



Submitted by Liz Tucker

Specific nutrition for Sjögren's

Sjögren's Disease has a wide range of symptoms with multiple triggers and levels of severity that gives each sufferer their own uniquely negative experience of the condition.

Nutrition can play a central role in health management and symptom relief but aside the consistent message to all of the benefits of a healthy balanced diet, with Sjögren's Disease there are variables for each individual. Generally dietary related conditions such as Coeliac Disease for example have a simple, common treatment message, in this case, cut out gluten. With Sjögren's, personalised nutritional plans need to be considered as symptoms and severity can vary from patient to patient. This means, from a nutritional perspective it is much harder to formulate a diet plan that can specifically benefit each individual. Unlike many medical treatments where effectiveness can be assessed in a matter of days, even hours, the impact of dietary changes is not immediately apparent so it is much harder to evaluate. Unfortunately the internet and media are crammed full of seemingly contradictory and unsubstantiated nutritional claims that can be very convincing, especially in times of desperation when pain levels are relentlessly high and energy, low. However self-imposed exclusion diet regimes may not only prove ineffective but have the potential to generate longer term imbalances and deficiencies. This could negatively affect both overall health and condition specific symptoms so it is important to get advice from appropriate and accurate sources and expect some adjustment and adaptation over time. The most reassuring route to an effective personal nutritional plan is with the support of an Association for Nutrition AfN or British Dietetic (BDA) qualified professional but dietary self-help, if well formulated can help in managing symptoms and reducing severity.

There are 4 main areas of dietary assessment to consider with Sjögren's; overall health and wellbeing, underlying Disease triggers, associated conditions and symptom



management as they all have the potential to impact on nutritional status and compromise the well-being of the individual.

Overall health

Simply put we are made and run on the nutrients we get from food. Our continuing form, function and maintenance rely on essential nutrients we can only get through consuming food. Nutrients are generally multifunctional and need other nutrients to operate effectively so it is not just about intake but ratio. Balancing nutrition may seem a complex concept but actually nature makes it very simple. Basic wholefoods such as vegetables, pulses, grains, fish and fruit are referred to as nutritionally dense as they contain a wide range of interrelating nutrients. On the other hand, processed food such as cakes, white bread, ready meals, sweets and carbonated drinks are more likely to use refined ingredients that contain little nutritional diversity. Dietary balance is effectively demonstrated on the online interactive Public Health England Eat Well Plate. This visually shows the importance of nutritionally dense as opposed to empty calories and the ratio of plant based to animal foods. This is designed for the general population but for those with an existing chronic condition good nutrition is especially relevant as natural resilience is likely to be compromised. An ongoing inflammatory condition will require additional nutritional assistance as internal degenerative effects and energy demands will be more evident.

Unfortunately, although nutritional demands are higher the autoimmune effect of Sjögren's Disease can significantly alter nutrient intake (1). Aside from general dietary

Eatwell Guide

Use the Eatwell Guide to help you get a balance of healthier and more sustainable food. It shows how much of what you eat overall should come from each food group.

Check the label on packaged foods

| Each serving (150g) contains | | | | |
|------------------------------|-------------|-------------|-------------|-------------|
| Energy | Fat | Saturated | Sugars | Salt |
| 194kcal 250kcal | 3.0g LOW | 1.3g LOW | 34g HIGH | 0.9g MED |
| 13% | 4% | 7% | 38% | 15% |

of an adult's reference intake
Typical values (as sold) per 100g: 697kJ/ 167kcal

Choose foods lower in fat, salt and sugars

Eat at least 5 portions of a variety of fruit and vegetables every day

Fruit and vegetables



Eat less often and in small amounts

Choose wholegrain or higher fibre versions with less added fat, salt and sugar

Potatoes, bread, rice, pasta and other starchy carbohydrates



6-8 a day

Water, lower fat milk, sugar-free drinks including tea and coffee all count.

Limit fruit juice and/or smoothies to a total of 150ml a day.

Beans, pulses, fish, eggs, meat and other proteins

Eat more beans and pulses, 2 portions of sustainably sourced fish per week, one of which is oily. Eat less red and processed meat

Dairy and alternatives

Choose lower fat and lower sugar options

Oil & spreads

Choose unsaturated oils and use in small amounts

Per day 2000kcal 2500kcal = ALL FOOD + ALL DRINKS

Source: Public Health England in association with the Welsh Government, Food Standards Scotland and the Food Standards Agency in Northern Ireland

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influences related to ill health such as poor appetite and disinterest in food preparation, internally nutritional absorption inadequacies can affect as many as 75% of Sjogren subjects, specifically in relation to calories, protein, fibre, potassium, vitamin A, vitamin C, vitamin B-6, thiamine, riboflavin, iron, calcium and zinc (2).

Disease triggers

With Sjögrens Disease each symptom is likely to have its own set of triggers but the underlying cause is due to an auto immune reaction. With immunity, dietary intervention is more commonly considered when the immune system is ineffective through inactivity and needs to be strengthened (3). In Sjögrens Disease an immunity malfunction generates an inappropriate inflammatory response so it would suggest the sufferer could benefit from it being less sensitive and more selective. Nutrients play a major role in the regulation of immune system (4). Some, such as zinc, copper, selenium (5) and omega 3 have a direct role but to be effective need to interrelate with others indirectly (6). This is why it is so important to look at dietary intervention as a whole and not view individual nutrients in isolation. Autoimmune conditions can benefit from a

more plant based wholefood diet (7)(8). With Sjögrens Disease inflammatory pain is probably the main generic symptom but Google and the page will fill with a confusing array of anti-inflammatory diets and supplementation. However on closer inspection those with any substance will all have the same dietary message. Anti-inflammatory foods are classified as natural wholefoods, mainly plant based such as nuts, seeds and vegetables as well as free range eggs and oily fish. Therefore it will come as no great surprise that inflammatory foods are cited as processed and high in refined ingredients such as sugar, white flour and salt. Based on new research the Public Health England Eat Well Plate has recently been revised to include more plant based foods and encourage meat reduction. From a self-help perspective there are also a range of evidence based incentives. One of the best is Eating Better, which mirrors the view that more plant, less meat is beneficial on many levels. This would all seem fairly straightforward but unfortunately the foods cited as inflammatory can offer initial pain relief due to the stimulating effect of adrenaline (9). Nutritionally poor foods high in sugar, salt, caffeine, fat and calories have the capacity to stimulate a stress response which can initially suppress pain. This can encourage compulsive cravings as the pain relief is short

term so a new fix is constantly needed. It is important to break this negative spiral as long term the effect of a low nutrition, adrenaline stimulating diet can lead to blood sugar imbalances, obesity, metabolism issues and more persistent inflammation (10)(5). A diet high in anti-inflammatory foods not only helps with an auto immune condition but reduces the incidence of other conditions related to a nutritionally compromised diet (11).

Associated conditions

There are a range of conditions which have a higher incidence or association with Sjögrens Disease but the condition has a wider impact on the health status of all bodily systems compromising their ability to function effectively (12). Some conditions are directly related to diet and others are influenced by the auto immune response, overall poor health or ongoing drug treatment. The combination of nutritional imbalances and a malfunctioning immune system can lead to food hypersensitivity and gastrointestinal disorders (5). Coeliac disease (13) and lactose intolerance have a diagnostic procedure and straightforward treatment. However IBS like symptoms with no conclusive diagnosis could be the result of a hypersensitivity to foods, the most common being wheat and dairy but not celiac or lactose intolerance related (14). Allergies and intolerances can apply to a wider range of multiple foods making them much harder to establish. The concern is the diet can become too restrictive, eliminating foods that are necessary. Gut bacteria play an intrinsic part in immunity so rebalancing could restore a resistance to over sensitive food reactions (15). Natural probiotics, the food source of inherent beneficial bacteria, are found mainly in plant based foods demonstrating once again why it is so important to consider overall nutrition from a natural plant based diet and not just specific foods or supplementation.

Managing symptoms

From a symptomatic point of view there are two nutritional aspects to consider, practical adaptation to make food easier to eat, swallow and digest and nutrition to help reduce the negative effects. Food is easier to eat if it is soft, moist and in small portions. A nutri-processor is idea for pureeing nutritionally dense food into soups and smoothies while maximising the fibre and nutrient content. Salty and spicy food can irritate the mouth but also upset the gut. Citrus fruit can sting dry mouths and juice can be over acidic. Excessive sugar is not good for teeth, can imbalance blood glucose and metabolism, irritate the bladder and compromise the immune response. Free refined sugars are also a common ingredient in nutritionally poor processed food. Caffeine and alcohol can make mouths dry but can also over stimulate and alter nutritional status. All these foods should be considered in moderation. Nutrients are many

and multifunctional so are needed on mass in order to assist in a wide range of symptom relief. For example, Omega 3 can help reduce inflammation, keep joints supple and aid dry eyes (16) but it does not function in isolation so look at the overall diet as moderation and balance are key. There is a message that by now must be starting to sound familiar which is pure, natural, wholefoods are nutritionally dense so will readily provide the range and ratio of nutrients we need. They are the resources our body needs to function effectively and with an auto-immune condition it needs all the help it can get.

Nutritional planning

From a nutritional point of view the digestive system controls the overall health of the entire body so look after your gut and its flora by making sure your diet is at least 50% coloured vegetables.

Natural colour is a very good indicator of how nutritious food is. Processed foods are usually in the beige to brown colour spectrum so fill your plate with rainbow colourful red, green, orange, purple and yellow plant based food.

Reduce your intake of meat and choose grass grazed and organic. With milk and eggs go free-range.

Don't get nutritionally confused, nature makes it simple. Eat more veg and cut down on processed food high in refined flour, sugar, fat, alcohol, caffeine and salt. Make the ratio 90% wholesome.

Stick to the science and if you get professional help make sure they are an AfN registered nutritionist or BDA registered dietitian.



References

1. Cermak, J M et al. (2003) Nutrient intake in women with primary and secondary Sjögren's Disease, *European Journal of Clinical Nutrition*; London 57.2 Feb: 328-34.
2. Nelson L. Rhodus D.M.D., M.P.H (1988) Qualitative Nutritional Intake Analysis of Older Adults with Sjögren's Disease, DOI: 10.1111/j.1741-2358.1988.tb00306
3. Chandra S, Chandra RK. (1986) Nutrition, immune response, and outcome, *Prog Food Nutr Sci.* 1986;10(1-2):1-65.
4. Marcos A, Nova E, Montero A (2003) Changes in the immune system are conditioned by nutrition, *European Journal of Clinical Nutrition* 57, Suppl 1, S66-S69.
5. Karacabey K, Ozdemir N (2012) The Effect of Nutritional Elements on the Immune System. *J Obes Wt Loss Ther* 2:152. doi:10.4172/2165-7904.1000152
6. Weimann A et al (1998) Influence of arginine, omega-3 fatty acids and nucleotide-supplement on systemic inflammatory response Disease, *Nutrition*, Vol 14, 2, P165-172
7. Michael S Donaldson MS, Speight N, Loomis S (2011) Fibromyalgia improved using a mostly raw vegetarian diet, *Journal of ISC Medicine Research (ISCMR)*20011:7
8. McDougall J et al (2004) Effects of a Very Low-Fat, Vegan Diet in Rheumatoid Arthritis, *The Journal of AC Medicine*. July, 8(1): 71-75.
9. Tracey K J (2010) The Inflammatory Reflex, *Laboratory of Biomedical Science, North Shore-LIJ Research Institute, New York 11030*, doi:10.1038/nature01321
10. Pérez de Heredia F, Gómez-Martínez S, Marcos A (2012) Obesity, inflammation and the immune system, *The Nutrition Society*, Volume 71, Issue 2 pp. 332-338
11. O'Keefe J H et al (2008) Dietary Strategies for Improving Post-Prandial Glucose, Lipids, Inflammation, and Cardiovascular Health, *JAC of Cardiology*, Vol 51, Issue 3, Pages 249-255
12. Van de Merwe J P (2010) Sjögren's Disease information for patients and professionals , www.van-de-merwe.eu/Sjogren
13. Shikhman A R (2011) The Connection between Gluten Intolerance and Sjögren's Disease , *Journal of Gluten Sensitivity*, Issue 3 p 22
14. Kim-Lee C et al (2015) Gastrointestinal disease in Sjögren's Disease: related to food hypersensitivities, Dec 12. doi: 10.1186/s40064-015-1557-7
15. Vieira A T et al (2013) The Role of Probiotics and Prebiotics in Inducing Gut Immunity, *Frontiers Immunology* 4: 445.
16. Miljanović B et al (2002) Relation between dietary n-3 fatty acids and clinically diagnosed dry eye Disease in women, *Department of Epid, Harvard* doi/abs/10.1080/07315724.10719248.

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Sjögren's Disease is the UK's second most common autoimmune rheumatic disease, yet the condition remains under recognised and frequently under treated. It does not command a high profile within the medical profession and the general public is largely unaware of the problems faced by sufferers. In reality, Sjögren's Disease is a debilitating, distressing and miserable condition.



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