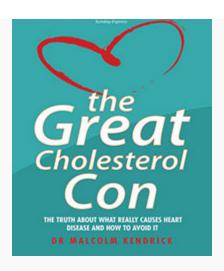




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Dr Kendrick cannot provide individual patient advice over the Internet. UK General Medical Council regulations are clear that to do so would be a breach of medical standards that could result in disciplinary proceedings.

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