



# Investigating Leaky Gut Testing the Gut Barrier

Emily Birch  
KBMO Diagnostics



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# What are we covering today?

- Overview of 'leaky gut'
- How to test the gut barrier
- The food sensitivity - gut barrier connection
- Gut barrier markers
- Real-life client reports



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# Meet the Team



Charlotte Hunter  
Head of KBMO UK



Linette Petrillo  
Customer Services



Kelly Hutson  
Business Relationships



Clare Kennedy  
Operations Manager



Natasha Khan  
Practitioner Relationships

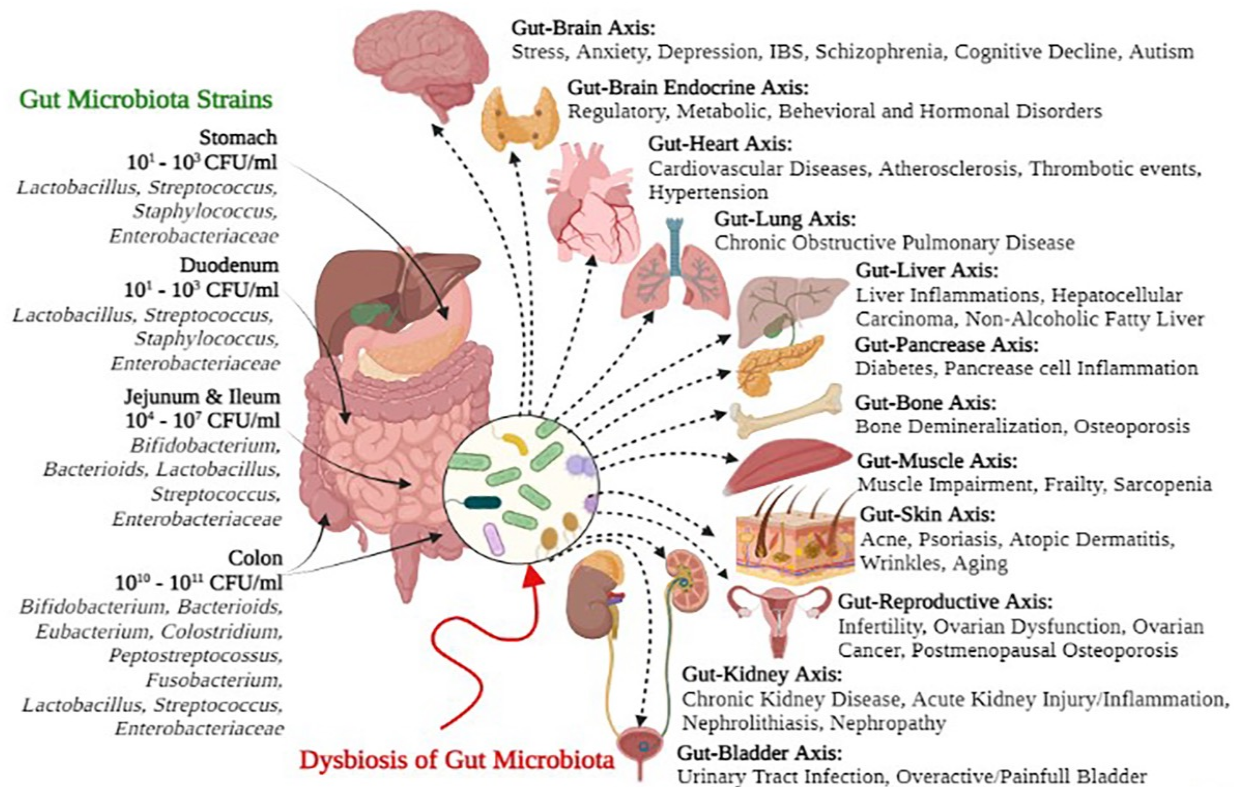


Emily Birch  
Support & Communications



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# “All disease begins in the gut” - Hippocrates



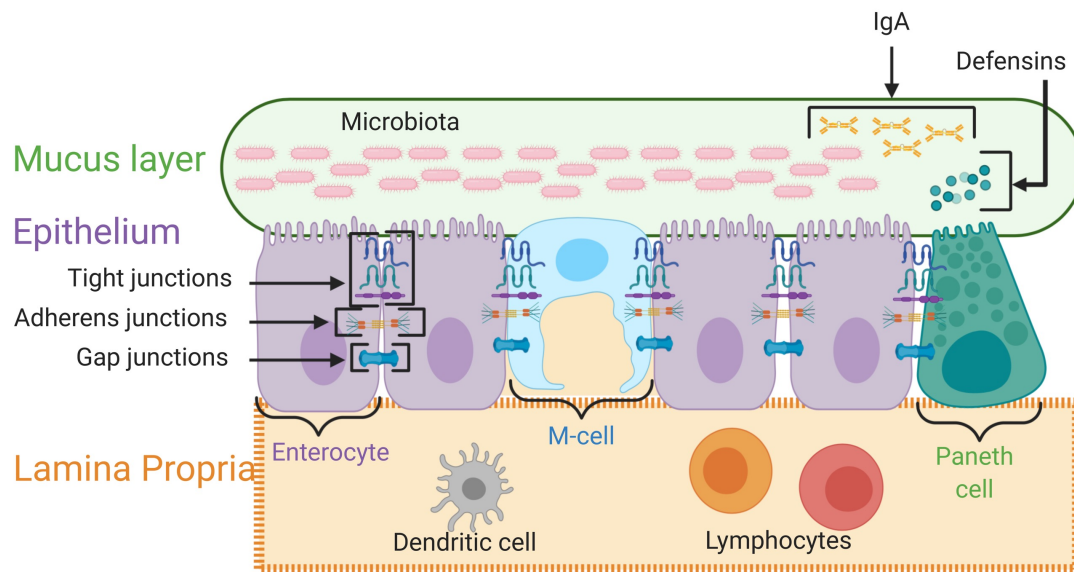
Source: Afzaal et al. 2022



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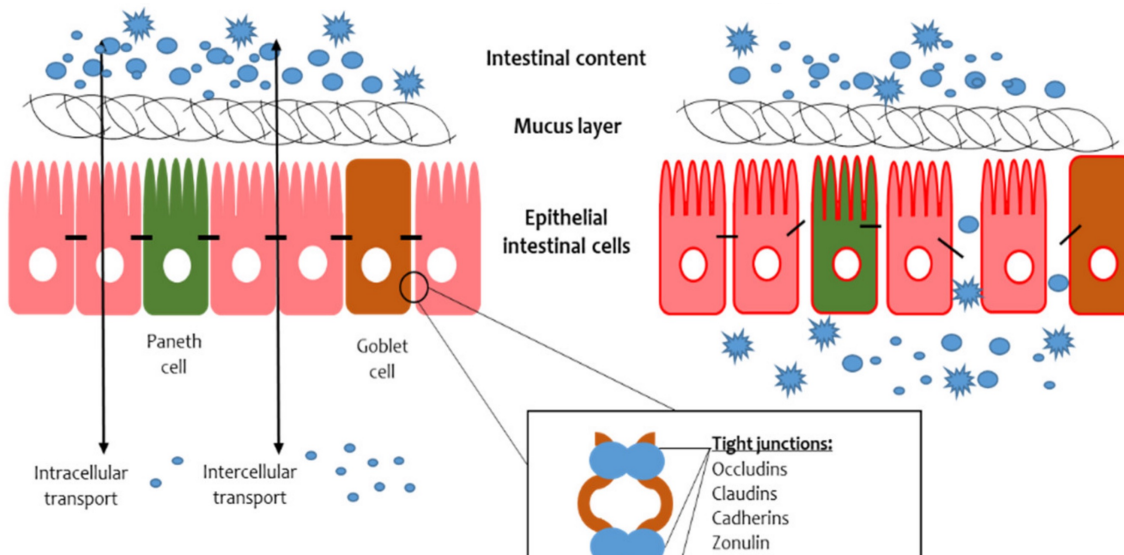
# The Intestinal Barrier (IB)



Source: Sharma & Riva, 2022

- The first line of defence against pathogens and food antigens
- In a healthy person, it operates on selective permeability. Water, ions and low-molecular substances can freely pass through. Macromolecules, toxins, food allergens and pathogens cannot.
- When the latter substances permeate the IB, the immune system is over-activated, resulting in a systemic inflammatory response.
- Maintaining the integrity of the intestinal barrier is key for your clients' wellbeing.

# Intestinal Permeability – “Leaky Gut”



Source: Kocot, Jarocka-Cyrta & Drabinska, 2022

- The lining of the small intestine becomes damaged and more porous.
- Allows toxins, bacteria and other particles to “leak” into the bloodstream.
- Contributes to excessive immune reactions.
- Triggers and mediates systemic inflammation.
- Is associated with a wide range of symptoms, including food sensitivities, bloating, fatigue, headaches, joint pain, skin issues and nutritional deficiencies.

**Remember:** A level of intestinal cell permeability is normal for nutrient absorption!  
But “leaky gut” involves compromised epithelial tight junctions.



# Testing the Gut Barrier

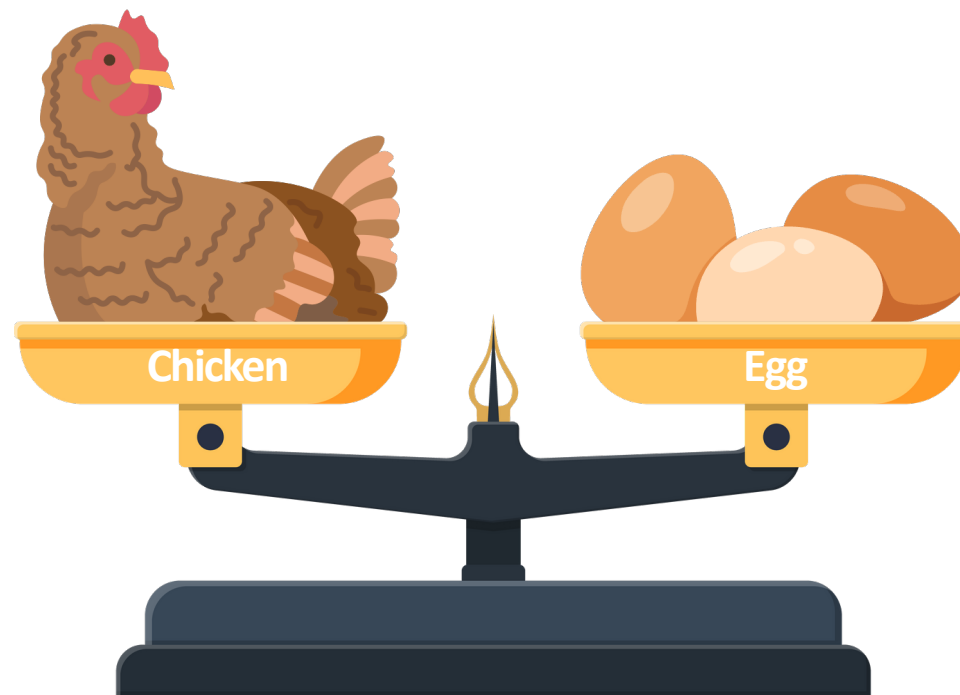
# The Food Inflammation Test (FIT)



# Dr Joel Evans

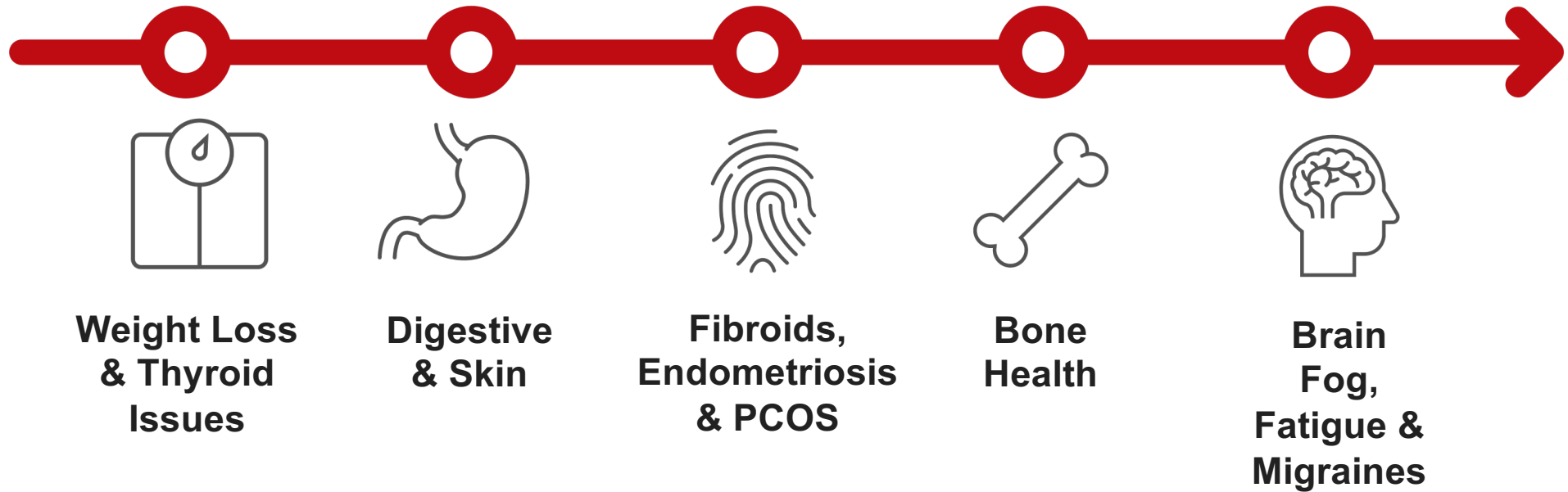
“The immune complexes and inflammation associated with foods are an underlying problem for all of the conditions I see daily.”

# Food sensitivity or leaky gut: which came first?





# Why test food sensitivities?



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# I know what you're probably thinking...

Unreliable  
and inaccurate

I want  
my clients  
to eat more – not less!

Waste of money

They only  
measure recent  
consumption

Elimination  
Diets are the  
Gold standard

They are not  
Scientific



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# Why is isolated IgG testing problematic?

1

IgG antibodies are found in healthy adults so most likely reflect exposure

2

High rate of false positives

3

Unnecessary dietary restrictions

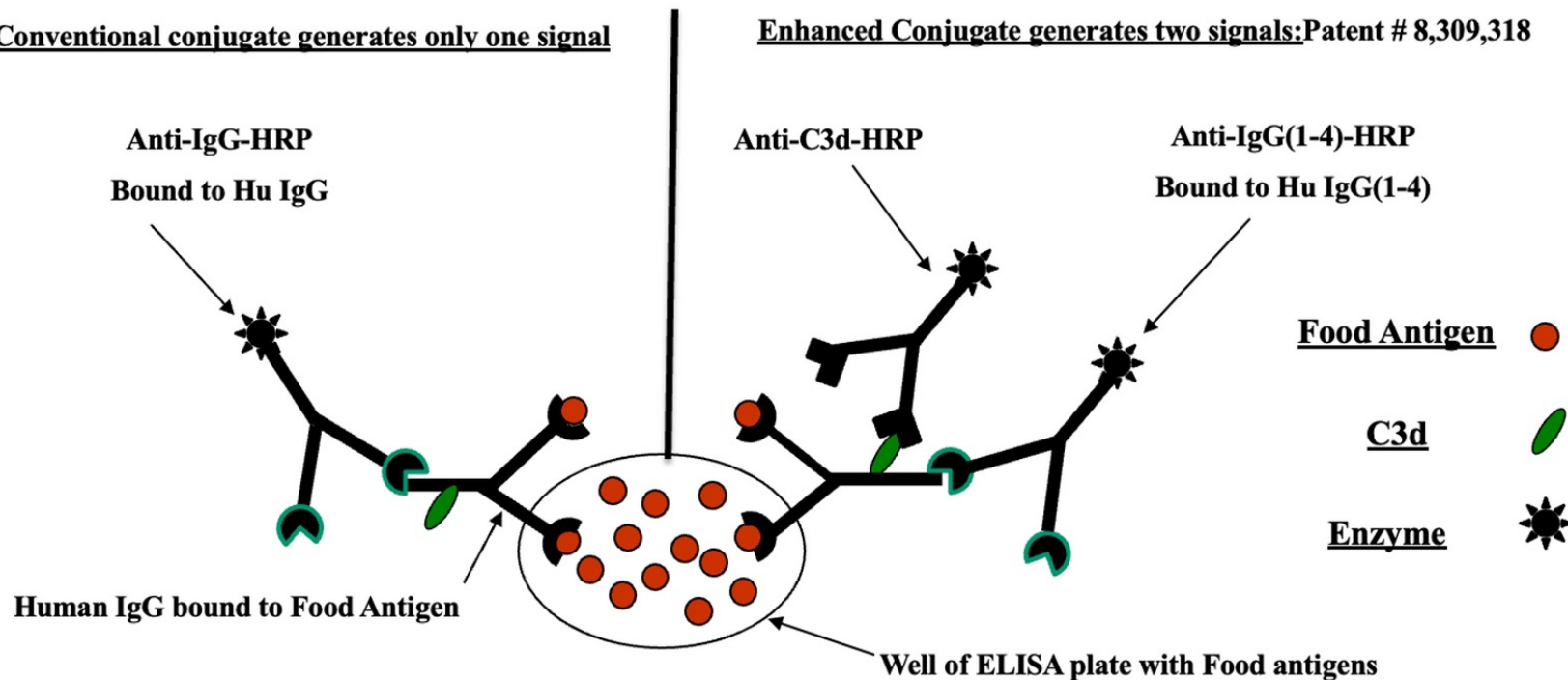


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# Technology for Enhanced Sensitivity

Conventional conjugate generates only one signal

Enhanced Conjugate generates two signals: Patent # 8,309,318



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# The Immune System

The immune system provides 3 levels of defence against disease causing organisms.

**The FIT and Gut Barrier Panel tests all of these:**

## 1. Barriers

### Prevent Entry

- Skin & mucus membranes
- Stomach acid & digestive enzymes
- Beneficial bacteria that live in the colon (the gut microbiota)

## 2. Innate Immunity

### General Defence

- WBCs called neutrophils & macrophages engulf & destroy foreign invaders & damaged cells

## 3. Adaptive Immunity

### Specific Defence

- WBCs (T lymphocytes or T cells) target & destroy infected or cancerous cells
- WBCs called B lymphocytes (B cells) & plasma cells produce antibodies that target & destroy infected /cancerous cells

(Informed Health, 2023 and Paludan et al., 2020)



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# Foods We Test

176 Foods & Gut Barrier Panel						
132 Foods & Gut Barrier Panel						
22 Foods						
DAIRY/EGGS	FISH	GRAINS	VEGETABLES	FRUITS	NUTS/SEEDS	SPICES/ MISCELLANEOUS
Casein Cow's Milk Egg White Egg Yolk MEATS Beef Chicken	Salmon  SEAFOOD Shrimp	Wheat, Gluten Wheat, Whole  BEANS Coffee Soy Bean	Corn Potato, White Tomato	Banana Pineapple	Almond Peanut	Candida Turmeric Yeast, Brewer's
Goat's Milk Whey   Bacon Duck Lamb Pork Turkey	Codfish Flounder Halibut Sea Bass Snapper Swordfish Trout Tuna  Clam Crab Lobster Scallops	Barley Millet Oat Quinoa Rice Rye  Cocoa Kidney Bean Lentils Navy Bean Pinto Bean	Artichoke Asparagus Beets Broccoli Butternut Squash Cabbage Carob Carrot Cauliflower Celery Collard Greens Cucumber Lettuce Pea, Chick Pea, Green Pepper, Green	Apple Avocado Blueberry Cantaloupe Cherry Cranberry Grape, White Grapefruit Honeydew Melon Lemon Lime Olive, Green Onion, White Orange Peach Pear	Cashew Coconut Cola Nut Dill Seed English Walnut Flax Seed Hazelnut Pecan Sesame Seed Sunflower Seed	Agave Aspartame Basil Benzoic Acid BHA Canola Oil Cinnamon Garlic Ginger Hops MSG Mushroom Mustard Oregano Paprika Pepper, Black  Pepper, Chili Peppermint Polysorbate 80 Red #3 Red #40 Rosemary Saccharin Spirulina Sugarcane Tea, Black Vanilla Wine, Red Yellow #6
Sheep's Milk   Venison	Anchovy Mackerel Sardine  Oyster Squid	Amaranth Buckwheat Gliadin Sorghum Spelt  Black Bean Green Bean	Arugula Brussel Sprouts Cilantro Kale Parsley Summer Squash	Acai Berry Apricot Eggplant Fig Kiwi Goji Berry Mango Monk Fruit Papaya	Brazil Nut Chia Seed Hemp Seed Macadamia Nut Pine Nut Pistachio	Cloves Coconut Oil Cumin Hemp Protein (CDB) Honey Maple Syrup Stevia Tapioca Vinegar

Food selection contains  
'real-world' foods, encompassing  
raw and cooked.

All FIT tests include the Gut Barrier  
Panel.



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# Summary of FIT Tests

**FIT22**

22 of the most common food sensitivities including gluten, cow's milk and egg plus the Gut Barrier Panel

**FIT176**

176 foods including health foods such as honey, stevia and coconut oil plus the Gut Barrier Panel

**FIT132**

132 foods and food additives plus the Gut Barrier Panel

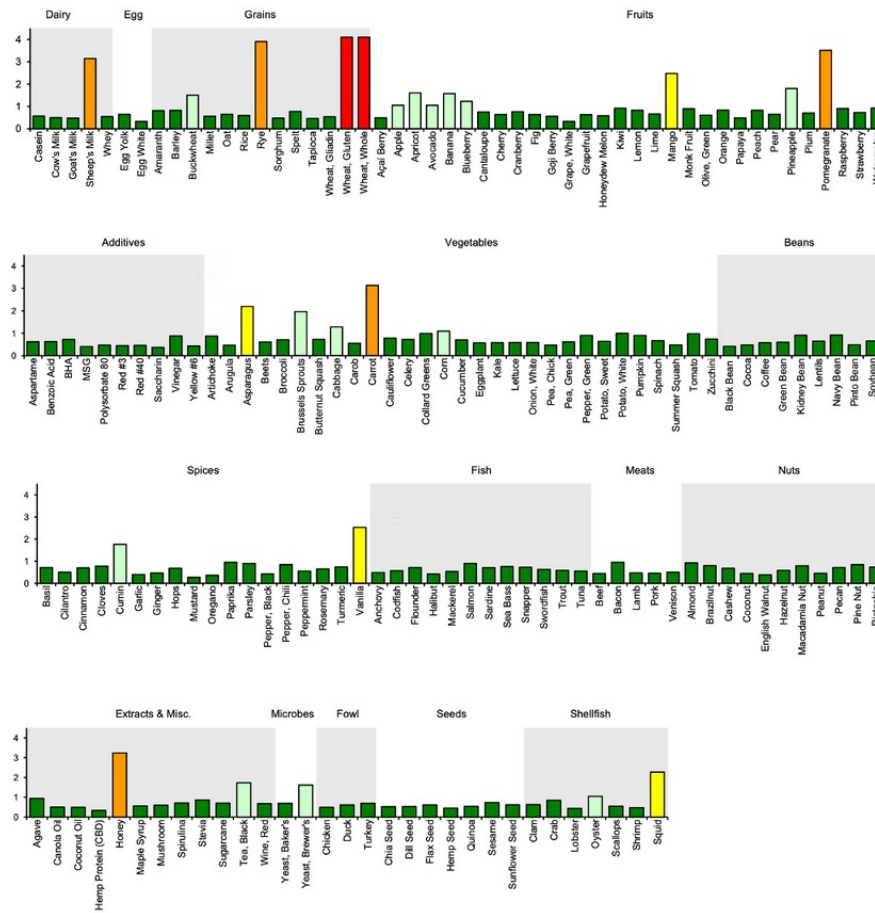
**GBP**

Assess the integrity of the gut lining by measuring Candida, Zonulin, Occludin and Lipopolysaccharides (LPS)



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# The FIT Report



4+ Reactions:	Wheat, Gluten Wheat, Whole
3+ Reactions:	Sheep's Milk Rye Pomegranate Carrot Honey
2+ Reactions:	Mango Asparagus Vanilla Squid

- Easy to read
- Colour coded
- Client-friendly
- Easy to interpret
- Efficient practice
- Easy to repeat tests

# Easy Interpretation

<b>4+ Reactions:</b>	Wheat, Gluten Wheat, Whole
<b>3+ Reactions:</b>	Sheep's Milk Rye Pomegranate Carrot Honey
<b>2+ Reactions:</b>	Mango Asparagus Vanilla Squid



Foods are split into clear categories: those with measurable immune reactivity (1+ to 4+) and foods that show no measurable reactivity.

Each food is colour-coded and graded based on reactivity intensity:









<b>Red</b>	+4	Highest immune reactivity
<b>Orange</b>	+3	Strong reactivity
<b>Yellow</b>	+2	Moderate reactivity
<b>Light Green</b>	+1	Low grade reactivity
<b>Dark Green</b>	+0	No reactivity (safe to consume)

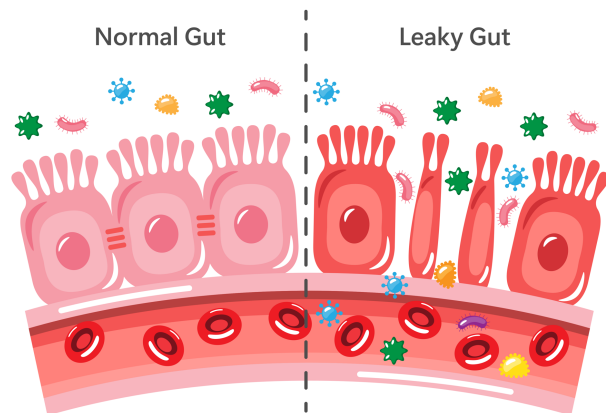


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# The Gut Barrier Panel

Gut Barrier Panel						
	IgG1-4+C3d			IgA1-2		
		Cut off			Cut off	
Candida	Negative			Positive		
Zonulin	Negative			Positive		
Occludin	Negative			Negative		
LPS	Negative			Positive		



Our unique Gut Barrier Panel acknowledges that leaky gut occurs across a spectrum and includes the gatekeeper markers: Candida, Zonulin, Occludin and LPS.

For each marker we measure IgG 1-4 / C3d, in addition to IgA 1-2.

## Candida

Naturally occurring yeast, residing in the GI tract as part of the normal microbiome. Overgrowth is problematic.

We measure and use any candida overgrowth in the stomach/dysbiosis as a precursor to leaky gut occurrence

## Zonulin

A marker of intestinal permeability. We use unique next generation Zonulin IgG **antibody** screening – a more stable and specific marker, exclusive to KBMO.

Developed by Dr Alessio Fasano & Dr Brent Dorval

## Occludin

A marker of intestinal tight junction stabilization and optimal barrier function.

Elevated occludin indicates that the tight junctions between intestinal epithelial cells are breaking down

## Lipopolysaccharide (LPS)

Potent endotoxin, present in outer surface membrane of gram-negative bacteria - many of which are pathogenic.

Major inducer of inflammatory response - triggers inflammatory cytokine release, can create direct epithelial damage in the gut, crosses the blood brain barrier.



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# Real Clients, Real Reports

## But before we dive in...

How strong is your rapport with your client?

Will you need to negotiate with your client?

Are there any client-specific contraindications?

How will you decide what to do with the results?

How will you coach your client?

What's the clinical context?



! DO NOT look for things that give you an excuse to treat!

! Your client is unique - any 'protocols' require personalisation



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# Client 1 – Anna

Female, 47 years, post-menopausal (surgical menopause – adenomyosis & endometriosis)

**History of:** Anxiety, controlling behaviour around foods

**Symptoms:** Postprandial bloating, constipation, reflux, brain fog, generalized fatigue, joint pains, frequent headaches

**Prior testing:** SIBO test (negative), H.Pylori test (negative), GI360 Stool Analysis (unremarkable), various blood tests (all within normal range), Coeliac testing (normal)

**Diet:** Reasonably healthy, no alcohol, good hydration, balanced macros, little sugar

**Lifestyle:** Daily exercise, low reported stress

List of Restricted Foods:	
4+ Reactions:	Wheat, Gliadin Wheat, Gluten Wheat, Whole
3+ Reactions:	Cabbage
2+ Reactions:	Collard Greens Paprika











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# Client 1 - Anna

List of Restricted Foods:	
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Gut Barrier Panel						
	IgG1-4+C3d			IgA1-2		
		Cut off			Cut off	
Candida	Negative			Negative		
Zonulin	Negative			Positive		
Occludin	Negative			Negative		
LPS	Negative			Negative		

Longer term, systemic

Short term, immune activation

## C3d:

- Downstream inflammatory metabolite
- Breakdown product of complement component C3
- Can indicate complement pathway activation in response to immune complexes.



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# Client 1 - Anna

Gut Barrier Panel						
	IgG1-4+C3d			IgA1-2		
		Cut off			Cut off	
Candida	Negative	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div><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## What we did:

Food: Exclusions as per her FIT Test results. Healthy replacement of gluten. Increased polyphenols and fibre (with as much variety as possible).

Lifestyle: Addressed eating 'housekeeping' (sufficient chewing, limited water at meals, mindful eating), increased sleep quantity

Supplements: Nutridyn: GI Integrity Peach Tea, Nutridyn: Fiber

Don't assume candida is the problem, just because its there.  
Be careful with your hand grenades!

# Client 2 - Christine

Female, 69 years, prior breast cancer history

**Symptoms:** Severe allergies, histamine intolerance, fatigue, anxiety, Celiac disease







Full protocol adherence, strong motivation

Autumn 2024

7 months

Spring 2025

Gut Barrier Panel		
	IgG1-4+C3d	IgA1-2
Candida	Negative	Positive
Zonulin	Negative	Positive
Occludin	Negative	Positive
LPS	Negative	Negative

Gut Barrier Panel						
	IgG1-4+C3d			IgA1-2		
		Cut off			Cut off	
Candida	Negative			Negative		
Zonulin	Negative			Negative		
Occludin	Negative			Negative		
LPS	Negative			Negative		

**Approach:** Continued gluten & dairy-free diet, gut healing (digestive enzymes, Mg, Zn, B-vitamins), gentle anti-Candida protocol, adaptogens and adrenal cortex glandulars.

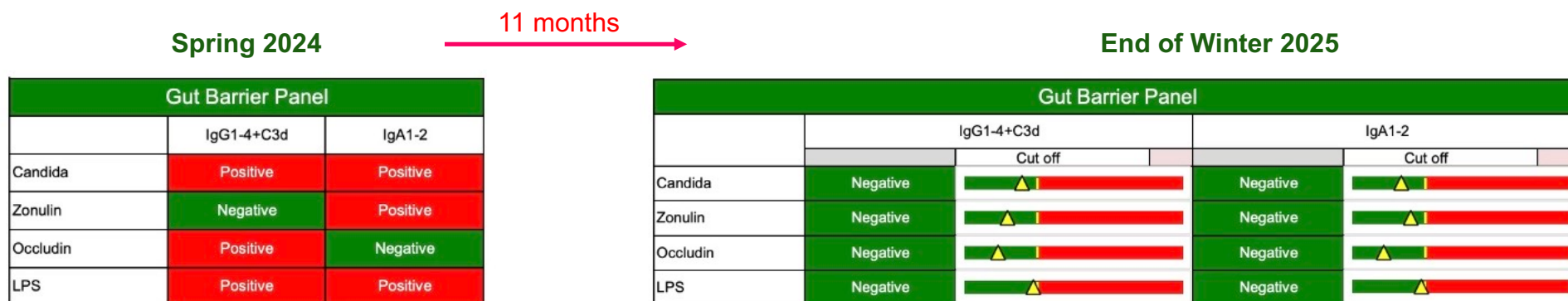
**Progress at Follow Up:** All GBP markers negative. Improved energy, digestion and allergies. HbA1c improved from 5.8% to 5.1%.

# Client 3 - Mark

Full protocol  
adherence, strong  
motivation

Male, 30 years

**Symptoms:** Ulcerative Collitis flare, loose stools with urgency, fatigue, poor exercise performance, increased CRP



**Approach:** Removed gluten, dairy and FIT-identified foods. Added whole foods (++ polyphenols). Gut barrier healing protocol, betaine HCl and digestive enzymes, anti-inflammatory herbs.

**Progress at Follow Up:** Symptoms resolved. Energy strong. Digestion normal. HbA1c improved. UC flare fully resolved without steroids (client's choice).



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DIAGNOSTICS



# Gut Barrier Support



Optimise dietary fibre - feed the microbes so they don't eat your mucins!



Polyphenol-rich diet - berries, pomegranate, blackcurrant, green tea, cacao



Gut Supporting nutrients - Glutamine, Glycine, Zinc, EFA's, B vitamins



Mucopolysaccharides / glucosaminoglycans - Bone broth, fish/poultry skin, flaxseeds, aloe vera, oats, okra, medicinal mushrooms, apples, citrus peel, slippery elm, marshmallow



Address food sensitivities / food-mediated inflammation



Mindful eating

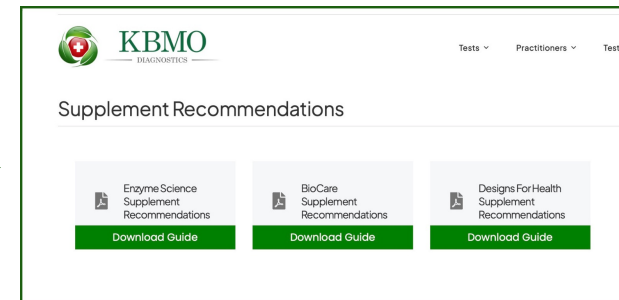
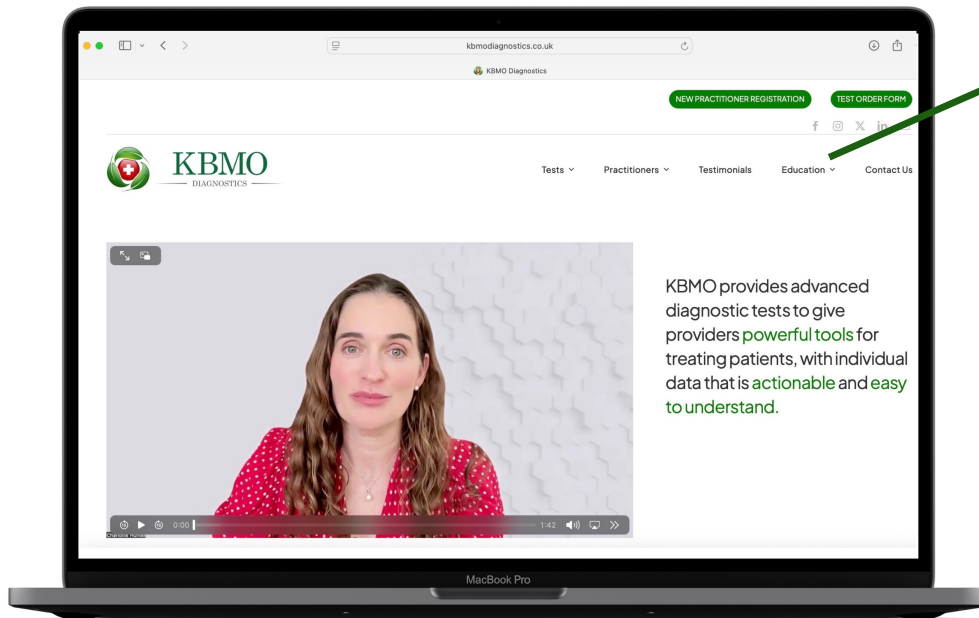


Stress reduction, sleep optimisation, breathing techniques



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# Supplement Guidance



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# When to re-test

We recommend re-testing after **3 – 6 months**



## What if I don't see changes, or they get worse?

- See previous FIT test considerations
- Consider ACTUAL client compliance
- Consider where you are in your support protocol
- Consider increased stress and other lifestyle or health factors
- Consider running a stool / SIBO test
- Consider GP referral or involvement



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# Clinical Support



- Fast to read patient reports
- Educational videos and webinars
- Provider handbook
- Supplementary handouts and leaflets
- Supplement protocols
- Website resources
- Support calls

 NutriDyn®

BioCare®  


 New Roots  
HERBAL

**ENZYME  
SCIENCE®**  
THE PRACTITIONER DIVISION OF ENZYMEDICA

 designs for health®



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# Patient Support



- Easy to read patient reports
- Client Mobile App
- Meal suggestions



# A powerful tool for your practice

- ✓ Useful pre- initial consultation screening tool for every client
- ✓ Data you can use straight away (immediate clarity)
- ✓ Improves client engagement & compliance
- ✓ No guessing at problematic foods / gut barrier compromise
- ✓ It's not a "so what?" test, it's insightful and useful
- ✓ Financial benefit for you, with a practitioner mark-up of your choice
- ✓ Clear, concise reports mean less need for long support calls and assistance = freeing up your time

# The gut is the foundation of systemic health

**It influences immune regulation, detoxification, hormone balance, and brain function.**

**The KBMO Gut Barrier Panel can help you identify hidden dysfunction,  
including silent immune activation**



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“You cannot repair what you haven’t measured. Gut barrier testing gives us that window – and the data to guide true healing.”

- HUM2N Clinical Team



# Stay in Touch



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Thank You



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# Image References

Afzaal, M. Saeed, F. Shah, Y.A *et al.* (2022). 'Human gut microbiota in health and disease: Unveiling the relationship', *Frontiers in Microbiology*,

Kocot, A.M. Jarocka-Cyrta, E. & Drabinska, N. (2022). 'Overview of the Importance of Biotics in Gut Barrier Integrity', *International Journal of Molecular Sciences*, 23 (5).

Sharma, L. & Riva, A. (2022). 'Intestinal Barrier Function in Health and Disease – Any Role of SARS-CoV-2?', *Microorganisms*, 8 (11).