

# Nutrition: Autoimmune Disorders - Part 1

Hey, everybody, in this presentation we're going to discuss nutritional considerations for autoimmune disease. Autoimmune disease is an increasingly common problem; it affects one in 10 people worldwide. According to the most recent estimates, one in four women and one in six men are now expected to develop an autoimmune disease in their lifetime. Over 100 autoimmune diseases have been identified, and others are now being linked to autoimmune processes. While autoimmune disease runs rampant in the industrialized world, however, it's practically nonexistent in contemporary hunter-gatherer populations living a traditional lifestyle. This suggests that our exposome, our environment, has a lot to do with developing autoimmune disease, and it's not simply genetic.

## Dietary Approaches



Remove foods that may trigger or exacerbate an **immune response**



Increase intake of nutrients that promote **optimal immune function**



Increase intake of foods that promote a **healthy gut microbiota**

There are three dietary approaches to addressing autoimmunity, which include the following: removing foods that may trigger or exacerbate an immune response, number one; number two, increasing intake of nutrients that promote optimal immune function, number two; and number three, increased intake of foods that promote a healthy gut microbiota, and we'll cover each of these in more detail on the next few slides.

Okay, so starting with removing foods that trigger or exacerbate an immune response, this involves putting your patients on an autoimmune Paleo protocol. This is a basic Paleo diet as a starting place, with the addition of removing grains and dairy completely, which of course strict Paleo does already, but then eggs, nightshades, and possibly nuts and seeds on top of that. Nightshades include the following: potatoes, tomatoes, sweet and hot peppers, eggplant, tomatillos, pepinos, pimentos, paprika, and cayenne pepper, but not black pepper. These foods

are perfectly healthy and generally well tolerated by people without autoimmune disease, but in some cases, people with autoimmune disease may not respond well to them. It's really important to keep in mind, however, that not all people with autoimmune disease will react to any or all of these foods, so it's really important to test this out. I'm not a fan of telling patients to remove entire classes of food for the rest of their life simply on the basis of a theory, and there's really no peer-reviewed evidence to support the idea that these foods need to be removed in autoimmune disease; it's mostly just anecdotal empirical experience of practitioners working with these kinds of patients, and I can tell you after several years of doing that that some patients with autoimmune disease are sensitive to some of these foods. It's pretty rare that someone is sensitive to all of them equally, and it's not uncommon to find patients with autoimmune disease that aren't sensitive to any of the foods on the autoimmune protocol, so you really have to test, and I'd suggest removing all of them for at least 30 days, preferably 60 days, and then try adding them back in one at a time and see what the patient is most sensitive to.

Second principle is increasing intake of nutrients that promote optimal immune function, and there are quite a few nutrients that are really important when dealing with autoimmune disease.

First one is glutathione, which is the body's master antioxidant. When we have enough glutathione, the body's relatively protected from oxidative damage. Glutathione also promotes healthy function of T regulatory cells, and those with autoimmunity often have both low glutathione and low T-reg cell count. Glutathione is found in fresh raw fruits and vegetables, plus raw dairy products. Eating collagen-rich animal parts, polyphenol-rich fruits and vegetables, and selenium-rich foods are all good ways to boost glutathione status.



You can also supplement with glutathione, though in many studies it's been shown that standard oral glutathione supplements are not very well absorbed. That finding was challenged recently by a study that found that typical oral glutathione is well absorbed, so the jury may still be out, but I have found that forms like liposomal glutathione tend to be better absorbed and produce better results. N-acetylcysteine is a precursor to glutathione, and it's often used to provide the body with the raw material needed to convert to glutathione, but that conversion can

often be impaired in people with chronic illness. IV glutathione is effective, but the effects are short term and it's a significant cost and inconvenience to the patient. S-acetyl glutathione is another option that's been shown to be better absorbed than typical oral glutathione preparations, and it's absorbed intact, and raises intracellular glutathione concentrations, but it's significantly more expensive than typical oral glutathione. As I said before, my favorite form is liposomal glutathione. It is also absorbed intact and can be quite effective in raising glutathione levels. The recommended dose is 400 to 500 milligrams per day. There are a number of liposomal brands that are good: Seeking Health is one, Quicksilver Scientific has a good liposomal glutathione spray, and these are great products for raising glutathione levels.

Other important nutrients for supporting healthy immune function include EPA and DHA. These are the long-chain omega-3 fats which are anti-inflammatory. I recommend patients consume at least a pound of cold-water fatty fish per week to get adequate EPA and DHA. Cod liver oil, of course, contains some EPA and DHA, as well as vitamins A and D, which are important for immune function, and if the patient isn't able to eat fish for whatever reason, you can consider supplementing with a high-quality wild salmon oil or something like that.

Vitamin D is crucial for those with autoimmune disease. It's been shown to promote T regulatory cell function and have multiple positive effects on immune balance, and in a patient with autoimmune disease, I would recommend aiming for a range of at least 40 nanograms per milliliter, somewhere between 40 and 60. I don't believe there's any research suggesting that patients need to go above 60 nanograms per milliliter, and there's some research suggesting that that may be harmful, especially if vitamin A and vitamin K2 intake isn't sufficient. Food sources of vitamin D are cold-water fatty fish, cod liver oil, much higher source of vitamin D than any other dietary source, and then pastured chicken and duck eggs. Of course, sunlight is another important source of vitamin D, but this depends on the latitude that the patient lives at, the time of year and the solar angle, and of course the amount of time they're spending outside, but it also depends on some individual health factors. For example, it's been shown that patients who are obese or inflamed do not convert sunlight to vitamin D as well as patients that don't have those conditions, so you have to evaluate all of these factors when determining how much vitamin D your patient may need to supplement with, and the best way of figuring that out is just testing their blood levels, prescribing a particular regimen, and then retesting to see if you're meeting the targets.