Message from the Tonic Media Network Editorial Committee*

Welcome to the first edition of *Practice Connect* for 2025 – your personal, practice and patient focussed newsletter with up-to-date news and information.

Seed oils – anything to be concerned about?

Many of your patients will be consuming all the news they can get about the United States and the policies and views of President Trump and his allies. Anecdotally we're hearing from practices that patients are asking questions based on what they hear from people like the podcaster Joe Rogan's guests or the nominee (at the time of writing) for Health Secretary Robert F Kennedy Jr. RFK, as he's called, has quite rightly been railing against the consumption in the US of ultra processed foods and the epidemic of chronic disease, not to mention the nation's low life expectancy compared to countries like Australia and Japan.

That's not controversial.

Where he and others who share his views differ from the experts, is when it comes to the role of seed oils. Now just because he differs with experts doesn't mean he's wrong but in this case his arguments are misleading and wrong.

<u>What's the gripe?</u>

What we're talking about here are seed oils such as grape, sesame, canola, sunflower and flax. They're usually used for frying because they tolerate high temperatures before they smoke. Seed oils are also used, because of their heat stability and other properties, in ultra processed foods.

To explain the gripe, you need a bit of technical detail. Fatty acids are the building blocks of fats and are described by how their carbon atoms bind to hydrogen. They can be linked by just one bond or two. Saturated fats have no double bonds. They're bad for you, especially when they come in meat. They tend to increase LDL cholesterol, inflammation and oxidative stress.

Monounsaturated fatty acids are best known in olive oil. They tend to be neutral when it comes to heart disease and their main benefit comes from replacing saturated fat in your diet and the bioactive compounds in extra virgin olive oil. The seed oils contain polyunsaturated fatty acids

and depending on where on the molecule the double bond is, they can be called omega 6 or omega 3 fatty acids. You've no doubt heard of omega 3 fatty acids in fish and fish oil.
Well, the debate about seed oils is about omega 6 fatty acids because they dominate over omega 3's. RFK and others argue that omega 6 fatty acids are bad for you because they say they promote inflammation and oxidative stress and increase the risk of diabetes and heart disease.

The critics also make a lot of the ratio between omega 6 and omega 3 fatty acids in these oils. One of these omega 6 fatty acids is linoleic acid which is an essential fatty acid, meaning we can only get it from food and not having enough can cause deficiency symptoms such as dry, scaly skin. One reason RFK and others say that linoleic acid is bad for you is that the body converts it into an inflammatory substance called arachidonic acid.

Seed oils like grapeseed have a lot of omega 6, while canola and sunflower and peanut oil, less but still more than, say, olive oil.

Okay…. That's the argument.

Here are the facts. Omega 6 fatty acids reduce inflammation, oxidative stress and toxic forms of cholesterol and in so doing *reduce* the risks of heart disease and probably type 2 diabetes.

There is nothing scientific about the omega 6 to omega 3 ratio. They don't fight with each other. Study after study shows this. See the reference at the foot of this article

And the arachidonic acid story? Well in fact only 0.2 per cent of linoleic acid is converted to arachidonic acid. Barely measurable.

So, the bottom line? Seed oils aren't the problem. In fact, they can be part of the solution, not that you want to be eating fried foods a lot. The argument about these oils distracts us from what we need to eat for optimum health which is a largely unprocessed diet which is high in vegetables, low in red meat and where cooking is slow - at a moderate heat.

That's where science meets RFK.

Reference

Petersen KS, Maki KC, Calder PC, Belury MA, Messina M, Kirkpatrick CF, Harris WS. Perspective on the health effects of unsaturated fatty acids and commonly consumed plant oils high in unsaturated fat. Br J Nutr. 2024 Oct 28;132(8):1039-1050. doi: 10.1017/S0007114524002459. Epub 2024 Oct 30. PMID: 39475012; PMCID: PMC11600290.

What about banning fluoride in drinking water?

Banning fluoride in drinking water is another obsession of the nominee (at the time of writing) for US Health Secretary Robert F Kennedy Jr. (RFK) and his allies - RFK even had Donald Trump jump on the bandwagon during the election campaign. The main assertion is that fluoride in drinking water reduces children's IQ.

They often quote a review a few years ago which looked at the available studies and came to that conclusion.

The problem with the review is that it contained studies which weren't carried out well, sometimes in places with high levels of fluoride naturally in their water supply. They also didn't take account of possible water contaminants in inadequately regulated water supplies in poor countries.

When you look at the high-quality studies in that review, in well-regulated countries, there was no effect of fluoridation on kids' IQ.

More recently, one of the world's best conducted studies – which happens to be Australian – has published their findings. The researchers from Queensland and South Australia have been following children and their dental health and development for many years. They know how much fluoride they've consumed, not just in drinking water but from toothpaste and fluoride applications at the dentist. They also allowed for the drinking of filtered water.

The researchers were also ultra careful about how they measured IQ, which is notoriously difficult to do.

The first phase of the study looked at dental caries (dental decay) and showed conclusively that there was a significant reduction, especially in disadvantaged kids.

The next phase looked at neurodevelopmental problems such as Autism Spectrum Disorder and ADHD and found no effect of regulated fluoride in drinking water.

The latest phase has reported on IQ when the kids were adolescents and found – again – no effect.

Some people argue that fluoride should be removed so that people can be free to choose. The trouble with that argument is that we're not free to choose in some public health areas. We must wear seatbelts. We can't drive if we're over 0.05, and we cannot smoke in restaurants. What these researchers and others have shown in relation to fluoride is that if you stop adding it, there will be an increased dental health gap between families which are better off and better educated and kids in disadvantaged families which find it harder to find the time and effort to follow public health recommendations. Dental surgeons will tell you that the kids where they must give them a general anaesthetic to remove their rotten teeth, almost invariably come from non-fluoridated areas.

Prevention works best when we don't have to take action ourselves; it's done without having to think about it.

References

Sexton CT, Ha DH, Le T, Lalloo R, Ford P, Do LG, Stormon N. Socio-economic status and access to fluoridated water in Queensland: an ecological data linkage study. Med J Aust. 2024 Feb 5;220(2):74-79. doi: 10.5694/mja2.52196. Epub 2023 Dec 27. PMID: 38149410.

Do LG, Sawyer A, John Spencer A, Leary S, Kuring JK, Jones AL, Le T, Reece CE, Ha DH. Early Childhood Exposures to Fluorides and Cognitive Neurodevelopment: A Population-Based Longitudinal Study. J Dent Res. 2024 Dec 18:220345241299352. doi: 10.1177/00220345241299352. Epub ahead of print. PMID: 39692252.

Do LG, Spencer AJ, Sawyer A, Jones A, Leary S, Roberts R, Ha DH. Early Childhood Exposures to Fluorides and Child Behavioral Development and Executive Function: A Population-Based Longitudinal Study. J Dent Res. 2023 Jan;102(1):28-36. doi: 10.1177/00220345221119431. Epub 2022 Oct 9. PMID: 36214232.

Obesity drugs are changing everything

Something big is happening in healthcare at the moment. These revolutions usually occur once in a generation. Endoscopy revolutionised the diagnosis and treatment of a long list of problems including the prevention of bowel cancer and radically shortening the need for hospital stays. Cholesterol lowering drugs reduced the impact of heart disease and so on. Now there are the obesity drugs including, semaglutide (Ozempic and Wegovy) and tirzepatide (Mounjaro and Zepbound). They're far from perfect and are expensive, but they do induce weight loss as long as you're taking them. They also appear to reduce the impact of heart disease and kidney damage

and may even have a role in dementia prevention. But buckle up because that's just the beginning.
Let's start with the pharmaceutical market and what you can expect in the not-too-distant future.

Currently just two companies – Novo Nordisk (Wegovy) and Ely Lilly (Zepbound) own 99% of this $40 billion market which is growing fast. But they have competitors breathing down their necks. A bit of technical detail first. Wegovy – semaglutide is what's called a GLP-1 agonist, which mimics the action of a protein which stimulates insulin production and has effects on feeling full after a meal and even changing our tastes for food and food focus. Tirzepatide on the other hand is a two in one drug with effects which combine GLP and another protein called GIP.

Anyway, what you're going to see is a move away from needing injections to oral drugs which combine GLP and GIP effects with the potential for even greater weight loss. That's when you might start to see price competition. But Novo Nordisk and Ely Lilly won't take that lying down so presumably they'll have their own 'new' drugs.

The second area of impact is the healthcare system because these medications should make it easier for GPs to reduce the impact of chronic problems like diabetes, and heart and kidney disease which are burdening our hospital system. The issue though is that in general, the people who need GLP-1s the most are those who can least afford them. Will the government subsidise their use? Let's see.

Then there are the effects outside healthcare.

In the US, the use of these medications is so widespread that the processed food industry has noticed a reduced food spend in supermarkets and elsewhere. People aren't buying as much food and appear to have changed their preferences to fresh, unprocessed foods.

Not to be outdone, the food manufacturers are producing new ultra processed foods aimed at the 'Ozempic' market. Their marketing is based on fear. Make sure you get enough protein – swallow our protein supplements. Make sure you get enough nutrients - swallow our micronutrient filled products. It's ironic that the industry that caused the obesity epidemic is now making sure they don't miss out on the other side.

And finally, there's the medical cosmetic industry. Manufacturers of cosmetic fillers are booming.

Why? Well, it's the 'Ozempic face'. People on these drugs lose fat and muscle and that's visible on the face as sag. Around the world there's a growing demand for fillers to counter the facial sag – even if it's temporary.

This is just the beginning.

Habits – how they form and how *breaking* a bad habit is the wrong way to think about it.

An astounding 45% of our behaviours are habits. We couldn't get through life with routine behaviours we don't have to think about, like how we load the dishwasher, or the route we take to mum and dad's for dinner. Mind you that probably triggers another habit which is having an argument about which way is faster. The point is that we think habits are bad, when they're part of our makeup.

Habits are deeply ingrained and imprinted on parts of our brains which are involved in things like memory, decision making and even addiction. You've got to work hard to create a habit. It needs to be an action you do repeatedly, in a certain context – like an inability to walk past the fridge without opening it – and where there's a reward, like tucking into yesterday's leftovers. So given the work that goes into creating a habit (like getting the kids to clean their teeth before bed), it shouldn't be a surprise that bad habits are equally imprinted in our brains.

What that means is that it's wrong to think about 'breaking' bad habits. It doesn't generally work.

It's about new habits

What you need to do is replace that habit with another healthier or more productive one. Sadly – that means work.

Brain plasticity - rewiring

You've first got to understand the context for your habit and what triggers it. Then you need to decide what the new habit is going to be. And finally, you need to work out what the reward will be to reinforce the new habit. So, it needs quite a bit of thought that's more than making a New Year's resolution after a few wines before the fireworks.

Then you need to do the new behaviour again and again associated with the reward you've decided for yourself.

Be patient, because you cannot rewire your brain overnight. For damaging habits though, this is work that's worth doing.

References

Koob GF, Volkow ND. Neurobiology of addiction: a neurocircuitry analysis. Lancet Psychiatry. 2016 Aug;3(8):760-773. doi: 10.1016/S2215-0366(16)00104-8. PMID: 27475769; PMCID: PMC6135092.

Amaya KA, Teboul E, Weiss GL, Antonoudiou P, Maguire JL. Basolateral amygdala parvalbumin interneurons coordinate oscillations to drive reward behaviors. Curr Biol. 2024 Apr 8;34(7):1561-1568.e4. doi: 10.1016/j.cub.2024.02.041. Epub 2024 Mar 12. PMID: 38479389; PMCID: PMC11003843.

Cepni AB, Shehata N, Ullah F, Johnston CA. Habit Formation in Older Adults. Am J Lifestyle Med. 2024 Nov 18:15598276241301743. doi: 10.1177/15598276241301743. Epub ahead of print. PMID: 39568797; PMCID: PMC11574773.

The Blood Type Diet – anything going for it?

There has been a popular notion, promoted by books on the topic, that you should tailor your diet to your blood type. On face value it's not a bad idea because our blood types are decided by our genes and these same genes are also known in some cases to be associated with an increased risk of heart disease or some cancers.

But there's more

The jump that's been made is that also embedded in your genetic profile based on your blood group, is the need for specific, targeted diets.

A bit of background first…..

Your blood type is decided by what molecular signals, called antigens, you have on your red blood cells. There are a large number of these red cell antigens but what most of us know about is the ABO system. If you carry the A antigen then your blood type is A, if you carry the B antigen then your blood type is B. If both then AB and if none then you're an O.

Non-O blood types (A, B or AB) may have higher risks of heart disease than blood type O - which if true, could have something to do with how clottable the blood is. Blood type A may also have a higher risk of cancer compared to the O type.

There's also an overlap between your blood type and your ethnicity which complicates an already complicated story.

Does that translate to diets?

There have now been several studies investigating health outcomes compared to people on blood type diets. The results are that when you look at people on blood type diets, they seem to be healthier overall, but when you dig deeper into who has benefited and in what way, there's no relationship with an individual's blood type.

Some people argue that they're type O and love meat. But that's different from saying blood type O people should be on a meat diet. Food preferences are largely genetic, from coffee to garlic to spices to meat - and not related to health outcomes. It's possible that the genes for blood types are also linked to genes for food preferences.

Bottom line?

There are lots of reasons to change your diet to a healthier one but tailoring it to your blood type is probably a wasted effort.

References

Zhang BL, He N, Huang YB, Song FJ, Chen KX. ABO blood groups and risk of cancer: a systematic review and meta-analysis. Asian Pac J Cancer Prev. 2014;15(11):4643-50. doi: 10.7314/apjcp.2014.15.11.4643. PMID: 24969898.

Groot HE, Villegas Sierra LE, Said MA, Lipsic E, Karper JC, van der Harst P. Genetically Determined ABO Blood Group and its Associations With Health and Disease. Arterioscler Thromb Vasc Biol. 2020 Mar;40(3):830-838. doi: 10.1161/ATVBAHA.119.313658. Epub 2020 Jan 23. PMID: 31969017.

Larson NB, Decker PA, Wassel CL, Pankow JS, Tang W, Hanson NQ, Tsai MY, Bielinski SJ. Blood group antigen loci demonstrate multivariate genetic associations with circulating cellular adhesion protein levels in the Multi-Ethnic Study of Atherosclerosis. Hum Genet. 2016 Apr;135(4):415-423. doi: 10.1007/s00439-016-1643-0. Epub 2016 Feb 16. PMID: 26883866; PMCID: PMC4795966.

Cusack L, De Buck E, Compernolle V, Vandekerckhove P. Blood type diets lack supporting evidence: a systematic review. Am J Clin Nutr. 2013 Jul;98(1):99-104. doi: 10.3945/ajcn.113.058693. Epub 2013 May 22. PMID: 23697707.

Wang J, García-Bailo B, Nielsen DE, El-Sohemy A. ABO genotype, 'blood-type' diet and cardiometabolic risk factors. PLoS One. 2014 Jan 15;9(1):e84749. doi: 10.1371/journal.pone.0084749. PMID: 24454746; PMCID: PMC3893150.

Barnard ND, Rembert E, Freeman A, Bradshaw M, Holubkov R, Kahleova H. Blood Type Is Not Associated with Changes in Cardiometabolic Outcomes in Response to a Plant-Based Dietary Intervention. J Acad Nutr Diet. 2021 Jun;121(6):1080-1086. doi: 10.1016/j.jand.2020.08.079. Epub 2020 Dec 4. PMID: 33288495.

My CPD Outcomes: Streamlining CPD Management for Practitioners

Continuing professional development (CPD) is important for maintaining high standards in patient care, helping practitioners stay up to date with the latest medical knowledge, guidelines, and best practices. As the new year begins, it's the perfect time to review your CPD progress and plan ahead for the months to come.

Our friends at Cubiko have recently launched *My CPD Outcomes*, a new feature developed in partnership with the RACGP, designed to effortlessly measure outcomes and enhance patient care with targeted insights from Cubiko. As a Major CPD Partner, Cubiko provides an efficient and structured way for practitioners to complete and track their Measuring Outcomes CPD requirements, earning up to 32.5 out of 50 hours of CPD within the platform.

My CPD Outcomes includes a library of pre-approved CPD activities to help you easily identify and complete impactful actions for your patients. The library offers activities ranging from small (1 hour) to larger (up to 10 hours), allowing you to choose what best suits your needs.

Simplifying Measuring Outcomes CPD tracking

Cubiko makes it easier for practitioners to manage and track their Measuring Outcomes CPD requirements. My CPD Outcomes is the first purpose-built tool for creating, tracking, and completing Measuring Outcomes CPD activities.

With practitioners constantly balancing patient care and busy schedules, keeping track of CPD hours can be a challenge. My CPD Outcomes simplifies this by offering a clear view of progress for Measuring Outcomes activities, eliminating the administrative burden. Instead, their time can be better spent focusing on what matters most - providing high-quality care to patients.

Aligning CPD with practice goals and quality improvement

With My CPD Outcomes, practitioners can align their CPD activities with their practice's goals and quality improvement initiatives. Aligning CPD with these objectives ensures that learning is both relevant and impactful, driving meaningful improvements in patient care and practice efficiency. Whether focusing on improving patient outcomes - such as recording patient ethnicity, alcohol and smoking status, Chronic Disease Management (CDM), or Health Assessments - practitioners can easily identify gaps or proactive care opportunities and select CPD activities that contribute most to their professional growth and the broader quality improvement efforts.

This targeted approach not only enhances personal development but also fosters greater team collaboration. By aligning CPD with practice-wide quality improvement, the entire team can work together toward shared goals. This improves both patient care and practice efficiency, creating a more cohesive and productive practice environment.

Meeting your CPD goals with ease

Practitioners are required to complete a variety of CPD activities, including Measuring Outcomes. My CPD Outcomes allows practitioners to easily log up to 32.5/50 CPD hours, streamlining the process. By offering RACGP pre-approved activities that integrate seamlessly into daily workflows, My CPD Outcomes ensures learning is relevant and directly applicable. It also helps meet CPD goals, enhancing quality of patient care. While Cubiko has partnered with RACGP, non-members can still use Cubiko's CPD module by keeping their own records and self-uploading completed hours to their CPD home.

A smarter approach to CPD

By integrating CPD tracking into daily workflows, practitioners can take a smarter approach to professional development. Instead of scrambling to log hours at the last minute, My CPD Outcomes helps practitioners stay proactive throughout the year, ensuring they meet their CPD goals efficiently and effectively.

With the right tools, managing CPD doesn't have to be complicated. My CPD Outcomes empowers practitioners to take control of their professional development with confidence, allowing them to focus on delivering high-quality care.

To find out more about how Cubiko can support practitioners and practices in achieving their CPD and quality improvement goals, feel free to book in a demo with the friendly Cubiko team.

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