

Starch-Free Leaflet

Whilst visiting the 2006 NASS (National Ankylosing Spondylitis Association) Symposium at the University of The West of England, I spoke to a Dr. Alan Ebringer from the Department of Rheumatology at Middlesex Hospital in London.

What Dr. Ebringer told me was almost unbelievable yet, if true, would be worth trying. He told me that people with Ankylosing Spondylitis (AS), in general, have a high number of *Klebsiella* bacteria in their stomachs. These bacteria have 'antigens' which react with 'self-antigens' such as the HLA-B27 (present in most AS sufferers) and spinal collagens. It is this reaction which causes the inflammation, the pain and the deposit of bone growth which makes up AS. This is an interesting thing to know, however the stunning thing was what he said next. He told me that *Klebsiella* is fed by starch present within the stomach. By refraining from eating starch in my diet I could reduce the number of *Klebsiella* bacteria in my stomach and thus reduce the inflammation, stiffening and pain!

A couple of weeks after the Symposium I decided to start a (completely) starch-free diet and I felt the difference in just a couple of days.

Now I am over 2 years into my starch-free diet. I am still completely pain-free and still able to do my NASS group exercises more freely than ever before. I am on no medication for AS, yet I have never felt better. I felt I had nothing to lose by trying the diet, and plenty to gain if it worked. Why don't you give it a try too?

I believe that this diet may well be applicable to related conditions such as Crohn's disease and Irritable Bowel Syndrome (IBS) since the same disease mechanism seems to apply. Bacterial infection is now believed to trigger Crohn's disease and has certainly triggered more than a few cases of AS. As with me, you may find that it gives you the cure that you never got from your medication. Isn't it worth a try?

I am basically following the London "AS Low Starch Diet" (www.kickas.org/londondiet.shtml) which is almost identical to "The IBS Low-starch Diet" by Carol Sinclair (ISBN 0091912865 – 2nd edition revised in 2006 with many recipes).

The starch-free diet is simple enough for us, as we cook a lot of our own food. For us, the diet is quite easy, not too restrictive at all for main courses, but a little more for puddings. However, for people who buy a lot of their food ready-made, it would be less simple and more restrictive.

A typical day's diet would be:

Breakfast - Yoghurt with fruit/raisins in it & tea.

Lunch – A bread alternative (which is really an omelette - eaten cold - made with almonds, see below) with anything I would have on bread - cheese, egg, fish, honey, jam, etc. Also carrot/salad, nuts, dried fruit, chocolate, fresh fruit, home-made starch-free cake/biscuits.

Tea - A home-made meat or fish dish with plenty of various vegetables. I could have the potato alternative (which is the same as the bread alternative, but warmed up a bit) but I actually prefer just extra vegetables.

Pudding - usually home-made - various – for example starch-free icecream, meringue, mousse, biscuits or cake. (Some shop bought puddings are OK).

Starch is found in cereal grains (wheat, oats, rye, barley and rice) so is in such things as bread, biscuits, cakes, pasta, rice, potato, breakfast cereal, flour, cornflour, crisps - so don't eat anything with these things in them.

You can also find that starch has been added to products you wouldn't expect, for example I have seen

- a packet of non-organic raisins which had wheat (syrup) added to it
- some types of yoghurt have tapioca starch added whereas other types have no starch added
- baking powder often has starch added. (You can make your own starch-free alternative though).

So be careful and check the ingredient's list for products that you buy.

Basically, you just need to replace the starch you would normally eat with increased amounts of other food e.g. meat, fish, milk products, eggs, vegetables and fruits which are generally all low in starch and are therefore the things to eat.

There are some food items that are surprisingly starchy and thus best avoided (*):

Fruit - rhubarb & bananas

Veg - cauliflower, corn, parsnip

Beans (e.g. baked beans, kidney beans)

Lentils

Nuts & Seeds - walnut skins, peanuts, cashew nuts, chestnuts, sunflower

(*not necessarily a complete list. This is in our experience)

Other - although sugar is OK to eat and use you must avoid heating it too much, since "caramelisation" produces a type of starch. The same goes for onions - they are fine, unless they are cooked to the 'caramelisation' point when they would be full of starch.

In addition, some cheese rind contains starch, and almost anything thickened is likely to contain starch. For example, Yeo Valley fruit yoghurt and Greek Yoghurt contain tapioca starch whilst the equivalent Rachel's Organic yoghurt does not. Some ice-cream contains starch, some don't. Some chocolate has starch, other chocolate has no starch.

You just have to look at the ingredients list carefully.

Most processed foods contain some form of starch – and the EU does not require starch to be marked – so be warned! Modified starches can be listed in ingredients via their "E" numbers. The following are "E" numbers to avoid: E1400 to E1404, E1410 to E1414, E1420 to E1423, E1430 and E1440 to E1442. I drink cider (which has no starch) instead of beer which I am not entirely happy with as I have had one or two tummy upsets when I have drunk it (although I don't believe it to be starch necessarily). Wine is fine.

We use the starch-free book above for biscuit, cake and pudding recipes that are starch-free. It is also possible to experiment with 'normal' recipes, just using ground almonds instead of flour.

It's not much effort, it just takes a bit of getting organised, not running out of things, etc. We keep a good stock of our starch-free bought items to ensure we do not run out of them

It really is not too inconvenient or difficult - and really so well worth doing, and so well worth the little sacrifice it is to stop eating certain foods.

What we Eat

Any (*) meat,

Soup (home-made)

Any veg (*) – apart from cauliflower, corn, parsnip

Any fruit (*) – apart from rhubarb & bananas

Dried fruit

Brazil nuts, macadamia nuts, almonds

Yoghurt, Cheese, Cream

Chocolate, home-made starch-free puddings, cakes, biscuits, sweets, etc.

(* not necessarily quite correct. This is in our experience)

Bread Pancakes

Ingredients: 2 eggs, a pinch of salt, 7 tablespoons home-ground almonds, oil

Method: Beat eggs (by hand), add salt, beat in almonds. Heat up some oil in a frying pan or skillet.

Pour some egg mixture into it, and spread it out to be as thin as possible, with a fish slice. It should look a bit like a normal but thicker pancake frying. Cook for 1-2 minutes each side, be careful not to burn it.

Keep in the fridge.

Any enquiries, please get in contact with us and we will be very pleased to advise or clarify further.

E-mail: diet@ankylosingspondylitis.org.uk Web: www.ankylosingspondylitis.org.uk