

3-PART GUT HEALTH SERIES

Exploring Testing Options & Tips for Maintaining Gut Health



March 6, 2025

6:00-7:00 pm

Presented by:



COMMUNITY
NATURAL FOODS
NOURISHING OUR COMMUNITY SINCE 1977



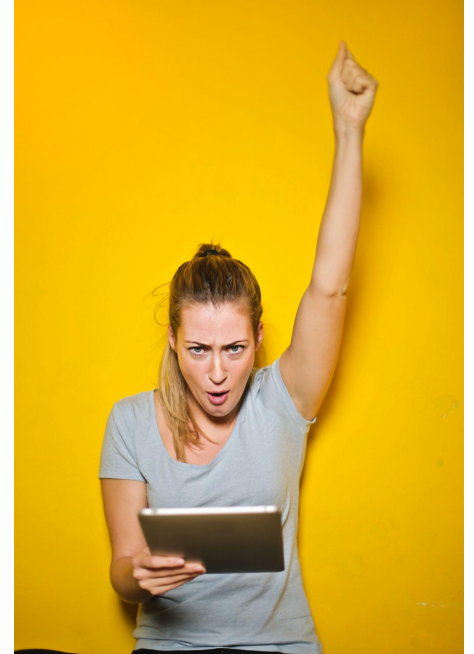
CALGARY CO-OP

Jessica Pecush
Nutrition

THIS EVENING!

- Why the gut is **GROUND ZERO** for thriving health
- Environmental factors impacting gut health
- How gut inflammation starts...and progresses
- My overall approach to gut repair + healing
- Root causes of common gut issues
- How to approach identifying underlying gut issues
- Sequence of **ACTION STEPS** to consider...

ARE YOU READY?!



Jessica Pecush
Nutrition

DISCLAIMER

This webinar is for **informational and educational purposes only** and is **not** intended as professional medical advice. By accessing and using this information, your use shall constitute your agreement that this information is **not** professional medical advice and shall **not** be relied upon by you as such. By using this information, you understand that I, Jessica Ferguson (Pecush) and/or Jessica Pecush Nutrition, are a certified *Culinary Nutrition Expert* and *Certified Holistic Nutritional Consultant*[™] professional, **not** a therapist or licensed medical professional.

You should **always** consult with your physician or other qualified medical professional first, prior to implementing any of our advice, information, or suggestions. You should **always** consult with your physician or other qualified medical professional (not us), so as to discuss and clear any and all changes, additions, or alterations to your diet, medication(s)/medical treatment, exercise regimen, supplement regimen, health practices or lifestyle, prior to implementing them. Please only implement any and all changes **after** consulting with your physician or other qualified medical professional and assessing your own risk.



WHAT DO I DO?

I help high-performing adults navigating autoimmune and non-autoimmune gut disorders REPAIR their gut, REGAIN their energy and RELEASE their life-hindering symptoms, so they can FLOURISH in their personal and professional lives!

Celiac, Crohn's, Colitis, Diverticulitis, GERD/acid reflux, Candida yeast overgrowth, H. pylori, parasites...

WHY?

- Personal journey with digestive autoimmunity (*Ulcerative Colitis*) since 2004!
- **Health starts IN THE GUT!**
- The body is very capable of being repaired + rebalanced, if provided the opportunity with **ALIGNED** supports in place
- Everyone deserves to feel their very best throughout their lifetime, not just now + then!
- Health transformation starts with shifting limiting/false beliefs, closing knowledge/skill gaps and getting into suitable, sustainable and **SUPPORTED ACTION!**



Jessica Pecush 
Nutrition

HOW?

- **THE DI-JESS-TION METHOD**
 - 5-month (online) private coaching program
- Corporate Wellness Workshops + Public Workshops
- Grocery Store & Health Food Store Tours

MY BACKGROUND:

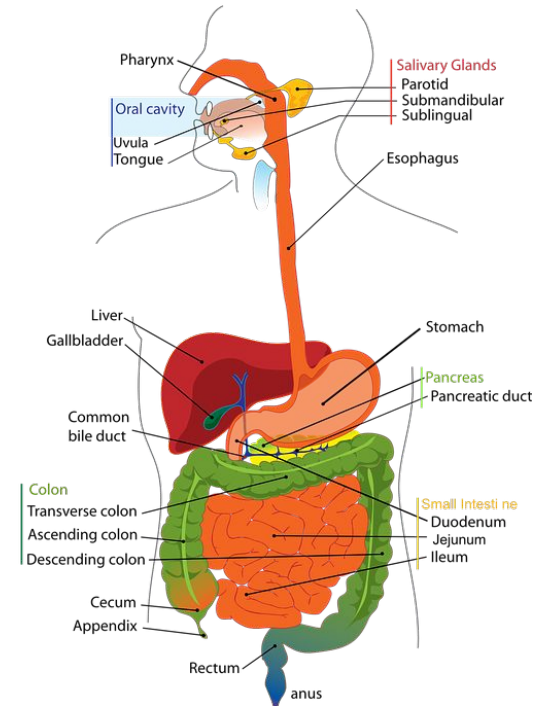
- **Certified Holistic Nutritional Consultant™**
Canadian School of Natural Nutrition (Calgary)
- **Certified Culinary Nutrition Expert**
Academy of Culinary Nutrition (Toronto)
- **Autoimmune Paleo Certified Coach®**
Autoimmune Wellness™ LLC (USA)
- **Certified Teacher**
Alberta Education
- **University of Calgary Wellness Hub Administrator**
Cumming School of Medicine



Jessica Pecush Nutrition

Why The Gut Is GROUND ZERO...

- The CORE of our body's physiological functioning
- Responsible for:
 - **INGESTION** of our food + its nutrients
 - **DIGESTION** of our food + its nutrients
 - **ABSORPTION** of nutrients for nourishment of cells + conversion into energy!
 - **ELIMINATION** of indigestible fiber, waste matter, hormone metabolites (e.g. estrogen)...
- Gut function is **DEEPLY CONNECTED** with:
 - Thyroid function (incl. metabolism)
 - Adrenal health + blood sugar regulation
 - Liver filtration
 - Hormones + Neurotransmitters



Environmental Factors Impacting Gut Health

Chemicals, Pollution + Heavy Metals

- Pesticides, herbicides (endocrine-disruptors)
 - Contribute to oxidative stress on cells/tissues

Xenoestrogens + obesogens

- Estrogen-mimicking, endocrine disruptors

Infections

- Bacterial, viral, parasitic...

Medications

- Birth control pills, NSAIDs, Proton-Pump Inhibitors...

Vitamin D Deficiency

- Insufficient sunlight, low levels of active Vitamin D...

Micronutrient Deficiencies

- Contribute to oxidative stress on cells/tissues



How Gut Inflammation Starts...DYSBIOSIS!

- **Imbalance (loss of equilibrium) and damage to the bacterial balance in the gut microbiome due to ongoing, inflammatory exposures**
- **Overgrowth of poor bacteria, too little beneficial (probiotic) bacteria, and possibly beneficial bacterial overgrowth, too**
- **Sets the stage for further inflammation, the surfacing of symptoms, and a *Leaky Gut* in the body (a state of chronic inflammation)**



Chronic Gut Symptoms with DYSBIOSIS

Acid Reflux	Anxiety	Bloating and/or Foul Gas	Brain Fog (difficulty thinking, focusing, recalling)	Chronic Fatigue	Constipation
Depression	Diarrhea	Frequent UTIs/ Vaginal Yeast Infections	Food Sensitivities + Allergies	Halitosis (bad breath)	Hormonal Imbalances (e.g. blood sugar, cortisol, PMS)
Inflammation (e.g. achy joints, body pain)	Nausea	Rash/Redness (e.g. hives)	Rectal/ VaginAL Itching	Skin Issues (e.g. acne, eczema, psoriasis)	Upset Stomach

How Chronic Gut Inflammation Progresses

Leaky Gut (Intestinal Permeability):

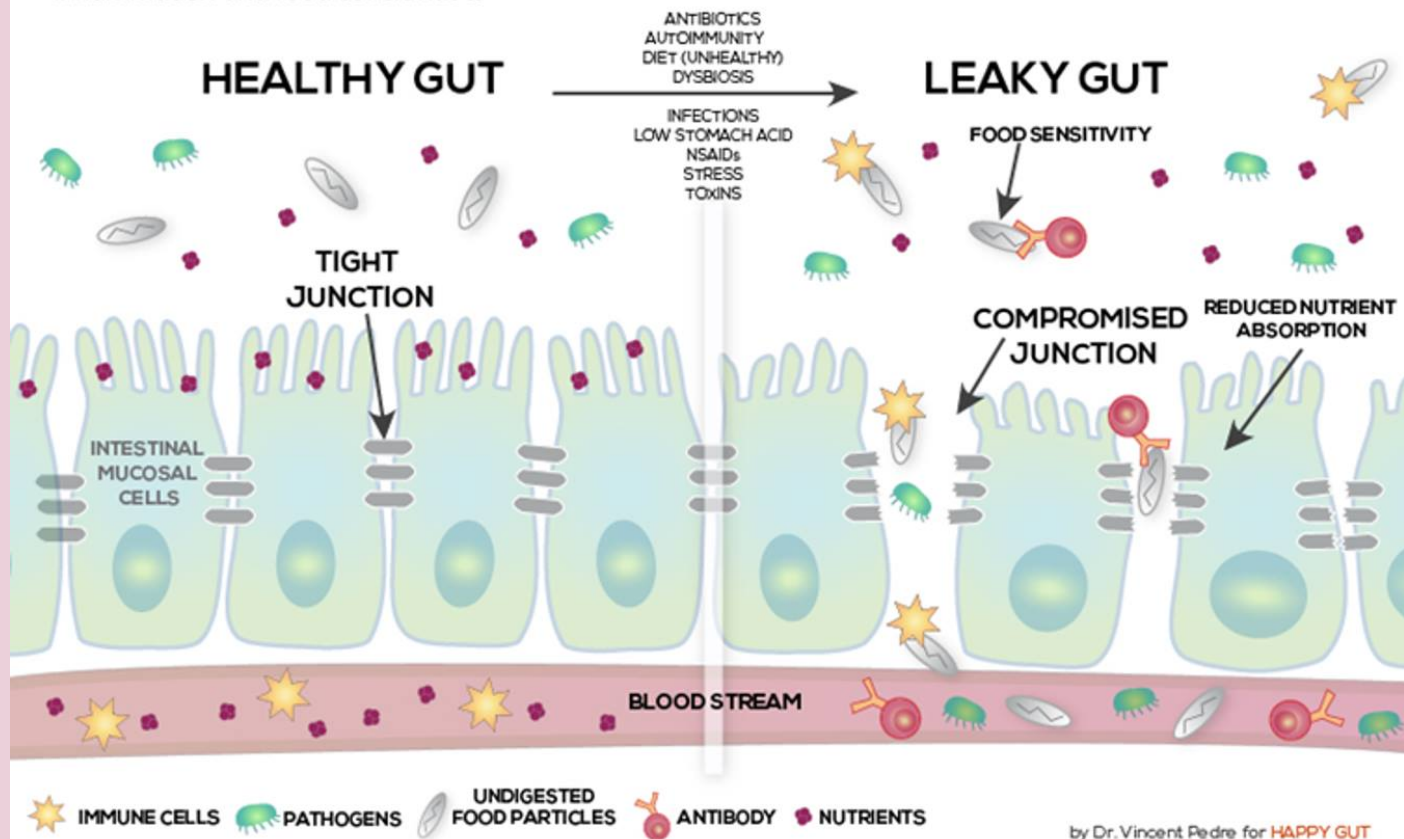
- The 1 cell-thick lining of the small intestinal wall = **critical barrier**
- Separates the outside of the body (digestive tract) from the inside of the body (bloodstream)
- Can become damaged/compromised if gut bacteria are not in an optimal state
- Healthy mucous lining on these cells can become thinned-out or non-existent due to chronic inflammation/damage
- Beneficial/probiotic bacteria that live in the mucous can die off
- Reduced protective wall for internal environment

Leaky Gut (Intestinal Permeability)

- Results in the cell junctions (connections) between the small intestinal wall cells loosening/pulling apart
- Gaps between the cells become larger and the barrier becomes 'leaky'
- Undigested food particles (e.g. proteins), toxins and poor bacteria can then 'leak' into the bloodstream and set off the Immune Response
- Sets the stage for chronic, **systemic** inflammation
- Dysbiosis + a Leaky Gut = contributing factors for autoimmunity, as well as other gut disorder (H. pylori, Candida, parasites, SIBO, etc.)

HEALTHY GUT VERSUS LEAKY GUT

A healthy gut works like a cheese cloth, allowing only nutrients through, but keeping larger food particles and pathogenic bacteria, yeast and parasites out. In a leaky gut, the tight junctions are loosened so undigested food particles and pathogens can get through and activate the immune system, causing inflammation and food sensitivities.



My Approach to Gut Repair + Healing...

1. ASSESS + REMOVE GUT HEALTH DISRUPTORS

- Identify underlying gut issues at play + their root causes
- Start clearing out any gut infection/overgrowth/parasites
- Identify any gut health disrupting foods/beverages
- Gradually wean off gut disruptors that are feeding inflammation



2. RE-ENGINEER GUT FUNCTION

- Targeted digestive support + nutrient deficiency support
- Therapeutic, gut-healing foods + bev for your circumstances
- Strong nutritional foundation
 - Diverse, colourful produce, high-quality proteins, and anti-inflammatory fats + oils

My Approach to Gut Repair and Healing...

3. GROW YOUR GUT FLORA

- Regular reliance on diverse prebiotic and probiotic-rich foods
- Use of targeted probiotic strains **when suitable**

4. GUT BARRIER CLOSURE

- Rebuilding the mucous lining (small intestinal wall)
- Sealing up a 'Leaky Gut'

5. SELF-REPAIR OPTIMIZATION

- Mindset supports
- Nervous System supports
- Functional movement + therapeutic exercise
- Soothing sleep supports



Examples of Root Causes w/ Gut Issues

- **Digestive insufficiency**
 - E.g. Low stomach acid, low pancreatic enzymes...
 - Can contribute to vitamin/mineral deficiencies
 - e.g. Calcium, Iron, Magnesium, Vitamins B12/A/C... (low stomach acid)
- **Congested/sluggish liver + compromised bile production and/or flow**
 - High toxic load
 - Includes gallbladder removal (impacts fat digestion)
- **Inflammatory gut dysbiosis**
 - Little good bacteria, overgrowth of opportunistic bacteria, yeast overgrowth, H. pylori, parasite(s)...
- **Nervous System DYSregulation**



Tips for Approaching Blood Work + Medical Testing

1. Be sure you're actively making nutritional + lifestyle shifts that are within your bandwidth at the current time, **with consistency**
2. Request as thorough of a blood work panel as you can attain (e.g. annual physical-style), so it provides the most comprehensive snapshot in time possible
3. Some examples of helpful markers:
 - **Complete Iron Panel**
 - Deficiency common w/ gut issues
 - Iron liberated from food w/ sufficient stomach acid
 - **B12**
 - Liberated from food w/ sufficient stomach acid
 - **C-reactive protein** (general marker of inflammation in the body)
 - **CBC** (white blood cell-related markers can indicate if the body is fighting infection)
4. Medical testing (if enough evidence to warrant it/can gain a referral)
 - Endoscopy, colonoscopy, flex sigmoidoscopy...
 - Stool/parasite testing, H. pylori antibody test...
 - FIT Test (colorectal cancer screening/blood in stool)

A 'Friendly Reminder'...

Blood work, given it represents what is currently freely circulation in the blood at the time of testing as a snapshot in time...

is JUST ONE piece of the puzzle and one small part of the bigger, overall picture.

We cannot gain the full picture of your gut health and overall health from blood work alone.

How to Approach Attaining Other Testing...

TIP #1: Anti-inflammatory nutritional + lifestyle practices should be in the picture pretty consistently for a reasonable period of time prior to pursuing possible testing (if even needed).

TIP #2: You'd need to locate a practitioner qualified to order/run additional types (out-of-pocket-funded) testing (e.g. Naturopathic Doctor, Functional Medicine Practitioner, etc.)

GI-MAP Comprehensive Stool Test

- ‘Gastrointestinal Microbial Assay Plus’ (by [Diagnostic Solutions Laboratory](#))
- qPCR (Polymerase Chain Reaction) DNA technology
 - Highly-accurate, quantifiable results (not just a + or - result)
 - No false positives
 - High levels of sensitivity and specificity
 - Picks up DNA of organisms existing in stool
 - Knowing exactly HOW MUCH of an organism is present is most ideal scenario
 - Results reported as CFUs per gram of stool (CFU/g)
 - One CFU = 1 microorganism/1 cell
 - Results expressed in standard scientific notation
 - A result of $3.5e7 = 3.5 \times 10^7$ CFU (= 35,000,000 CFU/g of stool)
- Tests for pathogens, beneficial bacterial strains, opportunistic bacterial strains, protozoa, fungi, viruses and worms
- Tests for digestive function, immune responses and intestinal barrier integrity

What a GI-MAP DNA Stool Test Can Indicate...

YOUR PERSONALIZED REPORT

GI Microbial Assay Plus

PATHOGENS

The testing includes pathogens (bacterial, parasitic and viral) commonly known to cause gastroenteritis. Note that not all individuals with positive findings will present with symptoms. Many factors, including the health of the individual (such as immune health, digestive function, and microbiome balance), the transient nature of most pathogens, and the presence and expression of virulence factors, all contribute to pathogen virulence and individual symptoms.

BACTERIAL PATHOGENS	Result	Reference
<i>Campylobacter</i>	<dl	< 1.00e3
<i>C. difficile</i> Toxin A	<dl	< 1.00e3
<i>C. difficile</i> Toxin B	<dl	< 1.00e3
Enterohemorrhagic <i>E. coli</i>	<dl	< 1.00e3
<i>E. coli</i> O157	<dl	< 1.00e3
Enteroinvasive <i>E. coli/Shigella</i>	<dl	< 1.00e3
Enterotoxigenic <i>E. coli</i> LT/ST	<dl	< 1.00e3
Shiga-like Toxin <i>E. coli</i> stx1	<dl	< 1.00e3
Shiga-like Toxin <i>E. coli</i> stx2	<dl	< 1.00e3
<i>Salmonella</i>	<dl	< 1.00e4
<i>Vibrio cholerae</i>	<dl	< 1.00e5
<i>Yersinia enterocolitica</i>	<dl	< 1.00e5
PARASITIC PATHOGENS		
<i>Cryptosporidium</i>	<dl	< 1.00e6
<i>Entamoeba histolytica</i>	<dl	< 1.00e4
<i>Giardia</i>	<dl	< 5.00e3
VIRAL PATHOGENS		
Adenovirus 40/41	<dl	< 1.00e10
Norovirus GI/II	<dl	< 1.00e7

HELICOBACTER PYLORI

H. PYLORI & VIRULENCE FACTORS	Result	Reference
<i>Helicobacter pylori</i>	1.26e2	< 1.00e3
Virulence Factor, babA	N/A	Negative
Virulence Factor, cagA	N/A	Negative
Virulence Factor, dupA	N/A	Negative
Virulence Factor, iceA	N/A	Negative
Virulence Factor, oipA	N/A	Negative
Virulence Factor, vacA	N/A	Negative
Virulence Factor, virB	N/A	Negative
Virulence Factor, virD	N/A	Negative

COMMENSAL/KEYSTONE BACTERIA

COMMENSAL BACTERIA	Result	Reference
<i>Bacteroides fragilis</i>	3.84e9	1.6e9 - 2.5e11
<i>Bifidobacterium</i> spp.	4.53e8	> 6.7e7
<i>Enterococcus</i> spp.	2.59e7	1.9e5 - 2.0e8
<i>Escherichia</i> spp.	7.52e5 L	3.7e6 - 3.8e9
<i>Lactobacillus</i> spp.	3.08e5 L	8.6e5 - 6.2e8
<i>Enterobacter</i> spp.	3.17e6	1.0e6 - 5.0e7
<i>Akkermansia muciniphila</i>	<dl L	1.0e1 - 8.2e6
<i>Faecalibacterium prausnitzii</i>	3.98e4	1.0e3 - 5.0e8
<i>Roseburia</i> spp.	1.07e8	5.0e7 - 2.0e10
BACTERIAL PHYLA		
<i>Bacteroidetes</i>	7.97e11 L	8.6e11 - 3.3e12
<i>Firmicutes</i>	1.81e10 L	5.7e10 - 3.0e11
<i>Firmicutes:Bacteroidetes</i> Ratio	0.02	< 1.0

What a GI-MAP DNA Stool Test Can Indicate...

OPPORTUNISTIC/OVERGROWTH MICROBES		
DYSBIOTIC & OVERGROWTH BACTERIA	Result	Reference
<i>Bacillus</i> spp.	7.26e5	< 1.76e6
<i>Enterococcus faecalis</i>	6.40e2	< 1.00e4
<i>Enterococcus faecium</i>	2.01e4 High ↑	< 1.00e4
<i>Morganella</i> spp.	<dl	< 1.00e3
<i>Pseudomonas</i> spp.	<dl	< 1.00e4
<i>Pseudomonas aeruginosa</i>	<dl	< 5.00e2
<i>Staphylococcus</i> spp.	<dl	< 1.00e4
<i>Staphylococcus aureus</i>	7.67e2 High ↑	< 5.00e2
<i>Streptococcus</i> spp.	6.48e3 High ↑	< 1.00e3
COMMENSAL OVERGROWTH MICROBES		
<i>Desulfovibrio</i> spp.	5.39e7	< 7.98e8
<i>Methanobacteriaceae</i> (family)	6.37e7	< 3.38e8
INFLAMMATORY & AUTOIMMUNE-RELATED BACTERIA		
<i>Citrobacter</i> spp.	<dl	< 5.00e6
<i>Citrobacter freundii</i>	<dl	< 5.00e5
<i>Klebsiella</i> spp.	<dl	< 5.00e3
<i>Klebsiella pneumoniae</i>	8.36e3	< 5.00e4
<i>M. avium</i> subsp. <i>paratuberculosis</i>	<dl	< 5.00e3
<i>Proteus</i> spp.	<dl	< 5.00e4
<i>Proteus mirabilis</i>	<dl	< 1.00e3
COMMENSAL INFLAMMATORY & AUTOIMMUNE-RELATED BACTERIA		
<i>Enterobacter</i> spp.	7.88e7 High ↑	< 5.00e7
<i>Escherichia</i> spp.	8.99e3	< 3.80e9
<i>Fusobacterium</i> spp.	4.45e5	< 1.00e8
<i>Prevotella</i> spp.	8.02e6	< 1.00e8
FUNGI/YEAST		
FUNGI/YEAST	Result	Reference
<i>Candida</i> spp.	4.63e2	< 5.00e3
<i>Candida albicans</i>	<dl	< 5.00e2
<i>Geotrichum</i> spp.	<dl	< 3.00e2
<i>Microsporidium</i> spp.	<dl	< 5.00e3
<i>Rhodotorula</i> spp.	<dl	< 1.00e3
VIRUSES		
VIRUSES	Result	Reference
Cytomegalovirus	<dl	< 1.00e5
Epstein-Barr Virus	<dl	< 1.00e7

OPPORTUNISTIC/OVERGROWTH MICROBES		
DYSBIOTIC & OVERGROWTH BACTERIA	Result	Reference
<i>Bacillus</i> spp.	2.63e6 High ↑	< 1.76e6
<i>Enterococcus faecalis</i>	9.45e3	< 1.00e4
<i>Enterococcus faecium</i>	<dl	< 1.00e4
<i>Morganella</i> spp.	2.44e4 High ↑	< 1.00e3
<i>Pseudomonas</i> spp.	7.52e5 High ↑	< 1.00e4
<i>Pseudomonas aeruginosa</i>	<dl	< 5.00e2
<i>Staphylococcus</i> spp.	<dl	< 1.00e4
<i>Staphylococcus aureus</i>	7.05e2 High ↑	< 5.00e2
<i>Streptococcus</i> spp.	1.98e3 High ↑	< 1.00e3
COMMENSAL OVERGROWTH MICROBES		
<i>Desulfovibrio</i> spp.	<dl	< 7.98e8
<i>Methanobacteriaceae</i> (family)	4.50e6	< 3.38e8
INFLAMMATORY & AUTOIMMUNE-RELATED BACTERIA		
<i>Citrobacter</i> spp.	<dl	< 5.00e6
<i>Citrobacter freundii</i>	1.55e5	< 5.00e5
<i>Klebsiella</i> spp.	<dl	< 5.00e3
<i>Klebsiella pneumoniae</i>	<dl	< 5.00e4
<i>M. avium</i> subsp. <i>paratuberculosis</i>	<dl	< 5.00e3
<i>Proteus</i> spp.	<dl	< 5.00e4
<i>Proteus mirabilis</i>	<dl	< 1.00e3
COMMENSAL INFLAMMATORY & AUTOIMMUNE-RELATED BACTERIA		
<i>Enterobacter</i> spp.	3.17e6	< 5.00e7
<i>Escherichia</i> spp.	7.52e5	< 3.80e9
<i>Fusobacterium</i> spp.	9.38e4	< 1.00e8
<i>Prevotella</i> spp.	3.26e6	< 1.00e8
FUNGI/YEAST		
FUNGI/YEAST	Result	Reference
<i>Candida</i> spp.	<dl	< 5.00e3
<i>Candida albicans</i>	<dl	< 5.00e2
<i>Geotrichum</i> spp.	<dl	< 3.00e2
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What a GI-MAP DNA Stool Test Can Indicate...

PARASITES		
PROTOZOA	Result	Reference
<i>Blastocystis hominis</i>	2.83e5 High ↑	< 2.00e3
<i>Chilomastix mesnili</i>	<dl	< 1.00e5
<i>Cyclospora</i> spp.	<dl	< 5.00e4
<i>Dientamoeba fragilis</i>	<dl	< 1.00e5
<i>Endolimax nana</i>	<dl	< 1.00e4
<i>Entamoeba coli</i>	<dl	< 5.00e6
<i>Pentatrichomonas hominis</i>	<dl	< 1.00e2
WORMS		
<i>Ancylostoma duodenale</i>	Not Detected	Not Detected
<i>Ascaris lumbricoides</i>	Not Detected	Not Detected
<i>Necator americanus</i>	Not Detected	Not Detected
<i>Trichuris trichiura</i>	Not Detected	Not Detected
<i>Taenia</i> spp.	Not Detected	Not Detected
INTESTINAL HEALTH MARKERS		
DIGESTION	Result	Reference
Steatocrit	17 H	< 15 %
Elastase-1	418	> 200 ug/g
GI MARKERS		
β-Glucuronidase	1196	< 2486 U/mL
Occult Blood - FIT	<dl	< 10 ug/g
IMMUNE RESPONSE		
Secretory IgA	308 L	510 - 2010 ug/g
Anti-gliadin IgA	24	< 175 U/L
Eosinophil Activation Protein (EDN, EPX)	0.09	< 2.34 ug/g
INFLAMMATION		
Calprotectin	<dl	< 173 ug/g
ADD-ON TESTS		
Zonulin	141.1	< 175 ng/g

PARASITES		
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<i>Endolimax nana</i>	<dl	< 1.00e4
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Steatocrit	17 H	< 15 %
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Secretory IgA	308 L	510 - 2010 ug/g
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Eosinophil Activation Protein (EDN, EPX)	0.09	< 2.34 ug/g
INFLAMMATION		
Calprotectin	<dl	< 173 ug/g
ADD-ON TESTS		
Zonulin	141.1	< 175 ng/g

Hair Trace Mineral Analysis (HTMA)

- Collect a small sample of hair from just above the nape of your neck (approx. 1 inch)
- Lab report measures the levels (and comparative ratios) of **nutritional trace minerals** (including mineral deficiency), **toxic/non-nutritional heavy metals**, **oxidative stress** and **gut dysbiosis** detected
- **Trace Minerals (E = Electrolytes):** Boron, Calcium, Chromium, Cobalt, Copper, Iron, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium (E), Selenium, Silicon, Sodium (E), Strontium, Sulphur, Vanadium, Zinc
- **Heavy Metals:** Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Copper, Lead, Mercury
- Measures mineral-based ‘Significant Ratios’ - insight about particular body functions (e.g. thyroid - Calcium:Potassium, adrenal function - Calcium:Sodium)
- Deposits in hair provide insights as to what is hiding out in cells vs. what the body is actively disposing of

The HTMA Functional Test Report..

TOXIC AND NON-NUTRITIONAL					
	Result (ug/g)	High Limit	Acceptable	Above Acceptable Limits	
Mercury (Hg)	0.74	1.00			Hg
Lead (Pb)	0.47	1.00			Pb
Cadmium (Cd)	0.21	0.10			Cd
Arsenic (As)	0.03	1.00			As
Aluminium (Al)	11.49	10.00			Al
Antimony (Sb)	0.03	1.00			Sb
Barium (Ba)	3.12	1.50			Ba
Beryllium (Be)	0.070	0.050			Be

Weighted Total Toxicity Assessment (92)

NUTRITIONAL ELEMENTS						
Mainly Structural	Result (ug/g)	Expected (ug/g)	Below Normal	Normal	Above Normal	
Calcium (Ca)	1201	375-875				Ca
Magnesium (Mg)	26	44-98				Mg
Sulphur (S)	50563	35000-55000				S
Silicon (Si)	152	15-300				Si
Boron (B)	0.29	0.5-3.5				B
Phosphorus (P)	102.5	125-250				P
Strontium (Sr)	1.2	0.8-6.0				Sr

Mainly Electrolyte						
Potassium (K)	16.1	10-115				K
Sodium (Na)	86.2	37-370				Na

Mainly CoFactor						
Zinc (Zn)	382.7	140-250				Zn
Copper (Cu)	58.0	12-38				Cu
Iron (Fe)	24.2	6-28				Fe
Selenium (Se)	0.92	0.8-2.0				Se
Chromium (Cr)	0.25	0.2-1.8				Cr
Manganese (Mn)	4.460	0.2-0.8				Mn
Nickel (Ni)	0.691	0.15-1.0				Ni
Vanadium (V)	0.035	0.01-0.15				V
Molybdenum (Mo)	0.046	0.03-0.15				Mo
Cobalt (Co)	1.676	0.02-0.20				Co

Results and the bar that is displayed in yellow indicate a high or low borderline result to the normal range

SIGNIFICANT RATIOS			
Result	Expected	Result	Expected
Ca:Mg	45.4	4-20	>84
Ca:P	11.7	1.5-7.0	>4.4
Ca:K	74.8	2.0-40	>22
Ca:Na	13.9	9.4-134	>1.0
Ca:Fe	50.0	21-109	>200
Na:K	5.4	2.0-4	>200
Na:Mg	3.3	0.2-2.2	>10
Zn:Cu	6.6	4-17	>10
Fe:Cu	0.4	0.20-1.5	>10

OTHER ELEMENTS					
The significance of these elements in hair has not been established. Higher than normal values may indicate exogenous sources.					
Potentially Toxic			Generally Non-Toxic		
Result	Expected		Result	Expected	
Bismuth (Bi)	0.004	<1.0	Lithium (Li)	0.005	<DL - 0.1
Palladium (Pd)	0.015	<1.0	Tin (Sn)	0.184	<DL - 2.0
Platinum (Pt)	0.001	<1.0	Zirconium (Zr)	0.096	<DL - 0.4
Silver (Ag)	0.279	<1.0	Cerium (Ce)	0.760	<DL - 0.05
Thallium (Tl)	<DL	<1.0	Lanthanum (La)	1.631	<DL - 0.05
Uranium (U)	0.009	<1.5			
Tungsten (W)	0.003	<2.0			

TOXIC AND NON-NUTRITIONAL					
	Result (ug/g)	High Limit	Acceptable	Above Acceptable Limits	
Mercury (Hg)	1.68	1.00			Hg
Lead (Pb)	0.20	1.00			Pb
Cadmium (Cd)	0.01	0.10			Cd
Arsenic (As)	0.03	1.00			As
Aluminium (Al)	16.41	10.00			Al
Antimony (Sb)	0.14	1.00			Sb
Barium (Ba)	1.29	1.50			Ba
Beryllium (Be)	0.005	0.050			Be

Weighted Total Toxicity Assessment (50)

NUTRITIONAL ELEMENTS						
Mainly Structural	Result (ug/g)	Expected (ug/g)	Below Normal	Normal	Above Normal	
Calcium (Ca)	819	375-875				Ca
Magnesium (Mg)	104	44-98				Mg
Sulphur (S)	49442	35000-55000				S
Silicon (Si)	163	15-300				Si
Boron (B)	20.11	0.5-3.5				B
Phosphorus (P)	164.8	125-250				P
Strontium (Sr)	8.1	0.8-6.0				Sr

Mainly Electrolyte						
Potassium (K)	311.6	10-115				K
Sodium (Na)	1389.5	37-370				Na

Mainly CoFactor						
Zinc (Zn)	234.2	140-250				Zn
Copper (Cu)	8.9	12-38				Cu
Iron (Fe)	45.4	6-28				Fe
Selenium (Se)	0.80	0.8-2.0				Se
Chromium (Cr)	0.40	0.2-1.8				Cr
Manganese (Mn)	0.490	0.2-0.8				Mn
Nickel (Ni)	3.979	0.15-1.0				Ni
Vanadium (V)	0.019	0.00-0.15				V
Molybdenum (Mo)	0.055	0.03-0.15				Mo
Cobalt (Co)	0.017	0.02-0.20				Co

Results and the bar that is displayed in yellow indicate a high or low borderline result to the normal range

SIGNIFICANT RATIOS			
Result	Expected	Result	Expected
Ca:Mg	7.9	4-20	>84
Ca:P	5.0	1.5-7.0	>4.4
Ca:K	2.6	2.0-40	>22
Ca:Na	0.6	9.4-134	>1.0
Ca:Fe	18.0	21-109	>200
Na:K	4.5	2.0-4	>200
Na:Mg	13.4	0.2-2.2	>10
Zn:Cu	26.2	4-17	>10
Fe:Cu	5.1	0.20-1.5	>10

OTHER ELEMENTS					
The significance of these elements in hair has not been established. Higher than normal values may indicate exogenous sources.					
Potentially Toxic			Generally Non-Toxic		
Result	Expected		Result	Expected	
Bismuth (Bi)	0.074	<1.0	Lithium (Li)	0.043	<DL - 0.1
Silver (Ag)	0.179	<1.0	Tin (Sn)	0.163	<DL - 2.0
Thallium (Tl)	0.001	<1.0	Zirconium (Zr)	1.858	<DL - 0.4
Uranium (U)	0.005	<1.5	Cerium (Ce)	0.013	<DL - 0.05
Tungsten (W)	0.013	<2.0	Lanthanum (La)	0.007	<DL - 0.05

SIBO (Lactulose) Breath Test

- Often used for determining the presence of *SIBO* (*Small Intestinal Bacterial Overgrowth*)
- Occurs when bacteria that are supposed to be in the large intestine have migrated into the small intestine
- Involves drinking a sugar solution (sugars that the poor/overgrowth bacteria would feed off of as a food source), followed by breathing into a balloon-like device that is tested for gases the bacteria produce (e.g. hydrogen and methane gas)
- Sent to a lab for analysis
- Results can help direct a medical, antibiotic-based protocol, for example

Organic Acids Test (OAT Test) (Urine-Based)

- Organic Acids = products of the various metabolic pathways that exist in the body
- By-products of these pathways provide insight about factors like:
 - Gut health/function
 - Intestinal microbial overgrowth, bacterial toxins, candida, mold exposure...
 - Mitochondrial health/function
 - Energy-generating components of our cells
 - Neurotransmitter health/function
 - E.g. Tryptophan (precursor to Serotonin)
 - Amino acids
 - Building blocks of protein chains
 - Detoxification status of the liver (the body's filter)
 - Nutritional status (essential vitamins, antioxidants, co-factors...)

A comprehensive nutritional and metabolic snapshot in time.

So...Where to Start?!

Gain a handle on the nutritional and lifestyle fundamentals **FIRST**, and implement them with **consistency**.

Otherwise, you'll never know how positively your body responds to these changes alone.

Crucial Areas of Nutritional Focus...

- Plenty of H₂O daily, from the cleanest source of water available to you
- Anti-inflammatory diet
 - Diverse, colourful sources of fiber from plant foods, diverse, unrefined/minimally refined fats, and diverse sources of plant and animal-based protein (***suitable to your circumstances***)
- Reduce exposure to food toxins + edible, food-like substances.
- Self-awareness/mindfulness toward how you feel during after your meals, to help identify your personal triggers

Crucial Areas of Lifestyle Focus...

- Self-awareness/mindfulness toward HOW YOU FEEL in your body in the moment - WHAT DO YOU NEED right now?
- Nervous System-regulating activities
- Movement suitable to your circumstances that you ENJOY
- 8 hours of sleep!
- Building of increasingly strong boundaries to protect your mind, energy and time
- Reduce exposure to environmental toxins (incl. personal care, + house cleaning-based toxins)

Take-Away Resources for YOU!

3-PART GUT HEALTH SERIES

Exploring Testing Options & Tips for Maintaining Gut Health



March 6, 2025

6:00-7:00 pm

Presented by:



Jessica Pecush
Nutrition



3-Part Gut Health Series (Part 3)

📅 March 6, 2025 6:00 pm

LEARN MORE



Unlocking Our Mitochondria for Improved Energy and Vitality

📅 March 10, 2025 7:00 pm

LEARN MORE



Longevity: Innovative and Natural Approaches to Lifespan Extension

📅 March 11, 2025 7:00 pm

LEARN MORE

Webinar Slide Deck
+ Recording

<https://communitynaturalfoods.com/events/>

Jessica Pecush
Nutrition

Shop for Jessica's gut healthy product recommendations in store or online at Calgary Co-op or Community Natural Foods.

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Get \$15 Off when you spend \$150.

Online only. Promo available from 6-Midnight day of events: Feb 20, Feb 26, March 6.



Take-Away Resources from PART 2!



Nervous System Support Strategies

• When you're feeling riled up and in 'Fight-or-Flight Mode', stop, pause, and observe how you feel in your body. W!

- To get out
- A brisk walk
- To connect
- A guided
- To watch
- A nap
- A hot tea
- Time will
- To get to



Quality Sleep Strategies

• Practices that support your Circadian Rhythm

- Take intentional breaks from screens throughout the day
- Start minimizing (or eliminate) screen time once the sun has set
- Wear blue-light blocking glasses if on screens beyond sundown
- Shift your Smartphone to 'Night Shift' setting
- Install the 'f.lux' app on your laptop/desktop computer
- Decide on a reasonable/logical bed time and wake time, and stick with it as consistently as possible nightly (e.g. 10pm-6am)

• Declutter

- Use the 'I work' icon
- Turn off i particular
- Delete

• Practices that support your Sleep Hygiene/Sleep Routine

- Set a time for 60-90 minutes before your set bed time to mindfully start 'winding down'
- Screen-free, non-stimulating time
 - Games, puzzles, book, epsom salts bath, read, outdoor walk...
- Prepare what you can for the following day to ease stress/anxiety the next day

• Evaluate Your Bedroom/Sleep Space

- Ensure sleep temperature is comfortable
- Ensure pajamas, if worn, are comfortable
- Ensure room is as dark as possible
 - Use an organic cotton/breathable fabric sleep mask, if needed
- Use a battery-powered alarm clock instead of your Smartphone
- Do you need white noise?

Jessica Ferguson (Pecush), CH.N.C., BEd, RPE
 Certified Holistic Nutrition Expert
 Certified Holistic Nutritional Consultant™
 jessicapecush.com

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3-PART GUT HEALTH SERIES

Calming and Energizing Lifestyle Practices for Gut Repair and Healing

February 27, 2025
 6:00-7:00 pm

Presented By:

Jessica Pecush
 Nutrition

Gut Health Series - Product Recommendations			
Grocery/Beverages		Dairy & Alternatives	
Brand	Product	Brand	Product
Lily of the Desert	Aloe Vera Juice	Yogurt	Yogurt
Better Than Noodles	Organic Konjac Noodles	Spread 'Em	Chives and Garlic Creamy Cashew Dip
BRAGG	Organic Raw Apple Cider Vinegar		
Bob's Red Mill	Almond Flour	Meat/Broth	
Bob's Red Mill	Cassava Flour	Brand	Product
Bob's Red Mill	Coconut Flour	Community Naturals	Wild Sockeye Salmon Fillet
Bob's Red Mill	Organic Gluten-Free Rolled Oats	High Vibe Health	Beef Tailow
Obion Foods	Avocado Oil Spray	High Vibe Health	Organic Chicken Bone Broth
Community Naturals	Nutritional Yeast Flakes	Organika	Bone Broth (Chicken or Beef)
Earth's Choice	Organic Coconut Milk - Gaur Free	Suberworks	Organic Chicken Sausage
Earth's Choice	Lemon Juice	Top Grass	Extra Lean Grass-Fed Ground Beef
Eden	Organic Adzuki Beans		
Any Brand	Organic Extra Virgin Olive Oil	Supplements	
Greenhouse Juice	Organic Fanny Ginger	Brand	Product
Karthen's Organic	Carrots & Ginger Sauskraut	Beekeeper's Naturals	Probiotic Throat Spray
Any Brand	Organic Vinegar of Extra Virgin Coconut Oil	CanPreV	Mg-B6-Glycine 200 Gentle (capsules)
Manitoba Harvest	Organic Hemp Hearts	CanPreV	Vitamin D3 & K2
Naked & Sassy	Lightly Sweet Coconut Aminos	Genuine Health	Advanced Gut Health Probiotic 15B CFU
Nuts to You	Pumpkin Seed Butter	Genuine Health	Fermented Organic Gut Superfood+
Any Brand	Organic Ghee - Clarified and Carmaulad Butter	Genuine Health	Fermented Organic Vegan Probiotic +
Ohmaven Rawstone	Beet Chips	Harmonic Arts	Psaki 12.1 Mushroom Kestrel (powder form)
Organic Traditions	Sprouted Flax Seed Powder	Iron Vegan	Fermented L-Glutamine
Organic Traditions	Spirulina Powder	Natural Factors	Betaine HCl with Fenugreek
Amazo	Organic Genmai Miso	Now	Whole Pycnol Husks
Pukka	Three Mint Tea	New Roots Herbal	Human Probiotics 42B+
ROKAB	Assorted Bars	Organika	Enhanced Collagen
Any Brand	Organic Coconut Butter		Digestive Enzymes Ultra
SIFE	Organic Free Tortilla Chips	Pure Encapsulations	St. Francis Herb Farm
Traditional Medicinals	Ground Turmeric	Sure	Organic Elderberry Syrup
Traditional Medicinals	Fermented Organic Coconut Milk	Other	
Wildcherie	Organic Coconut Water	Brand	Product
	Ginger Aid Tea	Santiva	Mineralized Alkaline Water Pitcher
	Roasted Dandelion Root Tea		
	Kinohio		
Fresh	Product		
Brand	Product		
Fresh	Azooob		
Fresh	Beet Varieties		
Micro NYC	Broccoli Microgreens		
Fresh	Cauliflower Veggies		
Fresh	Fennel		
Fresh	Fresh Cranberries		
Fresh	Ginger Root		
Fresh	Kiel Fruit		
Fresh	Leek		
Fresh	Mushroom Varieties		
Fresh	Onion Varieties		
Fresh	Organic Apple Varieties		
Fresh	Organic Berry Varieties		
Fresh	Organic Spring Mix		
Fresh	Red Cabbage		
Fresh	Winter Squash Varieties		
Fresh	Turmeric Root		

Webinar Slide Deck
 + Recording

Jessica's Product
 Recommendations

Lifestyle
 Strategies for
 Maintaining
 Gut Health

Take-Away Resources from PART 1!

3-PART GUT HEALTH SERIES

Therapeutic Food + Beverages for Gut Repair + Healing

February 20, 2025
6:00-7:00 pm

Presented By:





Webinar Slide Deck + Recording

Key Gut Health Nutrients

- Soluble Fiber-Rich Foods**
E.g. walnuts, chia flax seed/flower seeds, apple, avocado, berries, lentils, carrots, sweet potato.
- Insoluble Fiber-Rich Foods**
E.g. almonds, walnuts, sunflower seeds, root vegetables and their skins (e.g. carrots, sweet potato, turnips), celery, broccoli, corn, dark leafy greens, berries, apples (pears (skin on) and cucumber).
- Prebiotic-Rich Foods**
E.g. apple (skin present), asparagus, banana (slightly green or natural yellow), chikara root, dandelion greens, flax seed, garlic, Jerusalem artichoke, jicama, kale, lentils, legumes, onions, seaweed...
- Probiotic-Rich Foods**
E.g. organic non-dairy fermented veggie, miso, tempeh, gluten-free fermented coconut aminos, coconut milk kefir, low-sugar kombucha...
- Living-Liver Foods**
E.g. avocado, asparagus, broccoli, beets, sprouts, cabbage varieties, celery, citrus, kiwi, ginger, all dark leafy greens and microgreens, radishes, rutabaga, turnip, walnuts.
- Omega-3-Rich Foods**
E.g. oily fish, wild caught fish (e.g. salmon, mackerel, herring, sardines) Plant-based Omega-3 sources: almonds, chia, flax, hemp, walnut.
* Plant forms must be converted into DHA-EPA in the body (use a highly-efficient conversion)

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Key Gut Health Nutrients


- Vitamin A**
E.g. animal proteins, organ meats, eggs.
- Vitamin C**
E.g. dark leafy greens, berries, citrus, cruciferous veg, papaya, kiwi.
- Vitamin D**
E.g. sunlight on bare skin
E.g. red meat, oily fish, cod liver, eggs, mushroom, fortified foods.
- Zinc**
E.g. animal proteins, oysters, parmesan, raw pumpkin seeds, legumes, Shiitake mushrooms, *organic* raw cashews...
- Glutamine (Amino Acid)**
E.g. red cabbage, bone broth, animal proteins, eggs, oily fish, spirulina, bean, vitamin, parsley...
- Sources of Polyphenols (Plant-Based Compounds)**
E.g. berries, citrus, apple, dark chocolate, green tea, tomatoes, olive oil, almonds, walnuts, artichokes, spinach, green olives, asparagus, celery

Jessica Peceush (PhD), C.N.C., B.S., B.P.E. Certified Gut Health Nutrition Expert
Certified Holistic Nutritionist (CNDN®)
HolisticNutritionist.com

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Gut Health Series - Product Recommendations

Grocery/Beverages	Product	Dairy & Alternatives	Product
Brand		Brand	
Lily of the Desert	Alvo Vera Juice	Yogurt	Yogurt
Better Than Noodles	Organic Konjac Noodles	Spread 'Em	Chives and Garlic Creamy Cashew Dip
BRAGG	Organic Raw Apple Cider Vinegar		
Bob's Red Mill	Almond Flour	Meat/Broth	
Bob's Red Mill	Cassava Flour	Brand	
Bob's Red Mill	Coconut Flour	Community Naturals	Product
Bob's Red Mill	Organic Gluten-Free Ruffed Out	High Vibe Health	Wild Sockeye Salmon Fillet
Chosen Foods	Avocado Oil Spray	High Vibe Health	Beef Tallow
Community Naturals	Nutritional Yeast Flakes	Organic Health	Organic Chicken Bone Broth
Earth's Choice	Organic Coconut Milk - Gaur Free	Organika	Bone Broth (Chicken or Beef)
Earth's Choice	Lentils	Sunovita	Organic Chicken Sausage
Eden	Organic Aduki Beans	Top Grass	Extra Lean Grass-Fed Ground Beef
Any Brand	Organic Extra Virgin Olive Oil		
Greenhouse Juice	Organic Fairy Ginger	Supplements	
Karthen's Organic	Carrots & Ginger Sauté/Strat	Beeskeeper's Naturals	Product
Any Brand	Organic Virgin or Extra Virgin Coconut Oil	CanVive	Propolis Throat Spray
Manitoba Harvest	Organic Hemp Hearts	CanVive	Mg Bio-Optimally 200 Gentle (aspartate)
Naked & Sassy	Lightly Sweet Coconut Aminos	Genulife Health	Vitamin D3 & K2
Nuts to You	Pumpkin Seed Butter	Genulife Health	Advanced Gut Health Probiotic 15B CFU
Any Brand	Organic Ghee - Clarified and Carmauld Butter	Genulife Health	Fermented Organic Gut Superfood*
Ohmagan Rawstone	Beet Chips	Genulife Health	Fermented Organic Vegan Probiotic +
Organic Traditions	Sprouted Flax Seed Powder	Harmonic Arts	Peak 12.3 Mushroom Kanna (powder form)
Organic Traditions	Organic Elm Powder	Iron Vegan	Fermented L-Glutamine
Amano	Organic Genmai Miso	Natural Factors	Betaine HCl with Pepsinase
Pukka	Three Mint Tea	Now	Whole Pylorus Husks
ROKAB	Assorted Bars	New Roots Herbal	Human Probiotics 428+
Any Brand	Organic Coconut Butter	Organika	Enhanced Collagen
SETE	Organic Coconut Chips	Pure Encapsulations	Digestive Enzymes Ultra
Simply Organic	Organic Turmeric	St. Francis Herb Farm	Canadian Bitters
Cultured Coconut	Fermented Organic Coconut Milk	Sure	Organic Elderberry Syrup
Thrive Buddha	Organic Coconut Water		
Traditional Medicinals	Organic Ginger Aid Tea	Other	
Traditional Medicinals	Roasted Dandelion Root Tea	Brand	
Wildcherie	Kinohio	Santevia	Product
			Mineralized Alkaline Water Pitcher



CNF 3-Part Gut Health Series - From-Scratch, Gut-Friendly Sample Recipes!

Created by Jessica Peceush Nutrition




Jessica's Product Recommendations

Gut-Friendly Mini Recipe Bundle

Key Gut Health Nutrients

Upcoming Event in Calgary + Toronto!




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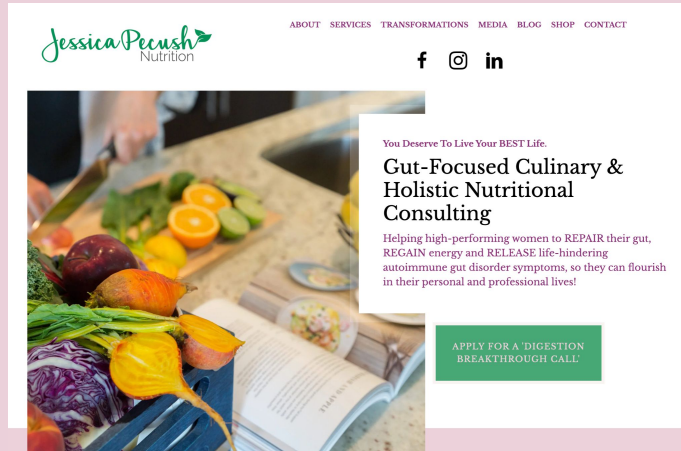
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- **Web:** jessicapecush.com
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