

PREBIOTIC FOODS AND GLUTAMINE FOODS



Adding Prebiotics To The Diet

- Some people have issue with prebiotics – having gut issues can cause some people to have digestive issues (FODMAPs)
- As the practitioner, you have to decide whether you work with probiotics and maybe a prebiotic (IMO is a good choice) in a supplement form first (along with butyrate and glutamine) before stressing the prebiotic foods
- Fermenting the prebiotics foods is an option
- Food journals can be so helpful to figure out which foods may work.

Resistant Starch Foods

- Resistant starch is found grains, legumes and nuts and seed and are needed for the production of SCFA
- They are found in carbohydrates so the more carbs in the food, the more potential for resistant starch
- Nuts and seeds often have less resistant starch than grains and legumes and too much Omega 6 which is not ideal for gut health
- Chia is a great option. It has a fair amount of carbs and has a high ratio Omega 3 to 6
- Flax has too little carbs and not enough excess Omega 3



Resistant Starch

- All grains – wheat, spelt, rice, oats, rye, buckwheat, barley, quinoa, kamut, corn, teff, (millet is not a grain)
- Tubers – potatoes, sweet potatoes, cassava – Jerusalem artichokes, jicama also have it but not as high and these also are in inulin and other oligosaccharides
- Legumes and lentils
- Bananas, plantain
- To increase the resistant starch in cooked foods – cook them, cool them and then re-heat them before serving.



Oligosaccharides

- Unlike resistant starch which are bigger polysaccharide molecules, oligosaccharides are smaller - 3-8 chain monosaccharides
- There are number of the types inulin fiber (which can break down into FOS), GOS, IMO, arabinogalactans and Beta-glucans
- The chances that these are not present in all fruits and vegetables is unlikely but we have to wait until the research tells us this is the case
- Some foods so far, have been found to contain more than other
- Calorie count is a guide



Oligosaccharides

- Jerusalem artichokes and chicory are two of the highest sources of inulin and FOS
- Garlic and onions are also good sources
- Cabbages, asparagus, bananas, blueberries and other berries, citrus (especially pectin), almonds, broccoli, cabbage, kale, cauliflower, radish, tomatoes, almonds, cashews, carrots, chia, flaxseeds, wine, algae
- When in doubt just google the name of the food and the word “prebiotic”



Getting Prebiotics into the Diet

- Of all the food suggestions – this should be the easiest to incorporate into the clients diets as most people will already be consuming some
- Ideally, consuming the prebiotics with the fermented foods is best.
- The fermented food will aid the digestion of the prebiotics, which will aid the feeding of the residential bacteria.
- It can also aid the production of the short chain fatty acids as transients bacteria can ferment resistant starch, too



Bone Broths

- No studies
- But it is presumed to be great gut healing and is presumed to be an anti-inflammatory and aid joint and bone health
- High in amino acids including glutamine, collagen and minerals
- To make it you need to buy bones, beef, chicken, fish or can save up bones you consume
- Place the bones in a stock pot and cover with water
- Bring to a boil and lower to simmer (with a lid) and cook until the water levels drop by half



Bone Broth

- Raw bones can be roasted for 25-30 minutes at 350-375 degrees F for extra flavour
- Herbs can be added at the end (last 10 minutes)
- Salt and pepper can be added when serving but not during the process of making the broth
- Store broth in the freezer and re-heat – drink it straight or add vegetables to make a soup
- The key is a long slow simmer to draw as much out as possible – should be gelatinous at room temp and this only happens if done slowly (8-14 hours)

Other sources

- Many foods – vegetables such as cabbage, beets, spinach, Swiss chard, parsley, legumes, nuts and seeds, fermented glutamine powder, algae
- Grass feed animals are higher sources for meat and dairy
- Seafood is also a source
- All of the plant-based forms and some of the animal have glutamic acids which must be converted to glutamine by good bacteria in our gut
- Consuming these foods with fermented foods aids the conversion
- Can be part of a healthy diet to aid gut health



- This is the fun part of working with clients as you are inspiring them with food
- There are many options so the goal is to not overwhelm the client and get them talking so you can learn what they like and what might appeal to them
- Use this information to help them make the right choices for them

