

Wellness Plan – Tom Hanna

Your tests showed that the enzymes which break down types of disaccharides including sucrase and maltase found in foods are deficient. Your lactase enzymes are within the reference range however they were at the low end.

What does this mean?

- Sugars, starches, and complex carbohydrates in foods are broken down into smaller sugars by enzymes. Eventually, these single sugars are absorbed into the body.
- Disaccharides are 2 single sugars that are linked together.
- Disaccharide intolerance is when your body can't break apart the disaccharides into single sugars and absorb them.
- This often leads to uncomfortable digestive tract symptoms such as diarrhoea, bloating, abdominal pain, and nausea.

What are the causes?

- It can be an inherited condition where your body simply does not produce enough, or any, of the enzymes required to break down the disaccharide.
- Inflammatory damage to the cells of the small intestine due to infections caused by parasites, bacteria or viruses, or from a food allergy including gluten (celiac disease), soy or milk allergies. The enzymes needed to break down disaccharides are made in the cells of the small intestine, so when there is inflammation in these cells, the production of the enzymes is hindered.
- Intestinal damage caused by drugs or medications.

Treatment

- Avoidance of the foods which contain these disaccharides for 4 weeks – see table below for a breakdown of foods then can be eaten, and those that need to be avoid during this 4 weeks.
- While these triggers foods are removed, we will focus on gut healing and reducing inflammation through supplementation
- We will also work on replenishing these enzymes through supplementation. In most cases, the intolerance is dose related and problems result when the amount of disaccharide in the food exceeds the capacity of the enzymes to digest it.
- After 4 weeks, we will slowly start bringing back in foods one at a time, every third day. You will need to keep a food journal to track what you are bringing back in and for monitoring your symptoms.
- You should be able to bring back all foods in time however there may be a handful that your body cannot deal with and these may need to be limited or removed from your diet completely. This is why it's important to keep a food journal so you can distinguish which foods are triggering for you.

Food Group	Foods which are usually tolerated	Foods to Avoid
Fats	Butter Olive oil	Margarine
Diary	Butter Milk Cottage cheese Plain, unsweetened yoghurt Cream Hard cheeses - cheddar, Colby, mozzarella, Swiss, parmesan, and provolone Sour Cream	Flavoured milk Flavoured yoghurt Processed cheeses – cheese slices Ice cream
Fruit	Avocado Blackberry Blueberry Boysenberries Cherry Cranberry, fresh Figs Grapes Kiwi Fruit Lemon Lime Olives Papaya Pears Pomegranate Prunes Raspberry Rhubarb Strawberries TIP: Check ingredients on canned, frozen and dried food to insure no sucrose and/or starch was added.	Apple Apricot Banana Clementines Coconut Dates Grapefruit Guava Honeydew Melon Mango Mandarines Nectarine Oranges Passionfruit Peach Pineapple Tangerines Rockmelon Watermelons
Vegetables	Alfalfa Sprouts Bamboo Shoots Bok Choy Celery Chard Chicory Chives Cucumber Cress Eggplant Green Beans Kale Mixed leafy greens Mung Bean Sprouts Mushrooms Capsicums Radishes Spaghetti Squash Spinach Tomatoes Turnips Yellow squash Zucchini	Beetroot Blackbeans Black eyed Peas Butternut squash Carrots Chickpeas Corn Garlic Green Beans Kidney Beans Leek Lentils Lima Beans Navy Beans Onions Parsnip Pinto Beans Potatoes Pumpkin Snow peas Soy beans Split peas Sweet potatoes Yams

	<p><i>The following vegetables can cause gas in people regardless of enzyme deficiency so consumption should be closely monitored for symptoms and removed for the 4 week period if symptoms are appearing:</i></p> <p>Artichoke Asparagus Broccoli Brussel Sprouts Cabbage Cauliflower</p> <p>TIP: Check ingredients on canned, frozen and dried food to insure no sucrose and/or starch was added.</p>	
Meat	<p>Beef Lamb Chicken Pork Eggs Turkey Fish</p> <p>*Most plain, unseasoned meats are tolerated</p>	<p>Process meats – bacon, ham, sausages, premade hamburgers, deli meats</p> <p>Crumbed meat & seafood</p>
Legumes	None	<p>Bean sprouts Black eyed peas Broad beans Chickpeas Kidney Beans Lentils Navy Beans Peanuts Peas Split peas Soybeans</p>
Grains	None	<p>Flours Amaranth Barley Buckwheat Bulgur Corn Millet Oats Quinoa Rice Rye Spelt Triticale Wheat</p>

Nuts & Seeds	None	Almond Brazil Nut Cashew Hazelnut Macadamia Pecan Pistachio Pumpkin seed Sesame seed Sunflower seed Walnut
Sugars	Honey Fructose (fruit sugar) Glucose Dextrose Stevia Monkfruit	Sucrose (table sugar) Maltose (grain sugar) Foods with added sugars Syrups (maple, golden etc)
Spices & Herbs	Allspice Anise seed Basil Bay leaf Caraway Cayenne Celery Chervil Chili powder Cinnamon Cloves Coriander Dill Fennel seed Fenugreek Garlic powder Ginger Mace Marjoram Mustard Nutmeg Onion powder Oregano Paprika Parsley Pepper Poppy seed Rosemary Sage Tarragon Thyme Turmeric	Herb or spice mixes or seasoning packets Curry
Beverages	Water Coffee* Tea* Herbal tea Unsweetened coconut, almond, cashew, or soy milk *Caffeine may worsen GI symptoms. Limit to 1 cup per day	All fruit juices Milk Rice or oat milk Sodas & soft drinks Alcoholic beverages

Meal Ideas:

Breakfast	Lunch	Dinner	Snacks
Scrambled eggs with cheese, herbs, spinach and avocado	Chicken salad with greens, capsicum, avocado, tomatoes and cucumber	Oven baked Salmon with sautéed mushrooms, and spinach	Hard boiled eggs
Omelette with chives, garlic, mushrooms, spinach, tomato, red and green capsicum, and avocado	Steak fajita (green and red capsicum, no onion, homemade fajita seasoning – cumin, paprika, oregano), lettuce wraps	Stuffed capsicums – stuffed with lamb or beef with cumin, oregano and paprika – topped with melted cheese, avocado & served with salad	Celery, capsicum sticks, cheese & radishes with guacamole
Fruit smoothie with blackberries, blueberries, lemon or lime, baby spinach or kale, with unsweetened almond milk	Taco salad (beef with homemade taco seasoning – cumin, oregano, paprika, garlic powder, salt) tomato, avocado, lettuce	Grilled chicken or steak with vegetables (zucchini, eggplant, green beans)	Plain Greek yoghurt with berries

Prescription:

- Continue with the **Herbs of Gold Gut Care** powder you are already taking
 - 1 level scoop in 150ml water daily with food
- **Orthoplex MagGI Restore**
 - 1 scoop once daily in water (can mix with Gut Care powder if prefer) – make sure you have this one with or after breakfast – you want food in your stomach and you do not want to take after lunch as the B vitamins can affect sleep if taken too late in the day
 - This is a great multivitamin which will help build back up your nutrient levels as these will be quite low after having diarrhoea for such a long time
 - It will help support gut healing and digestion, skin health, nervous system support and aid in increasing your energy levels
- **Designs for Health ZymeGest**
 - Take 2 capsules up to 30 minutes before breakfast, lunch and dinner
 - A blend of digestive enzymes important for the breakdown of protein, fats and carbohydrates which will help support digestive function and the breakdown of food

Lifestyle Advice:

- I have included a mindfulness handout which has some simple breathing exercises on them. You may like to try these especially at night when winding down for bed. Our nervous system and gut health is connected so an important part of treating our gut, is also making sure we are taking care of our stress levels. These breathing exercises help our bodies switch from our sympathetic nervous system (fight or flight) and into our parasympathetic nervous system, which promotes rest and digestion.

To do:

- Please follow up with your GP in regards to the testing they did for the possible tick borne allergy (possibly Mammalian Meat Allergy) and let me know the outcome
- Buy a notebook to make it into your food journey
- Stool test (Microbiome test) on Monday ☺