# PHENOTYPE 2: GUTOMICS HIGH SENSITIVE/INTOLERANT

# Phenotype Gutomics 2



#### **FOOD ENZYMES SUPPORT**

#### **EMBRACE**

#### Kiwi's

It is a great source of digestive enzymes, especially a protease called actinidain. This enzyme helps digest proteins, promotes digestion, reduces bloating and helps relieve constipation.

Pineapple
Pineapple contains a group of digestive enzymes called bromelain. Helps
break down proteins into amino acids.

## Papaya

Like pineapple, papaya also contains proteases that help digest proteins. Known as papain, these proteases break down proteins into building blocks, including amino acids. Papaya also helps with diarrhoea, constipation and reflux disease. High heat can destroy their digestive enzymes, so make sure to eat papaya ripe and uncooked.

### Mango

They contain the digestive enzyme amylases, which breaks down carbohydrates from starch (a complex carbohydráte) into sugars such as glucose and maltose. Amylase also helps mangoes ripen.

#### Bananas

Bananas contain amylases and glucosidases, two groups of enzymes that break down complex carbohydrates such as starch into smaller and more easily absorbed sugars.

These sugars become more active as bananas ripen.

Ginger
Ginger contains the protease zingibain, which digests proteins into their building blocks. More than that, ginger has been found to move food through the stomach faster, stimulating the body's own production of digestive enzymes.

#### **Avocados**

They contain the digestive enzyme lipase, which helps digest fat molecules into smaller molecules, such as fatty acids and glycerol, that are more easily absorbed by the body. Although lipase is also produced by the pancreas, consuming avocados or taking a lipase supplement can aid digestion after a high-fat meal.

Aloe Vera

Garlic

Coconut

### Figs

Honey
Raw honey contains digestive enzymes such as:
Diastases - break down starch into maltose.
Amylases - break down starch into sugars such as glucose and maltose.
Invertases - convert sucrose into glucose and fructose.
Proteases - convert proteins into amino acids.

Bee pollen - Bee pollen also contains amylase and a host of other enzymes.

Kefir

Kefir is a fermented milk drink that contains cultures of yeast, lactic acid bacteria, acetic acid bacteria and many digestive enzymes, including lipases, proteases and lactases. These enzymes are essential as they break down fat, protein and lactose molecules, respectively.

### Flaxseed soaked

Chlorella

**Spirulina** 

### **Fermented foods**

Sauerkraut

Sauerkraut is a type of fermented cabbage that is also considered a probiotic food and is rich in many digestive enzymes. The probiotic properties of sauerkraut can help relieve digestive symptoms.

Kimchi

Like sauerkraut, kimchi is a dish made from fermented vegetables. It contains bacteria of the Bacillus species, which produce proteases, lipases and amylases. These enzymes digest fats, proteins and carbohydrates separately.

Other good sources of digestive enzymes are miso, made from fermented soybeans, rice or barley. Due to the added fungi koji, miso contains a variety of digestive enzymes, including lactases, lipases, proteases and amylases.

**Tempeh**Is also a good source of digestive enzymes, made by a natural culture and controlled fermentation of soybeans that binds them together.

GUT-BRAIN AXIS SUPPORT	
EMBRACE	
Banana	
Brown rice	
Peas	
Grapes	
Finely chopped nuts and seeds (eat separately - never in combination with other foods)	
Fermented foods	
Greens (algae, kale, broccoli,) shake	
Chickpeas	

**Peanuts** 

Free-range eggs
Shellfish such as mussels, cockles and oysters
Orange
Oily fish

# **MEAT**

EMBRACE	AVOID
All low-fat preparations	Fried

# VIS, ZEEVRUCHTEN EN SCHAALDIEREN

EMBRACE	AVOID
All low-fat preparations	Fried

# **VEGETABLES**

EMBRACE	AVOID
All vegetables, cooked, steamed and boiled	unripe vegetables
Only raw leafy vegetables	Raw peels

# HERBS/SPICES

EMBRACE	AVOID
Pepper and salt	Onion raw
Fresh or dried: Chives, chilli, ginger, basil, thyme, coriander, oregano, rosemary, marjoram, mint, turmeric, lemongrass, parsley, sage, paprika, cayenne pepper, bay leaf, mustard seed, juniper, nutmeg, cardamom, asafoetida, cloves, coriander seed, cumin, fennel seed, fenugreek, mustard seed, saffron, aniseed, kaffir lime leaves  Vanilla  Cinnamon	Garlic raw (fermented or dried only)

# **FRUIT**

EMBRACE	AVOID
All fruit	Unripe fruit, difficult to digest husks

# **NUTS AND SEEDS**

EMBRACE	AVOID
Finely chopped nuts and seeds	Coarse pieces or unhulled nuts and seeds

# **DAIRY PRODUCTS**

DAIRTIN	ODUCIS
EMBRACE	AVOID
Eggs	Accumulation of milk products
Lactose-free substitute products (see below)	
Almond milk	
Soy milk from soy protein	
Rice milk	
Hazelnut milk (limited)	
Lactose-free cream	
Lactose-free ice cream/yogurt/curd with the right sweeteners (see list of sweeteners)	
Lactose-free cheese: Cheese is lactose-free if it contains it nutritional value table of the packaging states 0g sugars or <0.5g (lactose is a sugar). Cheese is also lactose-free if it is explicitly stated is stated on the packaging. Most hard aged cheeses are safe.	
Eg: Emmental, gouda, cheddar, feta, parmesan, grana padano, pecorino, Old Bruges, Old Amsterdam, gorgonzola, provolone, camembert, most bries, certain goat cheeses	
Beware: cheese is usually high in fat and can therefore cause problems in large quantities	
Lactase (lactic acid)	

# POTATO PREPARATIONS, RICE, BREAD (CARBOHYDRATES)

EMBRACE	AVOID
Potato	Pre-packed potato preparations with additives
Chips/French Fries (without wrong additives e.g. Lutosa Belgian fries or McCain Chips Op z'n Belgisch) or home-made fries	Fries with additives
Rice	Croquettes
Rice noodles	Accumulation of wheat, products made from wheat or wheat flour (e.g. bread, pasta, pizza dough, biscuits, puff pastry, shortcrust pastry, etc.) Allowed to a limited extent.
Gluten-free pasta from corn or rice flour	Pasta (from wheat flour)
Puree without milk/cream	Puree (standard preparation)
Quinoa	Barley, rye, products derived from these cereals
Gluten-free bread without sweeteners or additives	Accumulation of bread, pistolets, sandwiches etc.
Polenta	Wheat flour
Oatmeal, oats	Bean flour
Buckwheat and derived products	Gram flour
Millet and derivatives	
Corn flour and corn starch	
Rice flour	
Gluten-free flour without additives	

# **SWEETENERS**

EMBRACE	AVOID
Honey	Fructose (refined)
Glucose, glucose syrup	Maltitol
Maple syrup	Sorbitol
Rice syrup	Xylitol
Dextrose	Erythritol

Stevia	Mannitol
Palm sugar	All other sweeteners ending in "-ol"
Rice malt syrup	Molasses

# **DRINKS**

EMBRACE	AVOID
Water	Strong black tea >1 large cup
Weak black tea	Chai tea
White tea	Oolong tea
Green tea	Accumulation of milkproducts
Rosewood tea	Dessert wine with sweetener
Mint tea	
Coffee (limited)	
Milk substitutes (see dairy list)	
Fresh fruit juice from appropriate fruits (see fruit list) (limited)	
Dry white wine (Chardonnay)	
Red wine	
Beer	
Wodka	
Gin	
Jenever	

# **OTHER**

EMBRACE	AVOID
Vegetable oil, all types (olive, corn, rapeseed, groundnut, sunflower, coconut)	Sauces with incorrect or unknown ingredients (such as artificial colorings, preservatives, flavor enhancers or other synthetic additives)
Butter	

Vinegar, wine vinegar, apple vinegar, malt vinegar, rice wine vinegar (all 2 tablespoons) Dried banana (limited) Stock cubes without FODMAP ingredients (e.g. Knorr chicken - not Finesse) or homemade stock from safe vegetables and herbs Cocoa powder (2 large tablespoons) Vinegar, balsamic (1 tablespoon) Soy sauce Seaweed nori Seaweed wakame (2 tablespoons) Miso paste Sambal oelek - without FODMAP ingredients eg. brand Suzi Wan Caperkins Canned tomatoes (92 g) Tomato puree (2 tablespoons) Mustard Wasabi Almond paste (1 tablespoon) Vegemite (1 tablespoon) Tamarind paste (1/2 tablespoon) Worcestershire sauce Mayonnaise (2 tablespoons) Noble yeast (1 tablespoon) Vanilla essence Agar agar Gelatine Black chocolate without milk/ whey/..., without sweeteners