



Steph: Hi Katherine, and welcome to the show.

Katherine: Thank you so much for having me.

Steph: Really looking forward to our conversation today. I'd love for you to intro yourself to our listeners because it's your first time on the show today.

Katherine: Sure. So I'm Katherine Maslen obviously, and I'm a naturopath nutritionist, author, host of the podcast, The Shift and also founder of Shift Clinics. That's I guess the abbreviated version right now.

Steph: Yeah, for sure. Absolutely. I'd actually love to hear more about The Shift for those of our listeners that don't know, it's a project that I was involved with in just a small, small fraction of the massive project that is The Shift. So tell us more about what you've been up to recently.

Katherine: Okay. So I've been working with clients for 12 years and I guess one of the things that I've observed and one of the things that we're really good at, our Clinic Shift is helping people along the wellness journey. So The Shift podcast was born out of the need, the want, the need to really examine how do we make shifts in our life? So that might be physical, mental, emotional. But there's a certain process that people go through to get from where they don't want to be, to where they want to be.

So season one of The Shift, we chose to do gut health and that's because the gut is the center of everything. You know, if you're not absorbing your nutrients then it's going to affect your whole health. But also the microbiome is a really interesting topic at the moment and something that I'm really excited about. So we decided to get on the gut health root.

So essentially what The Shift is, it's a 12 part docu series on gut health. It includes 25 of the world leaders in this area, yourself included Steph, and what we've done is we've produced it into kind of a documentary style. So it takes

people on this journey throughout the 12 episodes where they're learning about their gut health, but also emotional wellness and also toxicity and all of the different bits and pieces that could cause people to be stuck and also what they need to make a shift.

Steph: Yeah, cool. And you and I were talking off air about it's, you know, it's a series and it can be, you know, I mean I guess it contains so much amazing information. So you know, myself personally, I'm looking forward to working my way through the 12 episodes and I definitely encourage our listeners today to check it out. So there'll be links in the show notes as always.

Katherine: Yeah, it's, and it is very content rich and it's very different to anything else that's out there. So I'm really passionate about it. I'm really passionate about getting it into as many ears as possible because we released about ... four weeks ago, six weeks ago now and the feedback we've had has just been amazing. So I think we've got over 80 5-star reviews on iTunes already, which is fantastic. But I really want, I really feel like this can help people on that real base level and it is something that everybody needs to know about because our gut is so important.

Steph: And that's exactly why I've got you here today to talk about, I know it's a really big passion of yours, as you mentioned, and we have had many episodes on the gut on the podcast, and we talk about it a lot in relation to the more typical digestive symptoms, which are the really obvious ones that I guess you would be paying attention to your gut. But we also know it's a lot more than that. You know, I would love to talk to you more about gut health in relation to chronic disease. So let's start there with some definitions.

Katherine: Okay. So Hippocrates said, "All disease begins in the gut." So this isn't really a new concept. The difference is that the science that we have now is just so much more profound. So what we do know is that chronic disease is a bigger killer of people globally. So when we talk about chronic disease, we're talking about things that are non-communicable so they're not infected. So another classification that the World Health Organization uses for chronic disease is called a noncommunicable disease or an NCD.

So if you look at it that you have a condition that lasts longer than a year, that's not infective in nature. So you can't catch it from one person to another. That's how we classify chronic disease. So we're talking all of the big ones like metabolic syndrome, obesity, heart disease, cancer, diabetes, but also things like autoimmune disease, asthma, chronic sinusitis. All of these things are going to be classed as chronic disease.

So I knew that there was a lot of chronic disease. I mean, I'm a naturopath, I'm seeing it every day in my practice, but it wasn't until I started researching for an episode that we have, it's called the Decline of our Species, which sounds a bit morbid, but it's really to look at the highlight of, if we keep on this trajectory

that we have with chronic disease, then we're not going to be very well leading into the future. So what I found was that 71% of global deaths are from chronic disease. Okay? So we bring it back down to Australia. The stats show that almost 90% of deaths are due to chronic disease. So if you have a chronic disease, it can take up to a third of your life or more. So we're talking, you know, early death from things like strokes and heart attacks and asthma attacks, etc.

So it's really a big deal. We know that about one third of the population here has at least one chronic lifelong illness. We know that if you are diagnosed with one chronic disease or NCD, it begets another, so as soon as you're diagnosed with asthma or Hashimoto's or diabetes, then it's, it will actually increase over time. And we all know that, don't we? Like we all know somebody that has two or three or four even of these NCDs. So the problem with chronic disease is that largely it's managed and not cured. And this is looking at the conventional health care model, not so much the stuff that you and I do Steph, which is more around prevention and getting the body to heal itself. But largely people manage their conditions so they get high blood pressure and they get put on blood pressure medication, that's what happens for life.

So it is something that's a really big deal. And when you look at the stats across the board, nearly everything is on the rise. Like cancer is on the rise. Diabetes, obesity is on the rise, cardiovascular disease and allergies and autoimmunity is really steeply on the rise as well. So this shocked me because when you look at the numbers it is, you know, it's difficult to ignore and we do need to do something about it. And in the context of The Shift and the gut health conversation, every single disease that I mentioned, so nearly every single noncommunicable disease now has research to show that the microbiome and the health about and diversity of our microbiome is actually connected to if you're going to get it or not. So it's huge.

Steph: That is huge. And I think there are some of those conditions that you mentioned like autoimmunity, like we have again spoken about that topic. I think that people are a lot more aware of the link between gut health and things like Hashimoto's or celiac disease. But then when we're talking about like cardiovascular disease or cancer, like I really don't think that's an area that a lot of people default to thinking about the microbiome. This is really, really exciting stuff.

Katherine: It is. And as I said, there's a new study every single day, so it is a really hot topic of research. A lot of government agencies are putting money into funding for studies on the microbiome, which is fantastic because what we know now is just completely different to what we knew 20 years ago. So we've always known that gut health was important, but we didn't know exactly why. And really, you know, we've got the microbiome story, but also when we're looking at inflammatory conditions like cardiovascular disease or Alzheimer's or autoimmune disease, that we know that if you have something called leaky gut or intestinal permeability, then what's going to happen is that we're going to

have particles passing through into your bloodstream that are quite pro inflammatory. So the gut really affects the entire health. And if we're going to look to one area first, it has to be the gut.

Steph: Yeah, I think the stats are just astounding that we know that the large majority of these are lifestyle and avoidable diseases. As you've been saying, they're not infections or things that you can catch. And the fact that you know, they are causing, that 90% of deaths in Australia, like that is something that we really need to change.

Katherine: It does and it sounds morbid but, the good news is, as you said, these are largely preventable. So nearly all chronic disease is preventable and there's definitely some exceptions to this, a rare genetic stuff or whatever, but largely people are dying from diseases that are preventable from lifestyle, diet, looking after themselves emotionally, mentally, spiritually. Yeah.

Steph: Yeah. Full-On. I think it's exciting though, like you said around the, the research at the moment, like there's some stats I know quite well that in 2005 there was an on average about 23 papers a month printed in our top tier journals and last year there was over 450 papers per month. So we've gone from 23 to 450 papers per month in, you know, in just over a decade. So there's so much more research, which I think is phenomenal considering, we know the significance of the gut, but we haven't really known the finer detail until recent years.

Katherine: That's right. And it's really exciting because it's an untapped part of medicine. I met with Professor Rodney Dieter and he has a book called the Human Superorganism, which I read and I was like, I need to talk to this guy because I just nerded out on him completely. I love him. But I went to Cornell University where he's been there for I think about 30 years and he's a professor of immuno toxicology. So his background used to be in looking at the immune system and environmental toxicity and how that affected human health. And he's now moved into the microbiome. And what he's found is that when a baby is born and in their infancy, the way that their microbiome develops will determine how many of these NCDs they're going to end up with later in life. So it's something that is huge and really, we know so much about it. There's a lot that we can do, but in 10,20 years it's going to become a lot more specific and we're going to know even more so as a testing advances and as the treatment options advanced. It's really exciting to see what this is going to do.

Steph: It is, it's mind blowing to think how much further we've got to go considering you know, I guess how pivotal it is and what you said before about the, I guess the scenario with infants for me is, is so irrelevant having a four month old and it's something I think about all the time, but it breaks my heart that we, we don't have this conversation with other mothers or other families, other parents because you would probably see the same thing at your clinic, Katherine, and we do too with people coming to see us that just aren't aware of the significance of the microbiome pre, you know, in utero obviously with what kind

of birth you have and how you look after your child in those early years of life. Like it's, it's absolutely so foundational. It's everything to their long term health.

Katherine:

Absolutely. And you know, what's really interesting Steph, is the, you know, we all know about antibiotics and you know, most people are aware that what we're eating, if we're not eating enough fiber, et cetera, is going to affect the gut microbiome. But there is so much more outside of that. You know, I just wrote an article for Mind, Body, Green the other week about detergents and their effect on the microbiome and that there's research on different drugs and the microbiome. So what will end up happening as this is accepted into mainstream, which may be another 10 or 15 years to be honest. But once it is, they'll, it'll be like, okay, well we're releasing this drug, what is the effect of it on the microbiome? Like most people don't realize that nonsteroidal anti-inflammatory, like ibuprofen actually damage the microbiome. So there's a, and so does the oral contraceptive pills.

So there's a lot of these things that we're just not aware of, you know, and where we're doing that, and it might not be just one on their own, but there's this collective lifestyle that we're running, you know, in this modern day that is damaging our little microbes and for each generation it's damaged more and more. So the one of the best places to come in is pregnant moms, you know, getting them to eat well, building up their microbiome throughout pregnancy so that as that baby comes through and collects that microbiome from the mother, then we can help to strengthen that next generation.

Steph:

Yeah, the ibuprofen conversation is really relevant to me. I was at a first aid course for little ones on the weekend and we sort of got to the pain relief topic and there was this really, you could quite tell, very typical, you know, packet driven advice around how it's safe for everyone in the right dose. And my husband, who was a chiropractor and I both looked at each other and we were almost speechless with that this information is given out to new parents who are, there to do the right thing, to learn first aid, to hopefully never have to use it, but to be prepared in an emergency. And we're still giving this information that these nonsteroidal anti-inflammatories are, "safe for everyone," as long as it's, you know, following the recommended dosage. Yet there's no consideration for the microbiome in that conversation at all.

Katherine:

Yeah. So I could get on a real soapbox about this because it's something I'm really passionate about, but certainly it's not only are they saying that it's safe, it's that they're guilted parents into not using these things. And if you've watched the TV commercials, it's almost like there's this implication that if your child has a fever and you don't give them paracetamol or you don't give them ibuprofen, that you're doing the wrong thing.

So it's, it's really, really frightening. I remember that. I, I think I was on the Today Show a few years ago talking about this. And it's, it's just such a big issue, but it's, it's something that you just might not realize. There's very good evidence

that shows that the more of these, the paracetamol, the Nurofen, that young infants have the higher risk of asthma and allergies they have. Yeah. And there's evidence that strong evidence, so it is something that parents need to be a bit more savvy to and hopefully, you know, through things like your podcast and getting the info out there, we can just help to educate people a bit more so that they can make the right decision for them and their baby.

Steph: You and my husband would have a field day around this conversation. He was fuming. I can still see the steam coming out of his ears and I feel like you're quite the same and very rightly so. Wow.

Katherine: Yeah, it's something so simple and I mean, I guess naturopathically too, fever management is, is a very, it's a very different thing. So for me, largely I think that if a baby has a fever, we need to, that it's body trying to heal and trying to regulate and increasing in body temperature is one of the best and most effective ways for us to actually kill off foreign invaders. And that's for both babies but also adults, you know, so people have the common cold and they feel like crap. So they're going get cold and flu tablets, which then you know, switches off that fever response and then they get even sicker and then they end up on antibiotics. So there is a lot of re-education to be done in that area for sure.

Steph: Wow. Yeah, absolutely. Couldn't agree more. So let's stay on the topic of bubs and little ones and mums. I actually wanted to get your thoughts on the microbiome in relation to infertility and what we might be looking at there in a more, yeah, naturopathic lens.

Katherine: So it's, I'm really excited about this area of research and previously, and I still do, but fertility is a real specialty of mine. So I've worked with a lot of mums to be and pregnant ladies and, and infants. But there's a lot of really interesting research coming out about the microbiome in, in relation to fertility. So it's interesting because what I found is some people's microbiomes just aren't compatible. So this might be where you get a new partner and then you're getting chronic thrush, etc. And it just won't seem to go away. Like there can be this incompatibility between the two. But also I really feel, and this is, I haven't read anything definitive yet, but I feel like the way that the evidence is going is that the health of the microbiome of the mother and the father actually has a really big impact on whether that fertility picture comes out in a positive solution.

So we know that the vaginal microbiome is really important for health. Yeah. And there's a lot of things that can impair that. So your vaginal microbiome is impaired by using tampons, especially non organic tampons which have bleach and all kinds of things in them that we really don't want to put inside of our vaginas, but it's, what's really interesting is that at the top of the vagina, it's anaerobic. And at the bottom of the vagina, the bacteria is aerobic, so if you are pushing a tampon up into the vagina, you're actually putting bacteria from the

bottom of the vagina into the top where it doesn't belong and it's sitting in there, yeah, and because tampons have air in them, it means that where that anaerobic bacteria is that normally thrives in a non oxygenated environment, it has an oxygen source and it can cause all kinds of problems.

The other really interesting thing is that the penis has a microbiome and sperm has a microbiome. The ovary has a microbiome, so it's just blowing my mind, the stuff that we're discovering that we do know that the microbiome is linked to fertility. We do know that microbiome health is linked to endometriosis and PCOS and those type of conditions as well. So in your microbiome as well, there's a sub part of, it's called the estrobolome, so it's basically like the estrogen metabolizing part of the microbiome and the estrobolome, it really, if the, if those estrogen metabolizing bacteria aren't in the right balance and they are not healthy, it means that we can end up with excesses of hormones and problems down the line.

So if we don't have a healthy functioning estrobolome, what that means is that we're at higher risk of estrogen dependent cancers, endometriosis, which can be really largely estrogen driven and other hormonal issues like infertility. So our microbiome is everything when it comes to this, and at the very least we want to fix our microbiomes before we have a baby anyway so that both mom and dad pass on that good bacteria. So there is a lot of really interesting ground-breaking stuff coming up.

Steph:

Absolutely. You know, I think what we don't discuss enough about is the connections that the gut has. You know, we always hear about the gut brain connection, but we're not really talking about other organs or other areas of the body. Whereas we've really got to understand there's a connection to every organ and to every area of the body. There's the gut vagina connection. And there's obviously the gut penis connection. And I think that's really, really important that we look at both sides of the coin because unfortunately we see a lot of women that are really aware of fixing their gut. But I don't see nearly as many men and I just really want to encourage everyone to understand the importance of that, that connection in relation to fertility and that it is something that you can prepare for. I'd love to get your thoughts around, you know, working with couples in your clinic and what experience you've had there Katherine?

Katherine:

Yeah, so we've, we've worked with a lot of people and the gut is a focus and it's for two reasons because of what we're speaking about, Steph with the microbiome, etc. But also ... fertility is a very nutrient dependent process. So to have that healthy baby, you need a healthy egg and sperm to have the healthy egg and sperm, you need a healthy mother and father, right? So if there's not enough nutrition to make that sperm to make sure that the DNA is robust, to actually make that healthy. Then it's not gonna result in a healthy conception. And what can end up happening is you have an increased risk of miscarriage because your deficient in certain nutrients or that the baby's born, but it's

health isn't very robust, you know, and they end up with these health issues very early on. So I think it is really important that you need to make sure you're absorbing all the good things that you're eating if you're trying to get pregnant.

Katherine: So vitamins are great, and we'd certainly use them with our supplement, with our patients to supplement them. But really the foundation should be a healthy organic whole food diet and if you have impaired stomach acid production or low pancreatic enzymes or the microbiomes out or your transit time is out and you're having diarrhea or constipation, et cetera, you simply aren't going to get the same amount of nutrition out of your diet.

So I think it's a really good place to start if people want to have a baby is nutrition and part of nutrition is making sure you're actually absorbing what you're eating. So it's like that old saying, "You are what you eat," your, you actually are what you absorb. And the amount of patients that I've seen over the years that have what, like "The perfect diet," but they're severely nutrient deficient is quite alarming. I'm sure you've probably seen the same thing Steph.

Steph: Yeah. And then it's the argument that we should be getting everything from the food that we eat. But the unfortunate reality is there is, there are so many reasons that we would've potentially developed this increased intestinal permeability, that no matter how well we eat now we've often got a lot of, "Work to do from our past." Like before we knew what we know now or when we were taking antibiotics as a child for our tonsillitis, like I was doing every winter and probably more so. And you know, I think it's just that awareness that it, of course it's the foundation of real food, but there's more to the picture. It's not just assuming that you are absorbing all your nutrients, which is why testing can be so important as well.

Katherine: Yeah. I think that's a really interesting conversation and I get that a bit as well. Well, shouldn't I just be getting everything for my food. Why do we need supplements? And it's almost like it's, it's swinging the other way. So on the one side, our conventional medical model is everything's symptomatic and it's managed, etc. And on the other side it's like, well, we just should be eating from food. But unfortunately we don't live on a deserted island where we're eating organic fish and coconuts and stuff straight from the ground. We have significant amounts of stress more than ever. You know, and this is a huge part of the picture.

And it's interesting because all of these factors, which I normally would have seen as isolated, I now also look at it as a double factor because it impacts the gut. So if you're stressed, your cortisol is high, it actually will damage the microbiome as environmental toxins will. So we're exposed to a swab of toxins every single day. And it's impossible to avoid them all. You can do a pretty good job and get it down to 80-90% of what it is, but you can't change the air that you breathe, which is full of diesel fumes and other particular matter.

Katherine: You know, you can't change the fact that you go into a public restroom and there's a little thing on the wall spraying phthalates at you all the time, you know.

Steph: Those things.

Katherine: Yeah. So, and that's what I say with supplementation. You know, I'm a naturopath. I would consider, I live a really healthy, balanced lifestyle. I take herbs every day pretty much, I take nutrients from time to time and it's because I'm doing a lot of stuff, you know, I know that I'm pushing the envelope a little bit. I know that I have exposures, I know that I'm not a purist and I like to have a glass of wine or a coffee every now and then, you know? So it's, it's looking at it from that context of, do you welcome these things into your life as not something that's necessarily replacing, it's just enhancing it. It's just helping your body to heal. And the difference between using supplements and using herbs is that we're trying to help your body to heal itself rather than provide a symptomatic relief. Most of the time, and I really believe particularly with herbal medicine, is herbs were put on this earth to heal us. I mean, if you look at countries across the world, they all have their own medicine. You know, every continent will have a herb for immunity and a herb for inflammation and a herb for sleep and they all have their own medicines. So these things can be really good adjuncts I think, and certainly with fertility, I'd rather be covered than not because once you are pregnant, baby's going to get the nutrients and you're going to get whatever's left over. So you want to make sure ... so we want to make sure that that supply is really nice and robust.

Steph: I once mentioned on a podcast when I was pregnant that my ferritin literally halved. And I swear that's a stat that everyone's remembered like my clients, my friends, random people that I meet. But you know, you literally are sharing your reserves or your resources with a developing human. And I've never had an iron problem, ever. And if I hadn't have tested and you know, dug a little bit deeper outside these reference ranges that we're subjected to in Australia. It could have been, you know, quite problematic long term and we have to realize, especially when we're talking about pregnancy and fertility, that we sometimes need more support.

You know, I often think about what I'm doing from sunset onwards. Like back in the day when there was no lights and computers and obviously blue light, we would have been winding down and we would have been, you know, probably spending time with our loved ones and eating dinner at a really early hour and not being on emails and social media. And now we have so many more hours in our day, but it can often be our undoing cause it's messing without evolutionary biology.

Katherine: Hmm. Oh that's a huge one as well, isn't it? I think like people, a lot of people don't realize this, there's this misconception that pregnancy's really hard and it's, it's really comes down to your preparation and health. You know, I'm a

really big advocate for doing three to four months of preconception care before you fall pregnant. Obviously that's not always the reality. Accidents happen.

Most of us are accidents. But ... you know, a lot of us, let's be honest, but it's if you have that opportunity and that intention that you're with your partner and you're wanting to get pregnant, you know what is an extra three to four months of looking after yourself. And this is where dad has a really big role to play. And you know, if you look at all of the evidence, you know, if 40% of miscarriage risk is because of sperm, but very rarely is it the male half that's looking at stuff and it's because we have the uterus and we have the periods and we have that, it seems, you know, that all the action is here, but the sperm is really, really an important part of the picture.

Fun fact is that when the sperm enters the egg, we will actually repair the DNA of that sperm to a certain extent, which is pretty phenomenal, I think. But the more damaged the sperm, the harder job that your egg is going to do, have to do that. So, and I know there's going to be people listening that are experiencing infertility just because it affects so many people. So it is looking at it from taking a holistic approach. If you are a healthy human you will have healthy babies. Okay. So it's looking at it, it's not just about the reproductive system, it's not just about looking at that small part of it, it's looking at the gut and looking at your exposures and looking at managing your stress and that kind of thing as well.

Steph: Oh everything. I totally agree. I think three months is really reasonable and I love that you mentioned both parties. I think it should be really something that everyone like it, as a partnership they do together because it can really make a huge difference. And you know for some people if they are on a timeline, I can kind of understand how three months might be annoying, but what if it was then to take you a year or more to fall pregnant or you had to look down the barrel of IVF, which we all know is extremely financially and emotionally stressful. And I think looking at that short term investment per se is such a beautiful way to really set the foundations, which as we've been discussing is so integral to your health and then obviously baby's health and longevity.

Katherine: Yeah, absolutely. And I think, and this is one of my frustrations about working with fertility is, is the IVF culture at the moment, and I know like I've been seeing, I've been working with couples for 12 years and it's been in the last kind of four to five years where it's, there is this kind of, how do I explain this? There are a lot of clinics out there that perhaps aren't managing patients as quite as holistically as they could be.

So I'm seeing patients with recurrent miscarriage being pushed to do IVF for example, and the, with IVF it's the problem is not getting pregnant. When you have recurrent miscarriages, IVF is not going to help that situation. So you do need to be really savvy and get you know, the right advice and make sure that things are being investigated properly and that you're not putting heaps of

money into IVF without them doing the immune testing, doing all the, you know, there's so many factors that can cause fertility and cause an IVF cycle to fail and you just want to make sure that you're not being treated like a number.

That's, that would be my biggest advice with that and to, throughout that process it's really arduous so look after yourself, we work with a lot of patients that have to do IVF or ended up doing IVF and it's fine, but it's again I would go three months preconception for both of you before going into that IVF process because then you know you've built up, you have that nutrition and you have the reserves to hopefully push the needle and make that a success for you.

Steph:

I know, and I'm sure you've heard stories like this too, like where I'm hearing stories of people that are looking at IVF and they haven't even done like basic strategies, like coming off coffee and alcohol and I just think like there's something really missing in that piece of the education, if they are just going straight into a clinic and, and you know, handing over their credit card essentially, because what about these foundations that could potentially avoid that whole process? You know, so working alongside a nutritionist or a naturopath could be so powerful, especially if you know, you're already in a clinic or investigating a clinic who might not offer those more holistic services.

Katherine:

Yeah and it's, it's really interesting because there's so much evidence on fertility and diet. Everything that we do prescriptively as nutritionist is evidence based. Okay. Because you know, we didn't just pull this stuff out of nowhere, but when I was interviewing the experts for The Shift and the doc's that a lot of doctors in the U.S., some of the questions I asked were, "How long does it take for new evidence to become mainstream?" And Dr Tom O'Brien and amongst others actually said that, "It takes around 17 years for new translational research to make it into the mainstream."

So if you think about gut health for instance, for about 10 years we've been, the, I think the term the microbiome was coined like 10 or 15 years ago. So really like it's only now that that acknowledgement is beginning to come and it's really worrying because you have these fertility clinics, there is clear evidence that drinking soft drink decreases fecundity, which is your ability to fall pregnant in men and women.

There's clear evidence for alcohol, there's clear evidence that drinking too much coffee causes miscarriages and it's out there in the public forum, but it's not in the doctors mindset to look at that stuff. We actually did a partnership with a heap of local Brisbane fertility clinics where we made them a handout with, "These are the all the things that you should eat or not eat for fertility," and gave them that resource and they were stoked. They were like, "Oh wow, this is fantastic." But it's not being looked at, and it's as simple as, it can be as simple as giving them a handout. These are the guidelines that you need to be following you know?

Steph: I love that idea. That's so simple. And again, assessing all those foundations, you know, doctors are obviously very well trained, many of them studied decades ago and if it's 17 years for the information to be in front of us, unless they're, you know, fairly newly retrained, then they're not going to be across some of this information and that can be a huge problem if your, if maybe that's your only specialist. So I'm a big believer of having a team, a collaborative approach so that you've got someone to support you with your food and maybe your testing or your herbs. Like you say Katherine, and then you've got the specialist that you know would look at, you know, other blood markers and so on and so forth.

Katherine: Yeah, I completely agree with you. You know, and I know that there's a lot of people who are listening that will be like, well, I can't afford to see a naturopath or I can't do that. And that's when you need to start reading and schooling yourself. You know, reading books, you know, even from the library trying to get up-skilled the Internet has a lot of information. I wouldn't recommend Dr. Googling too crazily, but there are a lot of reputable people. One of the things I look at when you're trying to find a source, is what is the motivation behind the information? You know, is it the company that's selling you the product or is it someone that's actually qualified? And this is where I am really passionate about, you know, qualified health practitioners, sort of leading the way with sharing this information and people really referencing the sources as well.

Steph: Well I think that's a really, really key point because you've absolutely got to be careful where you get your information from. Like I'm having a huge problem with Google myself at the moment because of the censorship that's currently going through because of the partnership with big pharma. So we have to be really, really careful now that where basically, you know, we're, we're being fed information that big pharma wants us to read. So if you're looking for something that's a little bit more holistic, you're probably going to through a search engine like DuckDuckGo. And that's something to be mindful of that we're no longer seeing all the information, it's being filtered right in front of us.

Katherine: Oh, it's scary. I'll tell you, interesting story. I was on ABC radio on the weekend and I was speaking about a toxin. So glyphosate came up and I mentioned that glyphosate has been associated with increased cancer risk and that it's now classed as a probable carcinogen by the IARC, which is kind of underneath the WHO, operated by the WHO and that it affects the microbiome. And I had an email from a woman who said, you know, "I don't know if that's completely accurate, here's a link to this article." So the article was basically slamming the IARC and saying they weren't credible. But the person who wrote the article, when I googled them, as I do as you going down the rabbit hole, who is this person, actually had, is a researcher in oncology but has ties in big tobacco and also in the chemical industry in the U.S. and is on the board of one of the organizations that's doing the media cleanup from the Monsanto press releases.

So I was like, wow, that's really interesting. But this is where the confusion comes because people will read things and they'll go, oh well, but that's not really true. But it's a lot of people don't have the knowledge to really dig that little bit deeper and to have a look at what is the source, is their conflicts of interest. Like who is giving you this information and this is where independent people are really important.

Steph: That is full on. Like I'm not one bit surprised, but I'm so glad you did your research, but not enough of us do. So I think we are, you know, unfortunately influenced by what we see on Facebook or what might have that vested interest. And we read it as gospels. We've got to be more savvy in this day and age when there is so much hidden vested interests, including, you know, research studies that are published in top tier journals.

Katherine: Yeah. And this is where I love podcasts because it means that people can actually go and just listen to conversations of people's opinions and you might not agree with it, but you, the conversations I think are really powerful. Whereas, you know, as you said, it's getting harder and harder online to actually reach really information with all this censorship stuff. And it's really a little bit scary to be honest.

Steph: Yeah. But I think it's also a really simple step. Like what you can do is go into your settings of both your smart phone and your laptop or your computer, and you can change your search engine. So rather than defaulting to always use Google or Yahoo or whatever you've got set up, you can change your settings to be DuckDuckGo. So every time that you're looking to research something, your less likely to be under that censorship condition that I mentioned earlier.

Katherine: That's a really good tip.

Steph: Yeah, it's full on. But something I want everyone to be really aware of.

Katherine: Yeah. Cause I hadn't heard of DuckDuckGo either. So I will check it out for sure.

Steph: Well they've suddenly become the most popular search engine in a matter of weeks, I can tell you that it's only going to continue once the awareness spreads.

Katherine: Good. We need that. We need more and more competition. You know, Google just got really big really quickly and it's, you know, it's a household name. It's a verb.

Steph: Absolutely, yeah.

Katherine: Yeah. We do need to be understanding of where our information is coming from and what are the intention of people for sure.

Steph: Yeah, I've just loved our discussion, I think it's so important that we look at the relationship between gut health and all chronic disease. So what would your takeaway be to someone who's listening that does have one or more chronic diseases or someone in their life that hasn't yet thought of that sort of gut health connection?

Katherine: So the first thing is learn to understand it. If there's one body system that you need to know, it's your gut health. And of course I'm going to say listen to The Shift. But honestly, if you listen to The Shift, you'll get the gist of both, most of what's going on and then you'll know what to look for as well. It's understanding that every time you put something in your mouth, you're either feeding your microbiome or you're killing it, largely. So you need to know what are, what are the things that are going to feed it and what are the things that aren't. And there's so many references and resources to this, but on a very basic, basic sense, if you eat a gluten free, gluten free, dairy free whole food diet, you're probably going to go, okay. And it's looking at, you know, we want to have really good sources of fiber, so, and diversity.

So lots and lots of different fruit and vegetables, lots of different nuts and seeds, you know, avocados, legumes, if that's appropriate for you. You know, potentially some quinoa or of some buckwheat, but your fiber likes to eat, I'm sorry, your bacteria likes to eat fiber and lots of different types of it. And I just think we're not getting the diversity and there's too much mono eating where we're eating the same thing for breakfast, lunch and dinner.

And we need to be really aware to mix it up a bit and look at that. And then the other one is to thinking about what's going on in the environment. You know, are you using dish washing liquid that contains harsh surfactants, which you're consuming off your dishes. Are you exposed to glyphosate, you know, through genetically modified foods or eating wheat or that type of thing. Or potentially even using roundup.

And you know, you may need to look at all these different factors and you're not going to change over night, but if you have the information you can start ticking off the list and really eliminating these things that are harming the gut and putting back what needs to be there to improve the microbiome.

Steph: Love it. So simple, but also so much more incredible information over on The Shift. So I definitely want everyone to listen to all 12 episodes of season one. Katherine, it's been so good to chat with you. I look forward to having you again on the show very soon.

Katherine: Thank you so much. It's been heaps of fun.