



THE FATIGUE SUPER CONFERENCE

Case study: A teenager's journey using psychology and functional medicine

Guest: Helen Lynam, Sara Jackson, Anna Duschinsky

Helen: Welcome to the Fatigue Super Conference. This is one of five nutrition case studies and today we're including psychology as well. With these case studies we aim to discuss the clinical practicalities and the realities of the consultation in therapeutic process. We hope these are going to be useful to practitioners and clients alike.

Throughout these case studies we're sharing functional matrices and test results to help give an idea of the time scales involved, the challenges, and the sensitivities clients have. Things that are rarely touched on in text books or on courses.

Three of the nutrition team have actually been involved contributing to an international case study book out later this year. One of the team is actually the editor. It's called Case Studies in Personalized Medicine ... Nutrition. Sorry, Personalized Nutrition available in December.

So today I'm joined by Sara Jackson and Anna Duschinsky. Anna is from psychology and Sara is from nutrition. And our case is quite interesting today because it's a teenager. We do have young people with the clinic, people of all ages. So it's really good that we're going to be showing this case study.

And particularly with this one the work with psychology and nutrition was very much interweaved. So throughout this, I think, Anna and Sara, you're going to be interjecting and just sharing all the way through, aren't you? Which is going to be great.

So let's start off presenting the client. I'm going to put the functional matrix up and start sharing that on the screen in a second. As that comes up, Sara, perhaps you'd like to start introducing the client taking us through and Anna please just chip in so that we're getting the nutritional and the psychology side both at the same time.

Sara: Absolutely. Thanks for the introduction, Helen.

So we're looking at a teenager here. The client was 14 when we started working together. She had been working with some other people, so our situation is a little bit different because we were looking at what she'd already done and what had worked, what hadn't worked. We started off with looking at her case history and we could see in her case history there was a strong family history of chronic fatigue syndrome. There was also some issues of gluten intolerance. There was some personality traits that maybe, Anna, you might want to interject how her passion...

Anna: Absolutely.

So she comes from a very high achieving family and very driven, very creative. She herself is in a kind of high achieving school as well. So you've got family, you've got peer group, and so the other thing that I would throw into that mix, which we can come to. So sorry not to do this in perfect order, but has also had dyslexia as well.

So I think it's a combination of both specters really from a psych perspective that you've got a teenager who is surrounded by people who are very driven, very successful, and who herself comes from a background of finding that academia very difficult and really quite challenging.

So that combination in itself is already going to set up a certain set of circumstances and-

Helen: So it's like a conflict, isn't it? In a way, and then we often see that pressure or the high achiever, which can be personally driven or externally driven. That's quite a regular trait that we see with our clients, isn't it? But yeah, that clash there with the dyslexia as well just adds compounds to the problem, doesn't it?

Anna: It adds to it. I mean, actually if ... and this is only observational at this point, but certainly throughout our time in clinic we have seen a strong thread of clients and patients who have dyslexia. And there seems to be this sense of how you function in the world feels a little more difficult as well, particularly in a school environment.

The other thing I would add is that if you're dyslexic quite often, what that goes with is a strong kind of creative tendency perhaps. It can also sit alongside things like this, perhaps it doesn't have to but may be. So generally a way of being in the world that may not fit exactly into the norms of how we function as a society, and certainly how we function within our systems at the school system.

Sara: And we've seen some interesting things in the nutrition side. There's some biochemical traits that ring true with dyslexia and with learning difficulties just generally with the population and there's some interesting work going on in the scientific field in this right now. And those things were true, to some extent, in this case.

But what was interesting about this case is that there was a lot of immune history from a very young age that was a very strong, immune issue in terms of there were frequent sinus infections, frequent tonsil infections eventually adding into a tonsillectomy. We can see through lots of other patients in our experience in clinic that, that relates very much to the gut, which also was a big part of this patient's presentation. So she'd had her adenoids removed and then glandular fever at 11 years old, which is something that we see a lot with our clients. And that was really one of the biggest triggers. And this is all set against the background of puberty, which is huge for any teenager, but particularly if you've got this illness as well.

Anna: Yeah, very much so.

Sara : Yeah. So some of the mediators were about stress. And I think, Anna, this was a big part for us, wasn't it? This is where a lot of your work came in.

Anna: Absolutely. I mean, we knew just straight out from looking at what we've been talking about already ... We know that ... I think what you're talking about with the gut as well that, that kind of gut and immune picture from quite young to us also, on our side of the clinic, also points to the fact that, that stress patterning has been there for a long time. And with this particular client the way that she presented her self esteem, if you like, sense of self, and self image was very tied in, I think, in fairly unconscious ways, but very tied in to the fact that she was dyslexic and therefore she was stupid. She had felt, I think, growing up that she was inadequate. She had some teasing, she had felt different as I've said before.

So I think, again, the fact that she had this immune history, this gut history from young I think that's also a stress picture from young as well. That sort of tied in. So it was about working with the history of it and also working, from our perspective, with the fact that because she'd been through things like that, she had a fever, she'd had lots of recurrent tonsillitis, she'd had ... by the time we actually saw her she'd had some quite stressful and acute incidents in terms of the fatigue and perhaps we can talk about those more. And Sara you can interject there as well, but we were dealing with two things. We were dealing with the kind of originating events perhaps, the background emotionally and in terms of stress. You're then dealing with what's happened, and some of it can be quite dramatic. And we see that a lot that there is

almost what we call a secondary anxiety that comes from the illness itself. So there's that facet of it as well and then the kind of ongoing triggers of the fact that there still was pressure from school, she needs to be back, she's 14 going on 15 and thinking about GCSE's.

So you have these various factors there and we definitely, together, needed to look at that and manage and begin to support the client to manage all of those layers. Yeah.

Sara: And there was a lot of frustration as well, wasn't there? There was frustration that they'd been seeking help from various, different avenues and weren't getting anywhere. So there was a lot of frustration and that also gave us another interesting twist to this case that working with a teenager is difficult anyway. We know teenage years are very difficult, but when you're working with somebody who had been trying to get help and from the family's perspective, and she's very lucky to be in a very caring and supportive family who, as anyone would, would do anything to try to improve their child's health.

But it was coming up against that resistance initially because they had explored lots of different routes....

Helen: And isn't that the same for so many people that we see and in some ways, obviously, it doesn't feel like this to her, but quite lucky that she was only 14. We have people here come to us who have been living with chronic fatigue and searching for answers for perhaps 30 years, 40 years and by then they are exhausted and worn down, and emotionally resistant to having any kind of hope because they've been let down so often.

Anna: Absolutely. Yes, from our perspective she's very lucky. I think from her perspective not so much.

Helen: Exactly.

Anna: Absolutely. I don't think-

Helen: Not the right wording.

Anna: No, now. Although, absolutely, it's a different perspective, isn't it? When we're seeing clients that far down the line actually to see someone so early and be able to catch it so quickly and really get in there. And in fact, I can still see that in presenting some of the shifts and changes that the client got, but from our perspective it's great. This is really early, but as you say there was frustration already from her. And she's a teenager. She wants to feel

normal. She wants to be like her friends. She wants to be the same as everyone else around her and quite clearly that point really wasn't the case.

The other piece as well, I talked about it being traumatic. I think they really didn't understand, there was very little understanding at that point as to what was really happening. And I don't think she understood. A lot of my role initially was to begin, if I say, normalize ... obviously this isn't normal, but to begin to help her to understand, to give a framework for what was happening and that in itself made a big difference, that she had someone to talk to. And if anyone knows our history in the clinic a lot of, certainly on the psych side and a lot of us have been through ourselves come out the other end. So from her perspective, I think, to have someone who understood it from the inside out as well and could really support her to understand what was happening was huge, and for the family as well.

I think that piece, Sara if you agree, I think they've appreciated the fact that we've been there to support and hold their hands through this and be able to give some clarity, some map to what's happening at the different points.

Sara: So I think that's part of our unique approach as a clinic that we do work so closely together. And you and I particularly on this case, we've worked so closely, so that we've known what we were each doing at each step of the way, which is also very important. We've got to pace our treatment according to where the client might be on psych side as well as the nutrition side.

The fact that a lot of her issues stemmed back to anxiety and to low mood and low self esteem meant that we were able to tackle it from that double pronged functional approach that we could look at the anxiety and how that was related to not only the nervous system, but the gut health and looking back at the matrix that there were issues going on. Her presentation initially was a lot of digestive issues. There was a lot of-

Helen: I was going to say, lets get back into the matrix, we sort of rattle our way around that.

Sara: So we've looked at the triggering events. We've looked at some of the issues that were maintaining the symptoms, and then if we look at her physiology, she was presenting with some digestive issues as it's common with a lot of our clients, there was suspected dysbiosis, there was constipation, there was abdominal pains, bloating, nausea, cravings. And I guess some of those symptoms gave us a bit of a framework with where to start initially.

Anna, you kind of helped to inform what would be the first stem.

And I think one of the other interview with Andrea Nakayama shows the importance of setting the soil and making sure that we're looking at everything from a foundational point of view, which is where we started, wasn't it? I was looking at her blood sugar balance, I was looking at her digestion. Probably because she's young and because her family was so on board and they really did grasp everything, we managed to get some improvements pretty quickly when we looked at those little foundation levels initially.

Anna: And it's interesting, you're talking about foundation. So from our perspective the foundations were how is she ... First of, as I said that, building rapport. And one thing that I should throw in here is that actually on our side it's rare that we work with someone this young, simply because a lot of the toolkit, the way that we work is geared for an adult. Even at 14 and a very emotionally intelligent 14 year old at that, there are big differences the way that ... what you can expect of a 14 year old versus what you can expect of a 21 up year old, and what you can expect in terms of what they're going to pick up, and the tools that they're going to take home and use consistently. Even the kind of emotional understanding is still very different from 14 to what we define as adult.

So we were kind of working with those limitations as well, and so the structure, the basics, the foundations to us was number one, for her to understand what was happening, I think, was huge. For her to get a sense and be able to get encouragement, and some reassurance and confidence and security in where she was, and the shift in change recovery was possible as well.

The second piece, I think, for our perspective foundationally, was actually around what she was doing day to day, the way that she was living and the kind of stress that she was putting on herself, but also just practical lifestyle factors. So things like how she was managing her activity levels, and the amount of pressure in terms of workload. She was still trying to keep up with work, she was still trying to ... very aiming to get back to school as soon as possible. And all of that we really had to manage quite carefully in those early days, didn't we Sara? To give her the chance to actually stop and get some real rest and recovery time.

The other thing that she wasn't really doing was resting. Sleep was an issue, she wasn't getting great rest there.

Helen: It's interesting because as it says on here is she presented exhausted and often housebound. So she wasn't attending school when she started with us, but yet you say, despite the fact that you would think in theory she was resting. Actually she was desperately trying to get back to school, she was trying to keep up with school work.

Anna: Definitely.

Sara: That was a big mediator, wasn't it?

Anna: It was a big factor and I think in terms of real rest, as you say, sleep was off and her sense of resting was watching TV, which as we know, is not the same level of rest.

Helen: Huge amount of energy there.

Anna: Exactly. So we really had to work hard together to get some basics in place for her. Yeah.

Sara: And that's a big thing working with a teenager, isn't it? We do come up against that a lot that the stimulation, the screen time, just looking at it from not just the nutritional point of view, but a lifestyle thing. That's so huge when you're looking at teenagers and what time they're going to sleep. Of course, their sleep is going to be impacted if they're watching their screens till late in the evening.

Helen: So anything else on the functional matrix that you want to share, **Sara?**

Sara: I think she was having panic attacks. I mean, her symptoms initially were really quite scary. So at that point that you just said, Anna, about trying to explain, sometimes she was collapsed and she'd literally be sitting on a chair and she'd fall off a chair out in public places, which is terrifying for her and for her family around her.

So some of those things ... we're looking for the drivers and we could relate that and improve that when we looked at her blood sugar balancing and that's why I sort of started off with some testing really. And it was also to overcome that teenage issue of ... It's difficult to get a teenager to take her supplements, it's difficult to get them on board and to understand why it's important. They're friends aren't doing it, why is it important for them to do it?

Helen: Yeah.

Sara: And that's where testing came in. It was that it was an important way of looking at black and white. This is going on in your body and we need to work from here and address it, which is what we kind of did then. That was the next step, wasn't it?

Anna: It was. And from our perspective as well, I think the kind of things that we were trying to get her to do t let go of the screens, to get some good

rest, to begin to get some relaxation and meditation in there, and this client in particular was very resistant to that idea, a bit too wacky.

So again, the testing was really supportive on that side because I think it was really at the point that she could see that in black and white, Sara, that she went, "Oh, okay. There is clear evidence here that my nervous system is not where it should be." But stress is a massive factor and gotten her nervous system health right now. And actually if there's something that I can do about that, then I should be.

Helen: It's a good use of testing, isn't it? We're very cautious with testing, we're very aware that so many of our clients financially struggle and so testing is not an option at all. But sometimes it can be A, because it's going to inform us as to what we're going to do and we can get much more specific much quicker with some test results. But for some people it's very motivating. They've had so many blood tests, they've had so much done with their GP and nothing has perhaps come forward as being an answer. Then suddenly they start to get some test results, they do, "Okay. This might not be the full answer, but it's starting to give us some information that things are not right at the level that they've not seen before."

So should we look at the adrenal? Is that where you started?

Sara: Yeah. Yeah.

Helen: So let me get-

Sara: So the adrenal test was an important one because it gives us a sort of clinical snapshot of the hormone function and also her immune function, which was important with this case because it does relate to the immune as well.

So briefly kind of going over the results we can see that she had a good response in the morning actually and her graph did go down as it should do, but it was after lunch time when possibly she'd used all her energy. She'd used it up that morning because, as you say Anna, she was still ... although she wasn't attending school, she was thinking about school and she was sneaking in some work. And by that afternoon point she'd expended her energy. There was a cortisol spike there, which is related to her stress. And we can see that that remained elevated in the afternoon and the evening and that was a factor with the stressful pitch. She was wired, she had that whole sort of typical pitch that we say of being very wired, and it was hard for her to calm herself down. And that was why the lifestyle was so effective with her.

So as a result of this ... Also, another thing to point out was her DHEA levels were really low. So her cortisol being the wear and tear stressful, the DHEA being more, the make and repair was very low. And that's also implicated in hormones as well, which we know was a bit of a factor here.

Helen: If it's in reference range, right? But it's right at the low end of the reference range.

Sara: Yeah. For a teenager her age we probably want to see it a bit higher, don't we?

Helen: Yeah, absolutely.

Sara: So it gave us a few clues and it gave us a good starting point from which to bring in some effective supplements. So we managed to find some things that helped her alongside your work, Anna, it gave you a good starting point too, didn't it?

Anna: Absolutely.

So you know, it reinforced the case if you like for everything that we were her trying to support her to do to begin to rest, to begin to take those steps, to begin to manage her energy, take relaxation, introduce meditation, a bit of yoga and bit by bit she did that. And definitely as those two things were contentent we began to see some good changes. And I think that was really supportive obviously as well that she could see it was working. In fact, there was one point slightly later on where she consistently really did use the meditation, yoga, and she really did it. She kind of committed and for a period of a couple of months she really didn't slip, if you like, and she really saw significant shifts in that timeframe, which was a real eye opener for her as well, I think. Yeah.

Helen: I think this helps stop all of this internal chatter that it sounds like she had.

Anna: Right. Doing the meditation is just literally to calm down the nervous system. We know that her mind was very overactive. She's very creative. She said to me the first couple of times that we met actually, "I don't like not thinking. I don't like not doing anything. I like to have about seven things happening. I like to have my phone and the music on and something on on the background. And then I like to be thinking and working." That was just kind of ... It was really quite a wired space to exist from.

So beginning to teach her how to shift down a few gears out of that was essential really because clearly her whole system needed to get to a point

where it could rest more efficiently, more effectively and that way of being in the world wasn't allowing for that.

So it is quite significant. It's really teaching someone how to change who and how they're being in the world or at least experience a different version of themselves, which is why I think initially there was going to be quite a lot of resistance to it. But bit by bit there was more acceptance, and the testing emphatically helped as did actually just her seeing some results, I think. That made a big difference.

Helen: I was just going to say, was there any specific supplements that you did? Anything you did on the nutrition side with those results?

Sara: Yeah. The lemon balm were really useful for her. We wanted to go gentle given her age, so we wanted to go gentle and she was finding that was really useful for her. We also put in some sleep support, and that made a huge difference. The turning point was when she wasn't lying in bed for two hours, three hours trying to sleep. Of course her body was benefiting from that extra time of literally just having slept.

And also this sort of wired state was presenting itself in physical symptoms. She was extremely thirsty over time, which we do see with quite a lot of our patients and she could stay once we started to document those things. She could actually feel the physical difference, which was really helpful.

But we also looked at another test called the NutrEval Test, and that one is a really amazing one when you can do it of course. It comes back to budget as well. This one's quite expensive to do, but it gave us a really good advanced analysis to identify her precise nutritional needs. And because she'd been working with people in the past and she'd taken various, different supplements this was part of my challenge with her was to explain that actually perhaps you weren't taking the best supplements for you. Of course, a lot of our clients go online and they can see there's thousands of things that can help support chronic fatigue, ME, fibromyalgia, but it's all about working with the individual and finding what is right for that particular person.

And we could've done it without the use of the test, which we do in a lot of cases, but doing the test just allowed us to be more precise and probably a bit quicker in terms of what we could do and how quickly she began to feel results.

And I do remember actually as soon as she started a particular supplement I had an email from her family with her family in tears because it was the first day she'd woken up without constant headaches and she

actually felt maybe normal for the first time in months and months, and months. So we could see that there was such a screaming need for certain nutrients that weren't-

Helen: And also I think it was just a standard multi, wasn't it? Well, it wasn't a standard multi, it was a high dose multi?

Sara: Exactly.

Helen: Vitamin and mineral, but the kind of thing that we would often use, but that was just starting to get a whole level of nutrients in, in a balanced way that she hadn't had before.

Sara: Yeah, exactly. I think that was ... the point was looking at what she was taking originally, streamlining it, and making it much more individualized for her.

Helen: So this is a first page of the results, which actually is a strange place in a way for the results to start, because it's the results, isn't it? It's what the supplements would potentially be or where the lack of the nutrients are based on the tests, but actually the details are on the next page. I'll make sure I show those.

There's a huge amount.

Sara: And it'll probably take us about six hours to go through each point, but the main issue is, that we could take from it, whether she had a really high need for B-vitamins, which of course implicated with energy production and that was one of her biggest issues. Also B6, which was related to neuro transmitted production, and that was part of your side too. Wasn't it, Anna? Because this was helpful for my point of view, but it was also validating your work and informing you.

Anna: Absolutely.

It really pointed to everything we've been saying already, but the nervous system stuff being really up there. And again, I think this was a real ... being able to sit there with her and was really significant and her beginning to recognize.

The one thing, I think, from our perspective is that ... what it shows is that she can take action that will change some of this, and that's really interesting. So obviously supplementation is huge in the beginning to support the body physically to repair. And from the stress perspective that actually it was very much going to be down to what she could do. She could take some

control of it. She could change the way that she was functioning and the states of her thinking. She could introduce relaxation and those kinds of things, and it would genuinely begin to make an impact on some of these results.

And that for her, because she's quite scientific I think in the way that she thinks about it, she's very pragmatic, that was quite compelling. So yes, absolutely. Again, these results were super helpful. And as you say, we don't always have them. It was particularly useful to have them and fitted very well into the client's personality type as well.

Sara: Yeah, and it gave us some really valuable information about her gut, and about her digestion, which of course is one of those foundation levels going back to Andrea Nakayama's functional approach, which is exactly what we adopt in our practice. It's going back to looking at where were some issues here? Why was she having issues around protein digestion, which we can see with some of these ... how this test works is it's kind of like a traffic light system. So anything that's in the red means there's a significant imbalance here.

So we're looking at some of the malabsorption markers and the bacterial dysbiosis markers, which all relate and confirmed the symptoms she was experiencing. And by being able to isolate where those malfunctions were it gives us a much better amount of information that we could then be more bespoke with the supplements because probiotics are not probiotics. There's a million different strains and this allows us to give a much more individualized approach to all of the supplementation. You know? And we were looking at here a lot of bacteria overgrowth, that was a very ... this ll indicates a very strong needs for a particular probiotics that we ... I think it's fair to say, **Helen**, as a clinic we're really, really up to date with our education and with what's going on in the medical and scientific field with gut health. So we can draw on all that experience we have to really interpret these results into a really good, strong supplementation program.

There were some interesting things here about some heavy metals as well. So there was through the energy metabolism, she had a lot of isocitric acid, which can sometimes be involved with aluminum blockages and we know from a mitochondrial point of view that there can be heavy metals that could perhaps be blocking your access to the energy that your body might be making. So this gave us a few key areas here along with ... over here on the toxin and detoxification markers. There was some high levels and these relate to plastics and BPA levels, and chemicals that are in our everyday life like new furniture, rubber, carpets, these kind of things. And when you're someone

that has chronic fatigue you're more sensitive to these chemicals. And we can see here that they were present in quite high numbers. So what we

Helen: And we'll touch on this in another recording, another case study of just how exposed we are to toxins these days. Everything we put on our skin, the air we breathe. And like you say, the new furniture, the new carpets, a new car, air fresheners. Things that thankfully are now starting to be discussed through the media, but for a long time we just haven't thought about it. But there are chemicals our bodies are not used to processing and it gets to overwhelmed, doesn't it? We can do a few of these things, but when we're constantly bombarded, these are the kind of results you start to see where she's struggling to detox the exposure she's got.

Sara: Yeah. I guess she's got a heavy burden on her liver. In general when your body is so overloaded with everything else that's coming at her from all these other systems because of course it's the functional medicine approach, so we're looking at all the systems that are involved in her symptoms.

Anna: Yeah. And it's interesting, isn't it? Years ago we used to talk about those people who would get chronic fatigue as being the canaries down the mineshaft, the ones who are more sensitive intrinsically as well. So maybe it's not necessarily just that, the chronic fatigue or the state because of the viruses she's become more sensitive, but actually if we flip it there are probably certain parts of the population who are more sensitive and less able to detox those things.

And on the psych side we would mirror it that actually a lot of times what you see in terms of the personality profile, emotional profile of people who get CFS tends to be people who have high emotional sensitivity as well, who are ... And I would say that that was true of this client. She is very emotionally sensitive and very emotionally intelligent probably beyond her years, very aware of other people's emotions, very and hyper aware I would think. But it's an interesting mirror, I always think that concept of sensitivity as the organism of the human, and from day one maybe.

Helen: Yeah.

Sara: Yeah, and we were seeing it being presented in so many, different levels. But from a more literal interpretation of the test. It just kept confirming that we needed more B-vitamins, we needed more magnesium, we needed particular elements to help boost her energy just to get her out of that fatigue slump when she was collapsing. As you're saying, she was fainting, there was a lot of dizziness. So those things began to improve when we're looking at the blood sugar balancing and looking at dietary measures that we do look at for most people.

But there was ... Which page are we at now? Yeah, there was quite a strong need for Omega-3. If we go down to the cardiovascular risk, she was pretty low. We prefer to see that at sort of between eight there. And she was at about five. And that's another important supplement that we look at what our foundation level is and Omega 3 is a huge link when there's lots of different reasons. But that relates also to the anxiety and the mood, and the mental health. Doesn't it, Anna? Omega is a huge link for it.

Anna: Yeah, absolutely. There's been a lot of research in that, hasn't it? The links between those two things. So again, given that she's presenting with high anxiety, high stress, and panic attacks, those kind of symptoms and very wired. Then again, yeah absolutely. That makes perfect sense if you look at the picture that this test presents in terms of the Omega's as well. Yeah.

Helen: Yeah. And also some high Omega-6, so that eicosadienoic acid is an inflammatory association, which would tie in with the whole picture as well, wouldn't it? And it's always important to get Omega-3 and Omega-6 imbalance, so if you've got too much of one Omega-6 the chances are you've not got enough of the other Omega-3s and we can see that here.

Sara: Yeah. It was important, so that helps us inform our supplementation and what was the best way forward and allowed us to make tweaks to her diet, which ultimately helped improve her symptoms.

There was one other point here, the potassium, which was a bit low and palpitations were part of our initial presentation. They were quite significant, so that possibly might've been another contributor factor there.

So to the test we then were able to really streamline her supplements, make sure that she was meeting all of her needs that the test clearly demonstrated she really, really needed. And we did start to see some pretty good improvements. So it can take time before the supplements level builds up in the body, and it's not a magic cure, but unfortunately there is no taking Omega-3s and suddenly the symptoms all improve. But luckily in her case we did see some pretty quick symptom improvements, but of course she's not fully recovered, even now. So it takes time.

Anna: But it was quick. You said from experience, long years working alongside you, this was ... She responded really well and quite quickly. And certainly some of those key symptoms as you said, Sara, shifted really quite quickly hence the crying on the phone to you. So there was some really positive changes really quite quickly and that itself, maybe we can go on from that, that in itself brought its own issues because she began to improve quite quickly and of course as would be the case with any teenager and any family of any teenager, they wanted to get back to normal. So what that meant was a

gradual phased return to school and that in itself ... So in a way she was a slight victim of her own success in terms of how well...

Helen: We can mirror this with ... Or we can sort of mirror or parallel this with adults who are off work and wanting to get back to work. I think a lot of what she went through is much the same as an adult would be as well in this kind case. And so it's always getting me nervous when people make rapid progress because obviously you can't get well too soon, you can never get well soon enough, but at the same time sometimes certain lessons aren't learned along the way, are they? Things aren't embedded when you get that massive response.

Anna: And that's very much a thing. Sara, you can chip in, but I think that's kind of what we saw that she went back. And because she was seemingly doing so well, she ended up going back really quite quickly and-

Sara: Back to school you mean?

Anna: Back to school. Sorry. Yeah, absolutely. Back into a school environment, back into normal I suppose. That brought its own challenges because actually it was too much too soon. And we kind of saw that slightly down the line, didn't we Sara?

Sara: Yeah, and-

Helen: How long was it before she went back to school? How long was it from her first seeing you, these test results, her work with both of you before going back for her first hour of school?

Sara: Three months? Three or four months would you say Anna?

Anna: I would say even less. Yeah. I think for her first hour even less. And actually what was interesting was how quickly that rounds up. So within another month that was not an hour, that was a day, that was ... We started on half day. So that really quickly did shift and she was coping initially. And as you say, Helen, I think some of those lessons weren't quite embedded.

The other thing that I think was key was that as we see so often in workplace, schools the same the understanding of this illness and this condition is just not there to the degree that it needs to be. And the school were very willing, I think, and very open to support her and didn't really understand. So what we were seeing is that the top level would say, "Yes, great. We'll take it easy," but then the teachers down the line were giving her all the catch up work. And she was trying to do it all, or were giving her the exams and the tests that she's missed.

So actually one of the things, as we'll come to shortly, we really had to work on was that communication across the board across every level between the family and the school, and every aspect of the school, every teacher in that school, every support system in that school so that they really began to understand what she needed and we in the end had to put some boundaries around some of this, didn't we Sara?

Sara: Well, that was a whole challenge in itself, working with someone who was feeling that much better and trying to give the warning but without making someone live in fear because of course that's not what we want either.

Helen: It's really hard. You don't want to be sort of putting doubt into someone's mind, you want to be encouraging their enthusiasm, but at the same time how can you caution it and sometimes it's difficult, isn't it?

Sara: The pacing was tricky, definitely.

Anna: And the proof was kind of in the pudding, wasn't it? Because actually give it a few months and what happened was with [inaudible 00:40:34] with us constantly kind of dragging her back as much as we could we began to get, she began to get far more symptomatic again, didn't she?

Sara: Well, the immune picture never went away. That was such a big part of her presentation and as soon as she experienced a trigger whether it'd be stress about an exam or whatever she was picking up, viruses, she was picking up infections all the time. She went from getting something just about every two weeks, I think ... So we round up the immune support. She literally was doing everything we did, a viral protocol with coriolus, which is a really amazing mycology mushroom that we use in clinic. And we were getting some results, but the fact that she was still putting herself back in that vulnerable situation and possibly doing too much and not being careful, as careful as she should've been with the pacing meant that we were seeing her coming down with just about everything constantly.

Anna: Absolutely. And I think that became very disheartening for her, obviously, and for her family as well. And quite anxiety creating as well. So at that point we really did have to step in. We communicated directly with the school, obviously via the family and with the family about what she needed to do. We set some boundaries around her time in school and time out of school, boundaries around the work. In fact, essentially that she was not to do homework and things outside of school, that was rest time. A lot of that. And even to the point to actually, I think, as we went that she needed to drop one of her GCHC subjects as well, and we communicated and worked with her and the family. Obviously this was not top of her list of things to do, not massively

popular of a decision for her, but it freed some space. And actually that was really key I think. The combination of supporting on the viral side, Sara as you're saying, really ramping up here need for rest and relaxation.

And this is the point where she really began to buy into the need for relaxation. She got very into meditation and albeit she still has a slightly love hate relationship with it today, but the-

Helen: But I would imagine to a certain extent when she went back to school she didn't have time to do some of the things that she'd done to get herself as well as she had got. She couldn't do them to keep herself well.

Anna: Exactly. And it was just ... it really was too much too soon I think. And as we've been saying, because it seemed like she was doing so well the tendency was to ramp that up and up. So we really had to put the reins on and drag that back. When we did that though the results were there again. So the combination of working on psychology and nutrition really supporting her to manage her energy, manage her workload, and taking off a lot of the external stress and made a big difference actually, didn't it?

Sara: And also helping the family understand that a small, little glitch didn't mean that she was going to have a complete relapse of her symptoms. And I think every time she got a call or every time she started to get the swollen glands or the headaches that were part of her initial presentation everyone suddenly panicked, "Oh my god, is it happening again?" And it was about us really guiding them and helping them understand the nature of the illness. And I think that was quite important. That was a big part of our role in this...

Helen: ... that Alex is doing these sessions for carers and about carers, which is going to be great I think because that is a whole area where attention is needed and the carers often get forgotten because it's one thing being in the middle of it, it's another thing watching it.

Anna: It absolutely is. And also, we forget the impact that the people around us have on the patient as well. So as you say it becomes a little bit of a vicious cycle where perhaps it's scary for the patient to have some of those symptoms again, but then if the people around them are also panicking managing all of it.

Helen: Yeah. I always think though that sometimes these symptoms can ... I start to talk about them as friends because they become early warning signals. Now clearly all of the time there are sore throats and swollen glands, or repeat infections. Things aren't right. She's not as well as she could be or should be, but if you start to say, "Well, okay. I must've overdone it. I've got

my tired, sore throat back. I need to rest, I need to pull back." And the idea is if she gets better our hope is, those symptoms they won't stop over night, but they'll happen less and less often and they won't be as severe. But each time they do occur, it's just like, "Okay. I've overdone it. What have I done? What can I reflect on? I need to rest. What can I cut out?"

Anna: And that's one thing I think she's done very well particularly given her age, which is not obvious at that age. I think she has taken on board and understood the picture of it, if you like, and begun to take on board the fact that when this happens it's an indication that she needs to step back. In fact, to the point where, if we fast forward a little bit to now, she's even back doing some sports at school. And she said to me, and I was so proud of her, she said to me, "But if I have any tiredness or anything going on I just don't do anything at all. I'll just go and rest [inaudible 00:45:50]." She really is listening in a way that she absolutely wasn't and wasn't able to, I think. So there's been a massive shift I think. Yeah.

Helen: But I think pacing is probably one of the most difficult things for our clients to pick up, being able to judge what you can do and what you can't do. I think once you've mastered that then the way is almost set clear for recovery, but until you can master that, all of the dietary changes, all of the supplements, all of the meditation in the world actually aren't going to get you there. It's a core piece of the jigsaw, isn't it?

Anna: It's a core piece and it's a lot about acceptance. It's a lot about accepting where you are before you can move on, that emotionally is quite a big thing for a lot of people. We also, on the psych side then go and complicate this all slightly by saying that it often isn't just as simple as if you're getting a symptom that it means you're just doing too much. Sometimes it's also what you're doing or the way that you're doing it. So there's a level of complexity, but you're quite right Helen. It is one of the biggest pieces to grasp.

And actually one thing that I think ... It's something that's going to continue to be something that we work with her, I think, is something that at least to this degree I think she has begun to grasp or has grasped.

Helen: Well, it's not an easy thing to do. We've got our documents on pacing, we talk about it and people think that it's really straightforward. It's not. It's a real ... yes, there's a science to it, but it's a real art form.

Sara: It's so individual. It really is so individual to everyone's experience. Everyone lives differently. It's so individual.

Helen: Yeah. So Sara, I know you did a stool analysis with her, didn't you? At what stage did you do that?

Sara: So that was pretty much at this stage where she was getting these recurrent infections and illnesses because of course we know that the gut is integral to our immune health with 80% of the immune system sitting inside the gut. So it was really important that we had a good look in there.

And also, the other part of this was typical teenage challenges. Once she started going back to school of course she wanted to make lunch with her friends and sticking to a gluten free diet was tricky and having low dairy, which were working for her. She was doing much better reducing those two elements from her diet. They began to creep in a little bit. And it's difficult from the family's point of view. You've got a teenager, you don't want them to be hugely restricted for lots of different reasons, but in her case we saw that gluten was a big factor here. And these test results were really important in that because we could see here she had really high antigliadin IGA, which confirmed that gluten is really bad news for her and it's almost that we could correlate when she'd eaten gluten she was getting physical symptoms. So this helped to confirm the case that actually she did need to be careful and if she did want to carry ongoing the right direction that gluten had to stay out.

And the other key thing that the test showed up was the secretory IGA, which is the first line of defence with the immune system and we can see hers was incredibly low. So this gave another part of the picture that allowed us to work on the gut healing, which we'd been doing the whole way and actually because we'd been working with gut healing that six months before we did this test a lot of the other test came back really good, which was also motivation for her.

Helen: I think it's worth sharing both, isn't it? Yeah, because that first page completely clear there's nothing going on because of the work you'd already done.

Sara: Yeah, would've been a different story if we did this initially because we saw that from the other test. There were some malabsorption, there were some digestion markers there, issues of dysbiosis that were missing from this test. So it showed that the work we'd done was good and had worked, and that helped her buy into it. But this gave us some more information yet again that we could look at her probiotics and going on the work of Jason Hawrelak, who's an amazing person working in this field, we could individualize the strains of probiotics that she's been taking. We've been constantly changing the probiotics so that we can build different areas of her immune system.

I'll just say, fast forwarding to now, she's gone from having infections every two weeks to ... I think she's had three incidents so far this year, literally something maybe every two or three months, which shows that what we've done has had a massive impact and-

Anna: And far more normal as well. So she's had a day off school or she's had a bit of a bug, but then the rest of the family has had it, and she's had it for the same kind of timeframe. So far, far more normal than it was-

Helen: Because that's interesting as well, isn't it? When you've been so ill and you've had so many infections you get another one and you think, "Oh my goodness, this is it." And actually we all get them. We all have colds. It's quite normal. And it's great when someone else in the family's got one and you can compare and realize, yeah it's just the same timeframe. I'm there. I'm making real progress.

Sara: Well, she's actually had some incidents where other people in the family or her school friends have gotten things and she hasn't got them. So it's been massive. That's really a huge achievement for her and to see how far she's come in this journey.

Helen: Yeah.

Anna: Yeah. Definitely.

Helen: So here we are. Were a year in, which isn't necessarily that long in a recovery program that we might be with someone. She sounds like she's come an awfully long way though. Is there still some work to do, would you say though?

Sara: Yeah, yeah. From my point of view, yes. We still need to keep building up these resource issues that we still ... And actually we're at the point now where I've suggested she's got some exams coming up, so we don't want to add to the stress of that. We're doing everything we can to support her stress and her nervous system through the exams. But once we're over the back of that then we are going to look at retesting. And luckily they're in a position that they can do that and that's an important part of it, the testing process. Of course, we've seen the results, the before picture. We want to see the after picture and to see how far we've come and is there anything else here that we really need to work on and can I reduce the supplements because of course we don't want people taking huge numbers of supplements ongoing. That's really important that we reassess that regularly so that we can hopefully reduce the supplements and we can see it in her symptoms but it's good to see in terms of her biochemistry.

And of course we look at that with blood tests as well. It's not just these functional tests that give us clues about that. The blood tests with your GP also help to guide in terms of what supplementation is still needed, but that's sort of where we're going now is hopefully we'll have some of the good news when we do come around to retesting.

Helen: Yeah. I mean, it's interesting what you've talked there about the nutritional point of view, about how fitting it into life there are times where we might sort of step back a little bit, exam times a classic one. And I guess on the psychology side, Anna, that's exactly the same because we're working with people who are still in the real world they still have a life. I often liken it to trying to repair a Formula 1 car that is out on the race track, they haven't come off, they're not in the pit. They're in the real world living and it's hard sometimes.

Anna: That's the challenge actually. You say what's the challenge going forward? As I said, there's been a great level of increased awareness. And in a way with the psychology there is a kind of deepening process over time because certainly with someone that age it's taken time to build trust, build rapport and all of those essential factors.

So actually we're at a point now where ... And this is quite an interesting piece from nutrition as well, but sometimes the initial stage, as we said, can be quite acute and quite traumatic. Most clients disconnect from that emotionally and for that timeframe. And it's only often when they come out, when they begin to be a lot more resourceful, a lot better that they often have a kind of ... sometimes flashbacks, actual flashbacks, but begin to kind of process what's happening or what happened at that timeframe.

And that's what's happening with this client at this point in time. Now, from our perspective that's good, that shows that she's moved through it, and that she's out the other side to a degree, not 100%, but certainly significantly. And that bring its own challenges. So at the moment she's processing some of now, "Oh my goodness, this happened to me" and that was very dramatic and actually it's been quite traumatic. And now having to work that through at the same time, as you say is also dealing with being out on the racetrack as well and all the challenges that brings being a teenager, what that looks like means in its significance and relatively challenging for most people. And of course she's got exams and a peer group who are pressurizing themselves. So she's got a lot on her plate at the moment in terms of what she needs to deal with going forward and to sustain where she's at, and to continue to recover.

So that's really where we are with her is to continue to support her on all of those levels.

Helen: Yeah, because ultimately we don't want to be there on a regular basis, we don't want her on supplements. We want her completely self sufficient and in the nicest possible way where we get people well, we don't want to see them again, do we? We like the old email to sort of give us an update on how they're doing, but our aim is to get people properly well, sustained well and in a way that they can keep themselves well, which that

takes time as well. We don't just get people well enough. We're not satisfied with well enough. Sometimes that's enough with some people, but we want to get people proper well, don't we?

Sara: Yeah.

Anna: And one thing I was saying to Sara just the other day was actually that this will be a positive sort of perpetuation cycle. The more resourceful she is, the better she deals with things, the less stressed she gets about exams, actually what that does is build her confidence that she can do all of these things without having to be a big deal and that the tools and resources that she has work. And actually what that sets up is this kind of virtual cycle.

So that's what we're aiming for and I've seen it happening and I think it's just supporting it a little further and particularly through a few aspects that are going on at the moment and I believe that will take her forward. Yeah. Absolutely.

Helen: And set her up for life. So much healthier than any of her colleagues.

Anna: Well, how great to learn it so young. Absolutely. Particularly on both sides to learn what it takes to be truly, sustainably well, psychologically, emotionally, physiologically. I think that's an amazing gift if she occasionally can see it that way, yeah.

Sara: And to look and see what impact the diet and everything ... it all fits together. She can take all those tools with her.

Anna: Yeah.

Helen: Yeah. Anything else that we've not covered? Hopefully we've given people a really good picture of her journey and her story.

Anna: The only thing I would add is how important it has been to work together with her, I think. And just how significant that correlation has been to be able to, at each stage, check back in with each other and say, "Okay, this is happening. What do we need to do about it from every angle?" And we've come up each point really with a multi pronged approach, and my sense is that it has worked all the better for her and for that being the case.

Helen: Yeah. We do that quite a bit. Some people can't afford it or they don't have the emotional space or the energy to do this in parallel as you've done it. And we have another case study where we got nutrition and psychology working at the same times. So doing both, but they're individual

times doing them sort of uniquely as opposed to this way, which was very knitted together. But it is great, isn't it, when clients have the capacity to do both? Because we do see people on the whole probably make better progress and faster progress by bringing the two together.

Anna: As you said, I think where it's possible, absolutely yeah.

Sara: It's been an interesting case.

Helen: Well thank you so much. Thank you for the work that you've done and also thank you for sharing it. I hope that everyone who has been watching and listening has enjoyed it. Thank you.