

Conclusions:

Mixed results;

Better with all inflammation markers back to normal, but still have GI pain.

Better with less yeast, more Bifido, more beneficial total SCFA and n-butyrate.

Worse: less E Coli, Bacteroides too high and mycoplasma too low, still have pptu.

Tolerance for probiotic supplements and foods has improved.

Plan to rebalance flora???

--Do more research on prebiotics and probiotics

--Continue biotin to maintain yeast, not fungus

--Reduce meat; increase vegetables to lower Bacteroides and raise Prevotella

--Add fermented foods; home culture probiotics

--Supplement Bifidobacteria at 100+ Billion per day.

--MD says avoid FOS because it feeds K pneumoniae

--Pray, pray, pray

Chronology of Interventions

Date/ Period of Time		Rating
10Nov17 - 11Nov29 ~1 yr	Used Renew Life Candizyme	
11Nov1	Stop digestive enzymes: Houston Enzymes Trienza	Help
11Nov9 - 11Dec7; 29 days	Take Artemesia and PARAResponse for MetaMetrix PPTU	Harm
11Nov 9	Discontinue glutamine (concern for feeding candida)	
11Nov 23	Start PARAResponse and Jarrow Bifidus Plus (w/maltodextrin+FOS)	
11Nov23	Stop almost daily coffee enemas since starting Candizyme	
11Dec6	Reduce Vitamin C (3-4 g to 280 mg/day), reduce MTHF to 1 tablet	
11Dec9	Focus on GUT HEALING and REPOPULATION- Stop Candizyme	
11Dec21 – 12Feb10 52 days	Start Flora Garden (FG) prebiotics herbal mix with FOS	
12Feb 3	Stop zinc-- concern that just feeding Candida	
12Feb11	Start arabinogalactan/apple pectin; Continue FG & Slippery elm	
12Mar8	Restart Flora Garden after 3 weeks off	
12Mar 5	Start yogurt: Cedar Summit bovine; Old Chatham Sheep	
12Mar 16	Start home culture goat's milk with Jarrow EPS probiotic	

Chronology of Probiotic Intervention

Date	Days	Total Dose	Frequency	Probiotic Product
11Oct25-11Nov24	32	12-30 Billion	4-5x/day	Source Natural (SN) Bifidyn cap
11Nov25-Dec 17	24	30-45	2x/day	Source Natural Bifidyn cap
11Dec18-12Jan24	40	0-10	2x/day	Source Natural Bifidyn powder
12Jan25-Feb10	18	20-30	2x/day	Jarrow Bif Balance + FOS
12Feb11-19	9	50-85	2x/day	Jarrow Bif Balance + FOS
12February 13		Stool samples for MetaMetrix and Genova -- no acidophilus supplements		
12Feb20-Mar12	22	85-92	2x/day	[Jarrow Bif Bal, SN Bifidyn powder]/ Lactob

MetaMetrix: Compare Feb 13, 2012 with Sep 2011

Predominant Bacteria

Obligate anaerobes

--*Bacteroides* increased from 2.9 to 8.6
Lower by reducing meat consumption??
--*Clostridia*, *Prevotella*, *Fusobacterium*, and *Streptomyces* spp remained the same.
Want to raise all; raise *Prevotella* by reducing meat, increasing vegetables??
--*Mycoplasma* decreased from 7.7 to 1.8; too low; how to raise some???

Facultative anaerobes

--*Lactobacillus* 5.2; remained the same without supplementation.
--*Bifidobacteria* increased from 2.5 to 3.0;
Supplement 30 Billion during parasite treatment;
50 Billion for month before stool sample.

Treatment of Parasite Protozoa Taxonomy
Unavailable (PPTU) with Nutricology Artemesia for 2 weeks followed by Highland PARA Response for 2 weeks caused above losses?

Obligate aerobes

--*Escherichia coli* decreased from 2.6 to 1.6; low.
PPTU treatment caused losses?? How to raise??

Pathogenic Bacteria None and no change
Didn't identify *K. pneumoniae*??

Yeast/Fungi

Yeast/fungi taxonomy unavailable
decreased from +2 to +1.

Parasites

Parasite present, taxonomy unavailable **positive**
No change even though I avoided many foods that are potential sources of parasite DNA for the 2 days prior to collecting the stool sample— is this contamination at MM lab??

Adiposity Index

Firmicutes decreased from 77 to 50
Bacteroidetes increased from 23 to 50

I am underweight; my MD says this is a very good ratio now.

Genova: Compare Feb 13, 2012 with Aug 2005 and compare with MetaMetrix as appropriate.

Microbiology

Bacteriology NP=nonpathogenic; PP=possible pathogen

13 Additional Bacteria

alpha haemolytic streptococci NP } 4+
gamma haemolytic streptococci NP } 4+ All increased
Klebsiella pneumoniae PP } 4+ from 2005

Does **not** agree with MM. MM Clinician Information says MM can identify *K. pneumoniae*??
IMO this is likely contamination at Genova Lab.

12 Beneficial Bacteria

Lactobacillus – NG = no growth
Does **not** agree with MM DNA test sampled from the same stool. Conclude Genova's culture media is not right for my strains.
Escherichia Coli 4+ } Falsely high?? Does **not** agree
Bifidobacterium 4+ } with MM DNA test results

13 Additional Bacteria

Klebsiella pneumoniae potential pathogen 4+
MM Clinician Information says MM can identify *K. pneumoniae*??

14 Mycology

No growth. does not agree with MM DNA results.

Parasitology

No ova or parasites seen. does not agree with MM-PPTU.
Cryptosporidium - negative
Giardia lamblia - negative
Entamoeba histolytica/dipar - negative

Beneficial SCFA

--Total SCFA increased from 53 to 86 mM/g.
Want to remain higher.
--n-Butyrate increased from 8.3 to 20.4 mM/g.
Want to remain higher—eating Pure 100% organic ghee from grass-fed cows for natural source of n-butyric acid.
--Acetate % increased from 58 to 63.
--Butyrate % increased from 16 to 24.
--Propionate % decreased from 23 to 12 low.
--Valerate % decreased from 3.2 to 0.8 low.
How to increase propionate and valerate??

--pH raised from 6.0 to 6.8 – OK

Digestion - OK

--Elastase increased from 176 to 349 mcg/g.
Stopped using most digestive enzymes for protein, fats, and carbohydrates for 3 months prior to stool sample- OK
Now only use alpha-galactosidase for sulfurous foods- cabbage etc.
--Triglycerides decreased from 47 to <40 -OK
--Putrefactive SCFA decreased from 3.6 to 0.5 mM/g -OK

Absorption

--LCFA decreased from 3.8 to 1.5 – OK

Metabolic - ~ok

5 Beneficial SCFA	49.4 mM/g	57% of MM value
6 n-butyrate	11.6 mM/g	57% of MM value
7 pH	6.9	~agrees with MM
8 beta-glucoranidase	980	

Secondary Bile Acids

9 Lithocolic acid	.51
10 Deoxycholic acid	.24
11 Ratio LCA/DCA	2.13 High

Digestion/Absorption ~ok

1 Pancreatic Elastase	>500 mcg/g	140% of MM
2 Putrefactive SCFA	0.6 microM/g	Low ~agree w/MM

Gut Immunology = OK

3 Eosinophil Protein X	0.9	Decreased from 12.5 H
4 Calprotectin	<16.0	Decreased from 56 H