

Examine.com

Research Digest

Exclusive Sneak Peek

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Table of Contents

Can probiotics be used to treat multiple sclerosis?

The main supplement that's been linked to helping MS is vitamin D. This probiotic trial could help inform whether gut microbiome approaches should be equally emphasized.

INTERVIEW: Julianne Taylor

Julianne is a New Zealand based nutritionist with a particular interest in autoimmune disease. Here, we pick her brain on what she's found about the diet-disease connection.

A second look at protein quantity after exercise

Do muscular people require more protein after lifting? How much protein is needed to optimize muscle protein synthesis after a workout? This trial addressed both questions.

New data on vitamin D safety

Vitamin D supplementation would appear to have a pristine safety record, at least at first glance. This meta-analysis takes another look at that issue, specifically at potential effects on excessive calcium levels.

INTERVIEW:

Julianne Taylor



Julianne first trained as a registered general and obstetric nurse. She then retrained as a furniture designer, followed by a post-graduate diploma in design for disability in London. Back in NZ in the 1990's Julianne designed, made, and fitted custom wheelchair seats and other aids for people with extreme physical disabilities.

We have some research interests in common, including diet and rheumatoid arthritis. With triggers being so diverse, and research being relatively thin, do you have any general recommendations?

Diet and rheumatoid arthritis (RA) was the topic I researched for a post grad project in 2015. I interviewed 10 people with RA who experienced the paleo diet as being highly successful in reducing symptoms and clinical markers. I also did a review of intervention and case studies treating RA with diet.

After looking at all this information – I consolidated some general recommendations if you have RA:

Food does have an effect for a percentage of people – the percentage varies between studies. Test this for yourself, in order to eliminate foods that cause flares, exacerbate symptoms and increase auto-antibodies. Use an appropriately structured elimination and re-introduction protocol. The auto-immune paleo protocol has been successful for many, however it does include foods that have been shown to affect some according to the studies, e.g. mammal meats. You may need to follow a strict diet for 3 months to get results. Use a slow re-introduction protocol, many people experience a flare as long as 36 hours after eating the offending food, or the flare is related to frequency and amount of food eaten.

Eat foods that supply nutrients which improve health and reduce inflammation. Foods rich in polyphenols and anti-oxidants, like colourful fruit and vegetables, and foods rich in long chain omega 3, i.e. seafood. An anti-inflammatory diet is also low in saturated fat and arachidonic acid, and low in refined grains and sugar.

Dysbiosis and intestinal permeability have been linked with RA. Eat food that contributes to a healthy microbiome; plant foods rich in prebiotic fibre, and fermented foods with probiotic bacteria. Remove foods that increase intestinal inflammation and permeability, for example gluten grains and dairy (for some).

Taking a step back, how did you initially become interested in nutrition research?

At 16 I was a little overweight and started on a roller-coaster of diets, always with the intention to lose weight. I would, but then I would gain it back again. In 1995 a friend bought a book in the USA – “The Zone Diet” by Barry Sears. The science of excess carbohydrates, insulin and health made a lot of sense to me, so I put it to the test on myself. I was utterly amazed at the profound difference it made. Prior to this I ate a high carb vegetarian diet that was supposedly healthy, yet I struggled with joint inflammation, menstrual pain and PMS, reactive hypoglycaemia and weight control. All these improved on a zone diet with supplemental long chain omega 3. I was extremely excited about how diet could transform health, and this led to a new career for me. I went back to university to study nutrition. I tried the paleo diet in 2009 after reading papers by Prof Loren Cordain on auto-immune disease and diet. For the first time in 30 years my auto-immune joint inflammation went and stayed away completely. Eczema on my hands completely cleared up.

I then went on to post grad, and I noted whilst there were many anecdotal reports of auto-immune (AI) disease responding to diet, in particular a paleo type diet, there was little if any research on it. Lay people often ask “Why don’t doctors or dieticians promote paleo for AI conditions?”. What people don’t realise is that anyone who has come through post grad training looks for evidence in clinical papers, not anecdotes off the internet to inform the advice they give clients.

I realised It is important for someone to study this area, to test the anecdotal success with clinical studies to show the success or otherwise of a diet for the treatment of disease. This is an area that interests me, so why not me?

Before embarking on an intervention study for my Masters year I carried out qualitative research to find out everything I could about how and why this group

of RA sufferers were successful on their paleo diet; what specific diet they ate, how they started and maintained the diet, what re-introduction protocol they used to find the foods triggered flares, how they overcame challenges in maintaining a diet over time.

I plan to continue this research next year.

You have a strong grasp of studies directly on the “paleo diet” (that is, as defined by study authors). What can we take away from these studies?

Thanks!

Perhaps because of my history of trying out diets and reading every diet book out there, over time I started to be a lot more analytical about the science.

In my younger years prior to studying nutrition I just believed what people said in books. If someone said you can’t eat carbs with protein because “the enzymes” I believed it. Studying the intricacies of nutrition science opened my eyes and I realised a lot of what was written by influential writers on diet was not often scientifically correct.

When I first discovered that paleo combined with the portion and balance of a zone diet plus certain supplements worked so well for me – I wanted to know why. I devoured everything I could find on the topic. I wanted to know how foods and diet patterns interacted in the human body and what the mechanisms were that caused them to change health.

If a study shows a diet works, I look at all factors that have been altered, and how that might have caused results, are there other studies to back this up, are there mechanisms to explain it?

I now understand how and why my diet protocol is so successful for me, but at the time I changed I thought it magical!

“ One thing that frustrates me in our current nutrition climate is the label based diets. The way people communicate that the ‘such and such’ diet made them healthy – therefore that diet is the answer to all human ailments. ”

One thing that frustrates me in our current nutrition climate is the label based diets. The way people communicate that the ‘such and such’ diet made them healthy – therefore that diet is the answer to all human ailments.

One thing I suggest is that people be much more analytical. Whenever a dietary change is made we need to look at all possible changes. E.g. when someone changes to a low carb diet they might get an improvement in AI disease, and without looking at all changes they might attribute their success to the wrong thing. For example when they removed carbs – which ones did they remove? If it was cereal grains – becoming gluten free could be the reason, not low carb per se. Most people increase plant foods, these bring nutrients and prebiotic fibre that alters gut microbiome. Removing processed foods high in salt, and increasing plants changes the ratio of potassium and sodium in the diet affecting blood pressure. Removing sugar removes synthetic colours and flavours.

I am also acutely aware that in my early days discovering the power of diet I was a Zone diet fanatic and simplified its success to the ratio of protein, carbs and

fats at each meal. Only much later did I break it down into the elements that made it successful.

Most Examine.com readers are the US, Canada, and Europe. What is healthcare like in New Zealand, and attitudes towards diet? In the US, succinctly, healthcare is a mess and diet fads run rampant.

I think we are fairly lucky in NZ as healthcare is a public system that is paid out of collective taxes. Any acute illness will be treated free of charge and immediately in our system. Any accident is covered by our government accident insurance system, I understand it's the most cost effective system in the world, again treatment is immediate, 100% covered, and time off work is covered to 80% of wages. In return we do not have the right to sue in NZ for accidents. Doctor's visits are heavily subsidised, lab tests are free and medications have a tiny charge. Non-urgent treatment unfortunately ends up with waiting lists, for example hip replacements. We can buy insurance for private treatment, and by US standards it is very cheap. Many have this as a backup in case they need non-urgent treatments and don't want to wait on the public system.

Fad diets abound in NZ – just as they do in the USA! And like the USA many doctors know little about nutrition.

What are you learning about currently? Any areas you particularly wish had more research on them?

Next year I hope to continue my research on diet for AI disease. Today modern drugs are seen as a much more reliable treatment for AI so dietary intervention is often dismissed by specialists in the field. I do wish there was more study being done on diet to treat health issues. A place we need to start at is all the anecdotes where people experience having success, then testing those, or at least analysing why they could be working.

I'm currently in the midst of learning about genes and how we can modify their expression with diet, exercise and supplements. I've become a FitGenes practitioner (Australian based company) and had my own gene test done through Fit Genes, it is fascinating to see the genetic hand I've been dealt, and how my diet has affected gene expression positively. For example I have many genes that will increase inflammatory cytokines, yet I have little to no inflammation now. FitGenes also test for Amy 1 copy numbers coding for salivary amy-

lase, I have only 2 copy numbers which explains why a high starch diet doesn't work for me.

Understanding more about gene variants has given me a greater appreciation as to why a diet that transforms one person's life may not have the same results for someone else.

The other recent work I did was research on a documentary series due to be screened soon in NZ called "Why Are We Fat". A series setting out to uncover the causes of the obesity epidemic and how to reverse it. Television research is interesting because it not only involves finding the best experts to interview, but we also need to create an interesting programme that engages the viewer. It has to be more than "talking heads". Successful television educates but does not preach, it pulls people in on an emotional level, makes the topic personally relevant, and has people talking about the programme at work the next day. We hope it also changes lives. Documentaries have the potential to reach a huge audience compared to working one on one with a client. This series is due on NZ television shortly. ♦

In 1996 Julianne tried the then popular Zone diet and which reduced a host of niggling health problems. Her passion for nutrition was ignited. Julianne became a diet coach and has since completed Post Graduate Dip in Nutrition at Massey University. Adopting the paleo diet in 2009 led to further health improvements, specifically eliminating auto-immune joint inflammation. This inspired a qualitative research project investigating the use of a paleo diet by people with rheumatoid arthritis.

Julianne works as a nutritionist, with a special interest in dietary interventions for auto-immune disease. She has also been the sole researcher for two prime time television documentaries. These include the highly successful "Is Sugar the New Fat?" presented by Nigel Latta, and a 3 x 1 hour series presented by Simon Gault called "Why Are We Fat?" investigating the obesity epidemic.