

Gut Dysbiosis & Digestive Health

How to Restore Your Gut Microbiota
to A Healthy Balance Naturally

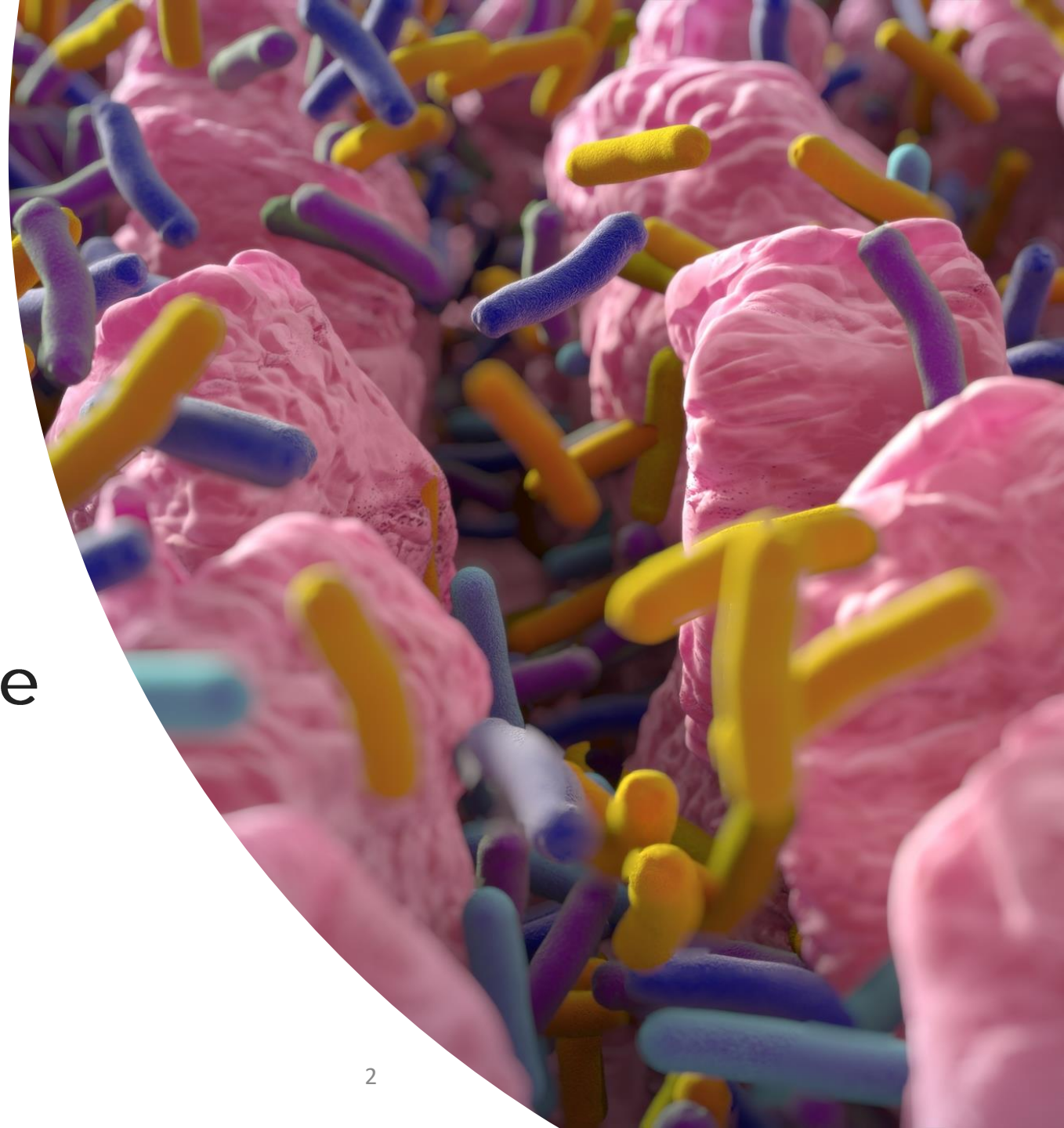
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Founder

[Digestive Health Institute](#)

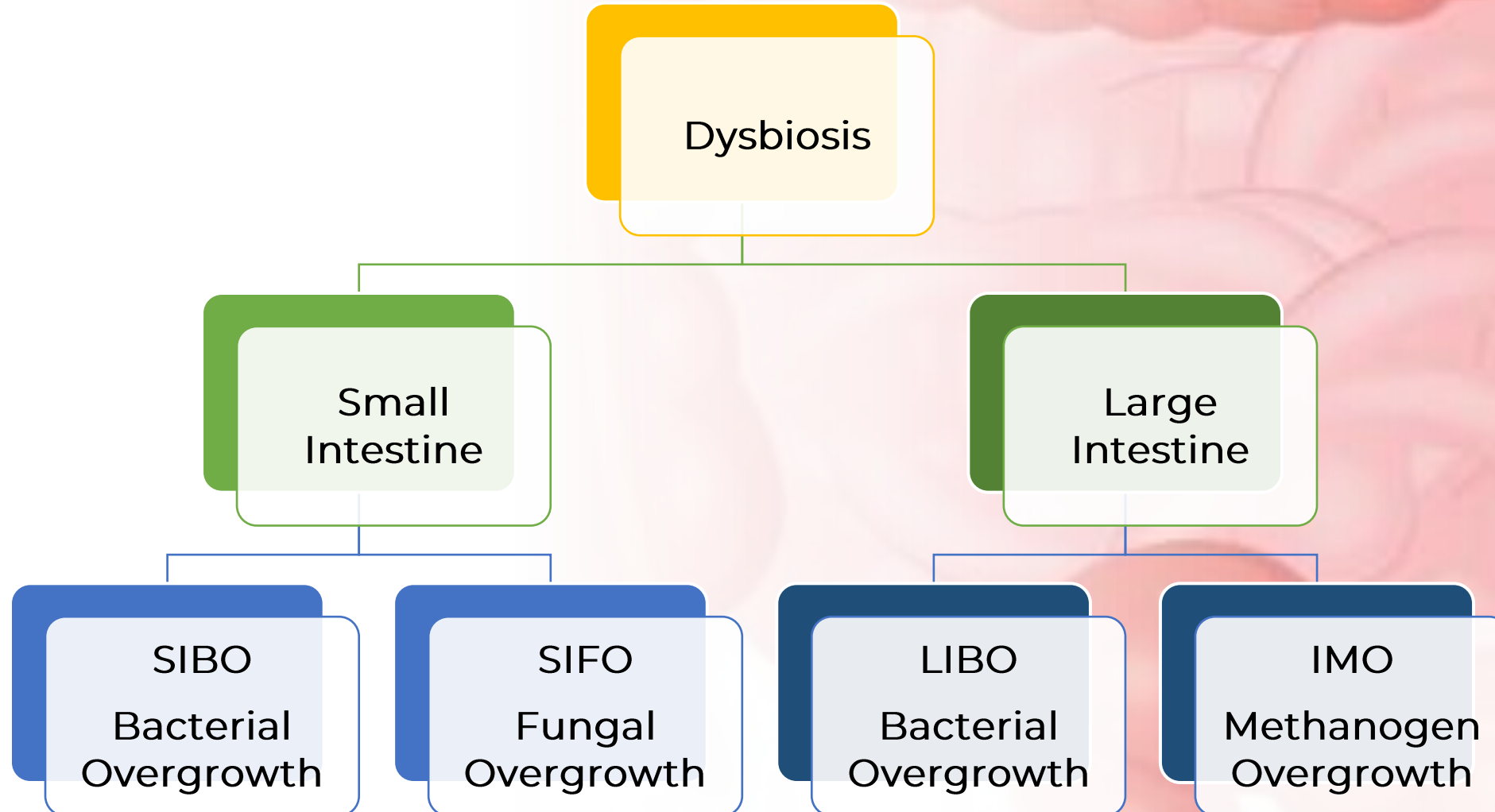


What is Gut Dysbiosis?

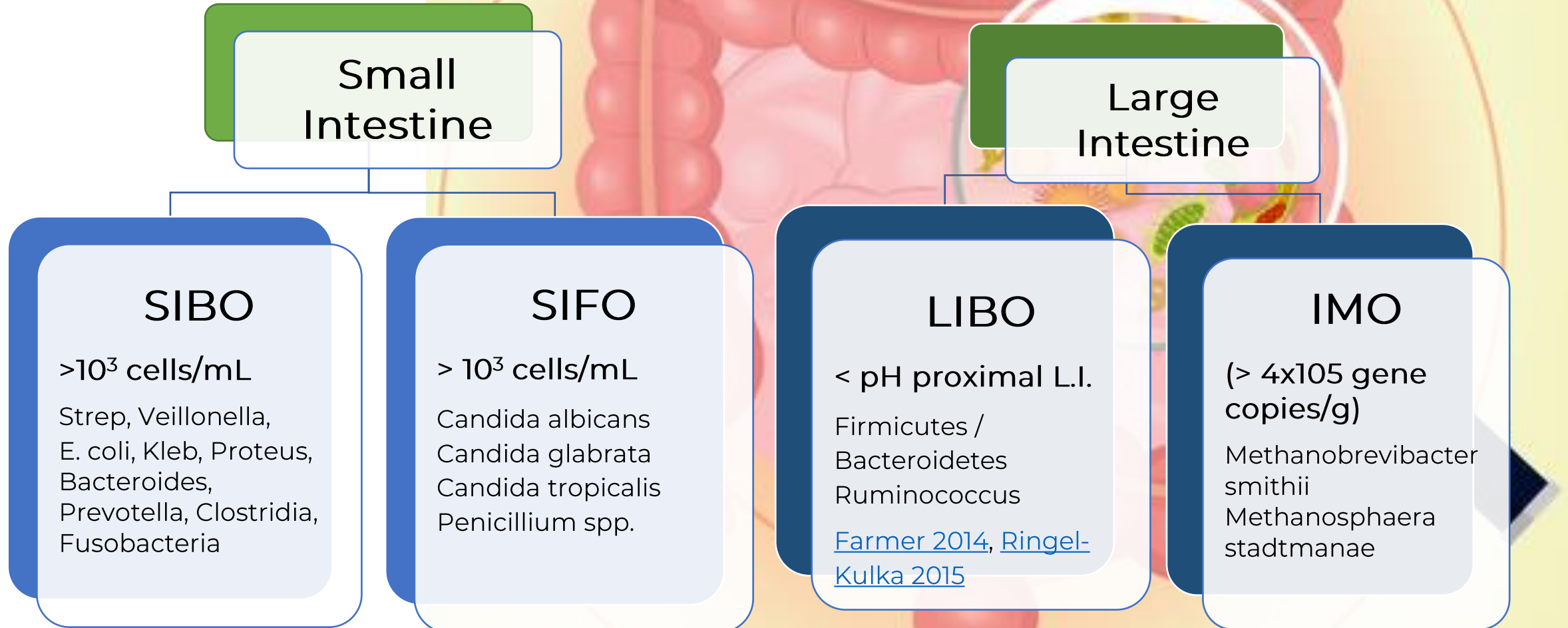
“A negative shift in microbial communities within the small or large intestine resulting in health conditions or symptoms”



Types of Dysbiosis



Dysbiosis – Microbes



Diagnostics



SIBO

Hydrogen
Breath test

> 20 PPM hydrogen



SIFO

S.I. aspirate
culture

> 10^3 cells/mL



LIBO

Smart pill pH
monitoring

pH < 6 cecum

Comprehensive
stool testing



IMO

Methane breath
testing

≥ 10 PPM methane

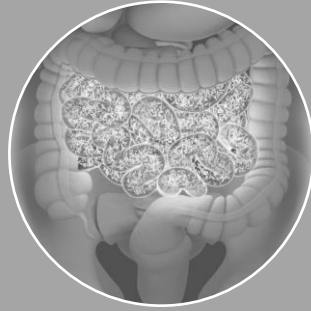
Comprehensive
Stool testing

Treatments



SIBO

Diet, Behaviors,
& Causes
Supplements
Antimicrobials



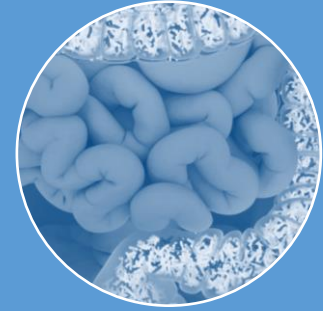
SIFO

Diet, Behaviors
& Causes
Supplements
Antifungals



LIBO

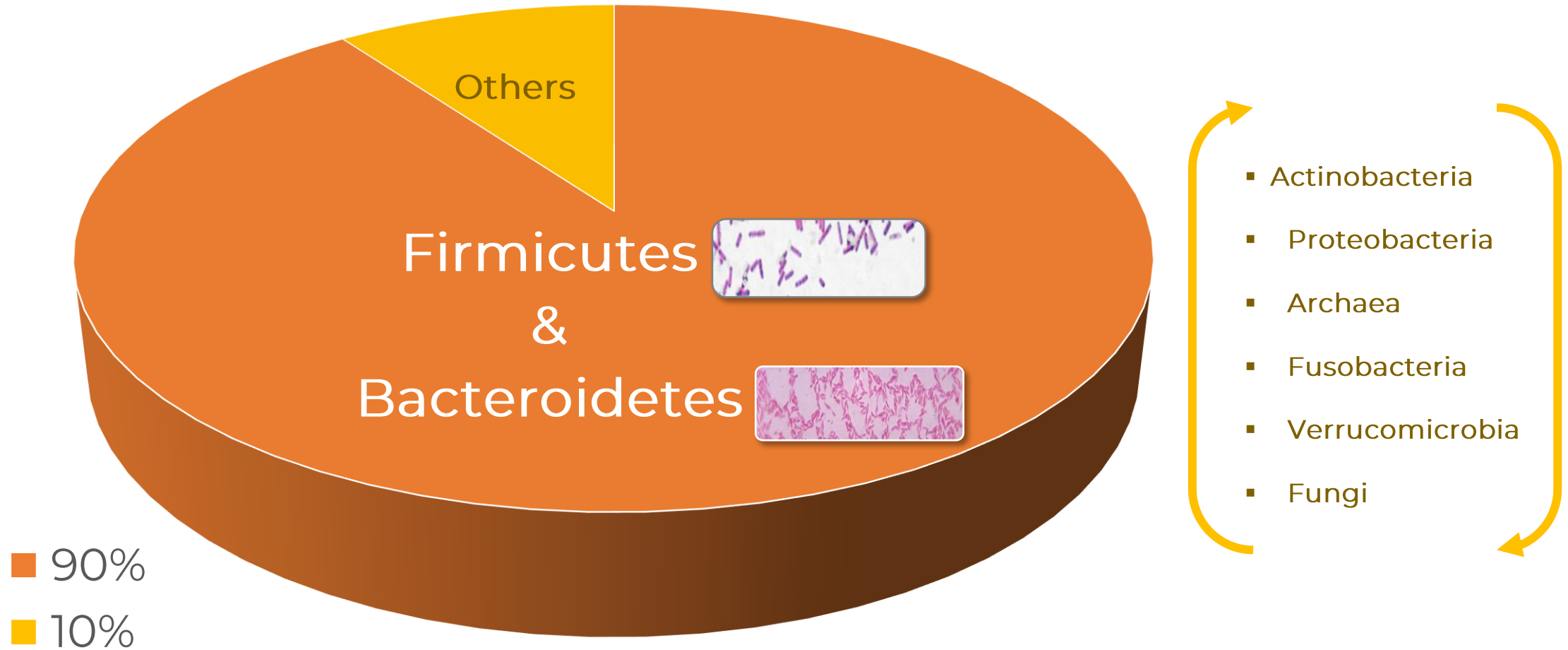
Diet, Behaviors
& Causes
Supplements
Antimicrobials



IMO

Diet, Behaviors
& Causes
Supplements
Antimicrobials

Groupings of Gut Microbes – Phyla



Diet – Beyond the Symptoms

Physical changes underlying the symptoms of dysbiosis

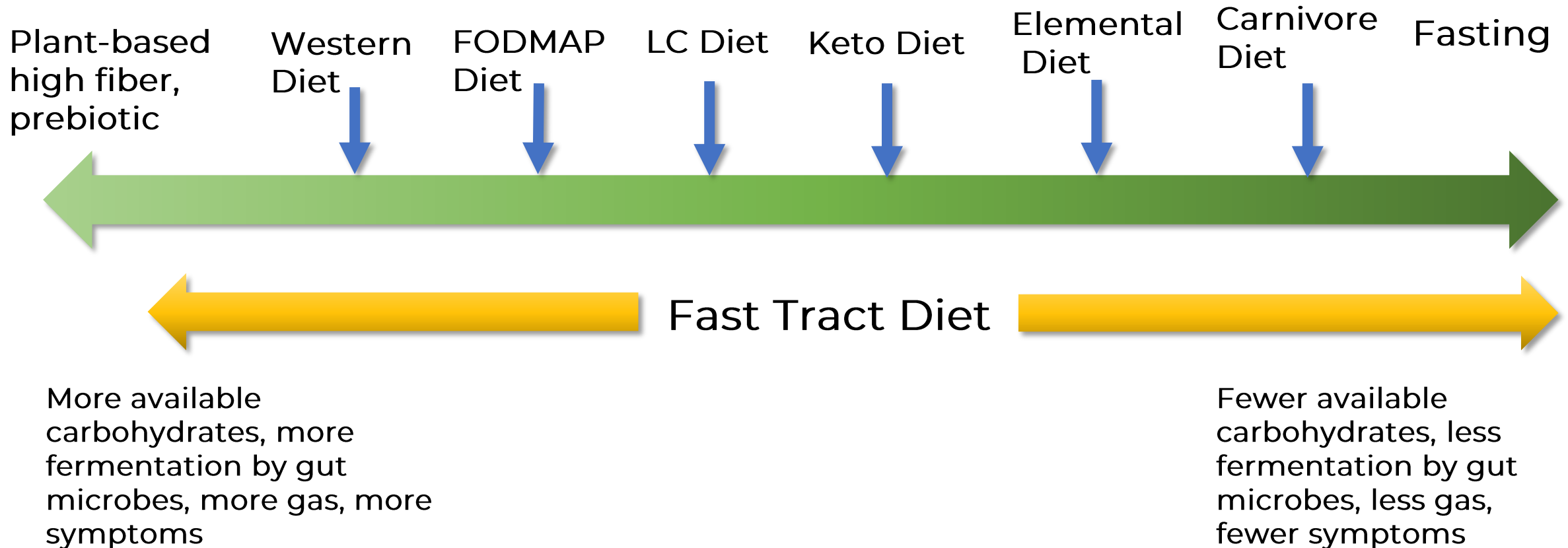
- Too much gas (hydrogen, methane, possibly hydrogen sulfide)
- Too many short chain fatty acids
- More acidic cecum and ascending colon
- Altered Firmicutes / Bacteroidetes ratio

Diets that reduce fermentable carbs (Elemental, LC, Keto)

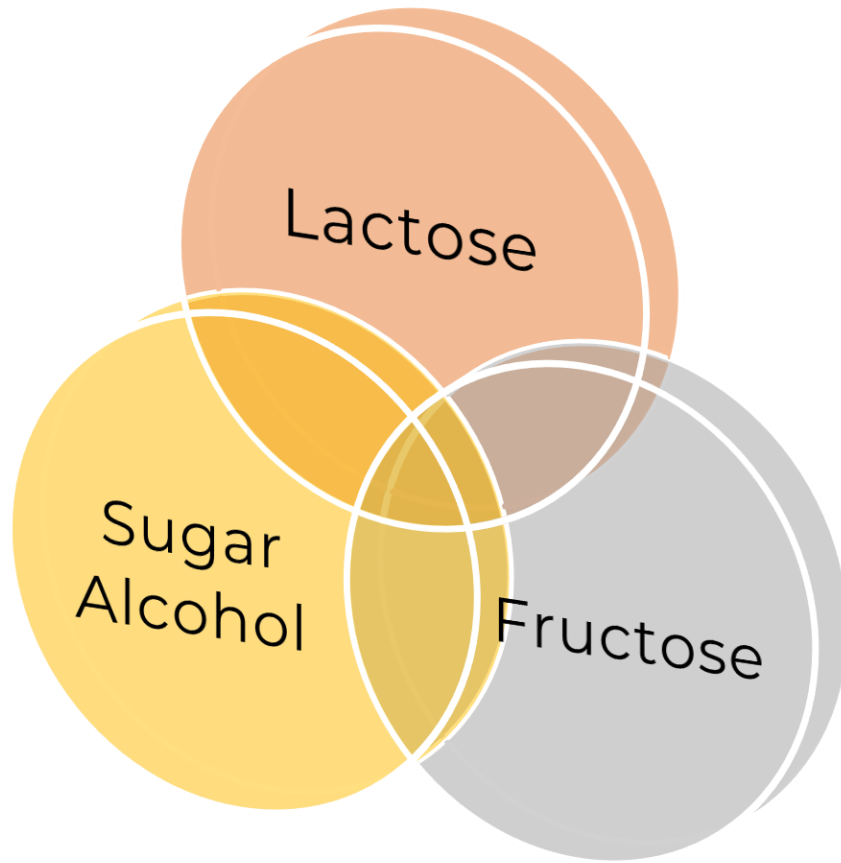
- Improve symptoms
- Reduce gases, especially hydrogen
- Reduce SCFAs
- More fermentable carbohydrates (lactulose and fiber studies) increase acid in the colon. A LC diet should decrease acid
- Reduce Firmicutes / Bacteroidetes ratio

[My SIBOCON 2019 Presentation: This is why low carb diets go beyond symptoms for acid reflux, IBS and SIBO](#)

Dietary Spectrum



Carbohydrate Intolerance – No Brainers



- Over 90% of IBS patients malabsorbed **lactose**, **fructose** or **sugar alcohol**. Restriction provided improvement in over half of patients.
- **Fructose** restriction lead to symptom improvement in 85% of adherent patients
- Over half with **sorbitol (sugar alcohol)** or **fructose** malabsorption and **all xylitol (sugar alcohol)** malabsorbers reported symptoms.
- **5 g sorbitol** - significant increase in breath hydrogen, 20 grams - severe symptoms.

Controversy on Carbohydrate Intolerance

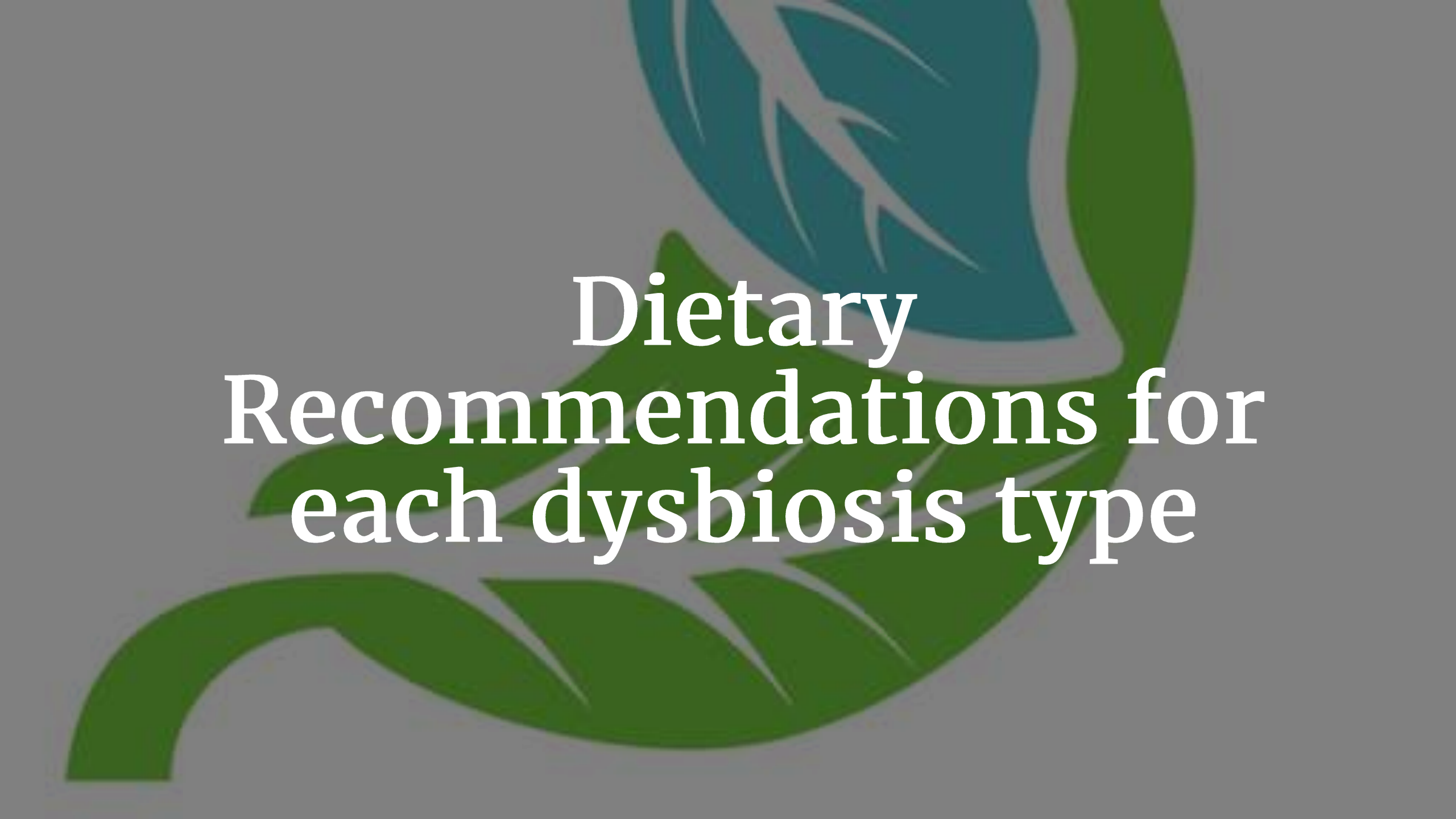
Fiber and Resistant Starch are fermentable and NOT digested

- [NICE Guidelines](#): Lactose, Fructose, RS, Fiber and Sugar Alcohols all linked to IBS
- [Textbook of Primary and Acute Care Medicine](#): Lactose, Fructose, RS, Fiber and Sugar Alcohols all linked to excess intestinal gases
- [Hunter 2005](#): Fiber-free diet as effective as metronidazole for gas and IBS symptoms
- [Maier, et.al. 2017](#): RS increases Firm/Bact ratio and stimulates growth of Ruminococcus
- [Dr William Chey 2013 review on fiber](#) “fiber can exacerbate abdominal distension, flatulence, constipation, and diarrhea”

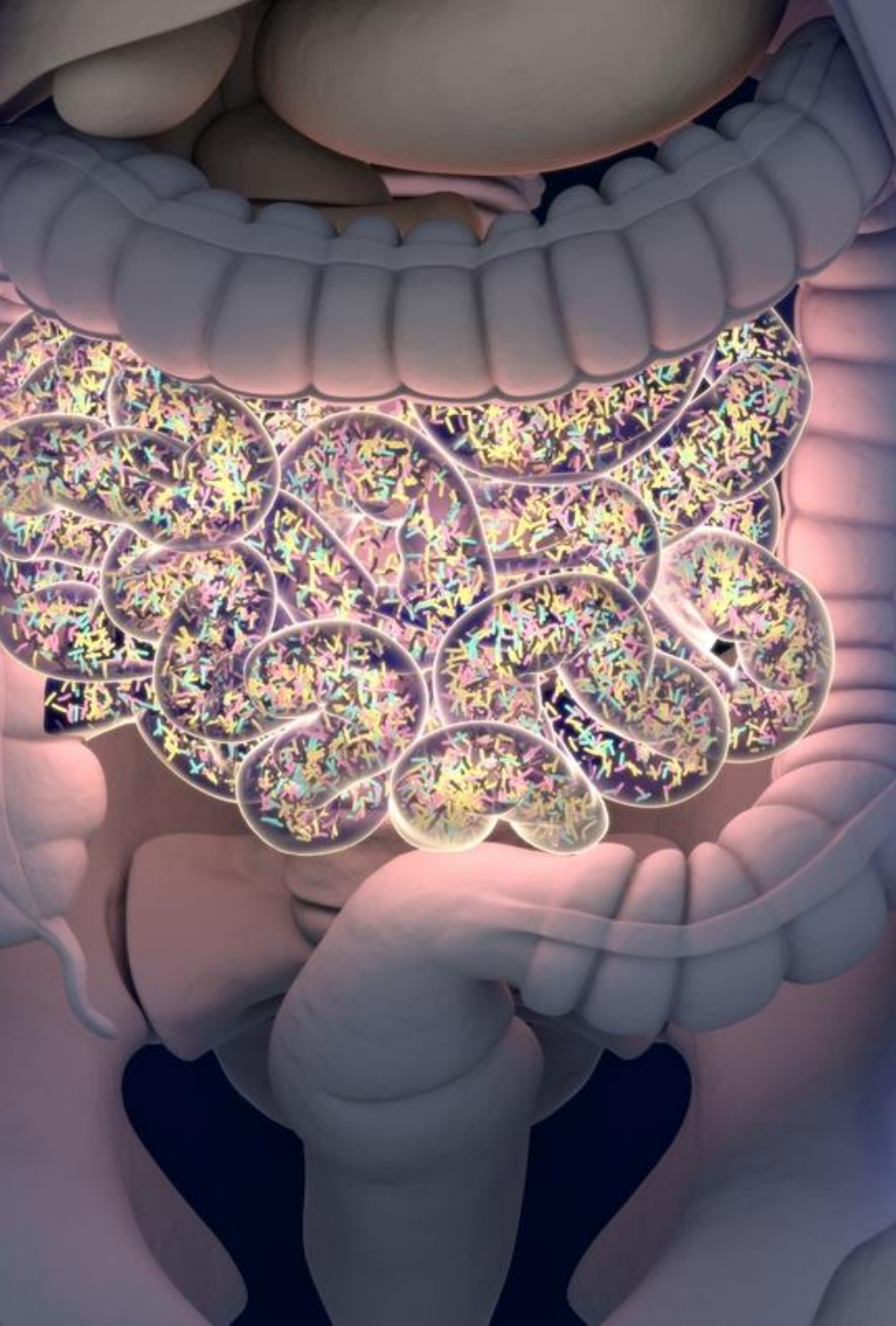
“Is limiting fiber and resistant starch healthy long term?”

“Don’t we need them to feed our gut microbes?”

- Not essential nutrient, no RCTs or Cochrane evidence RDA
- [The Dark Side of Fiber](#) and [Resistant Starch Friend or Foe](#)



Dietary Recommendations for each dysbiosis type



Diet for SIBO

Treatment:

- ✓ Limit fermentable carbohydrates including lactose, fructose, resistant starch, fiber and sugar alcohols (other than erythritol)
- ✓ Pro-digestion (Gut Friendly) behaviors and practices
- ✓ Supplementation
- ✓ Identify and address potential underlying causes

(Fast Tract Diet- FTD)

Limit all fermentable carbohydrates to reduce bacterial levels and symptoms because SIBO involves both S.I. strains that ferment simple carbs and colonic bacteria that ferment complex carbs.

Diet for SIFO

Treatment:

- ✓ Limit simple sugars and carb types that are easily broken down (sucrose, honey, potatoes, rice and pasta, etc.)
 - ✓ Increase fats and proteins
 - ✓ Improve digestion / absorption with behaviors and practice, digestive enzyme and other supplements
 - ✓ Identify and address potential underlying causes
- (Modified version of Fast Tract Diet - FTD)

[Hoffman 2013](#): Showed that Candida species positively associated with diets high in carbohydrates, but negatively with diets high in amino acids, protein, and fatty acids



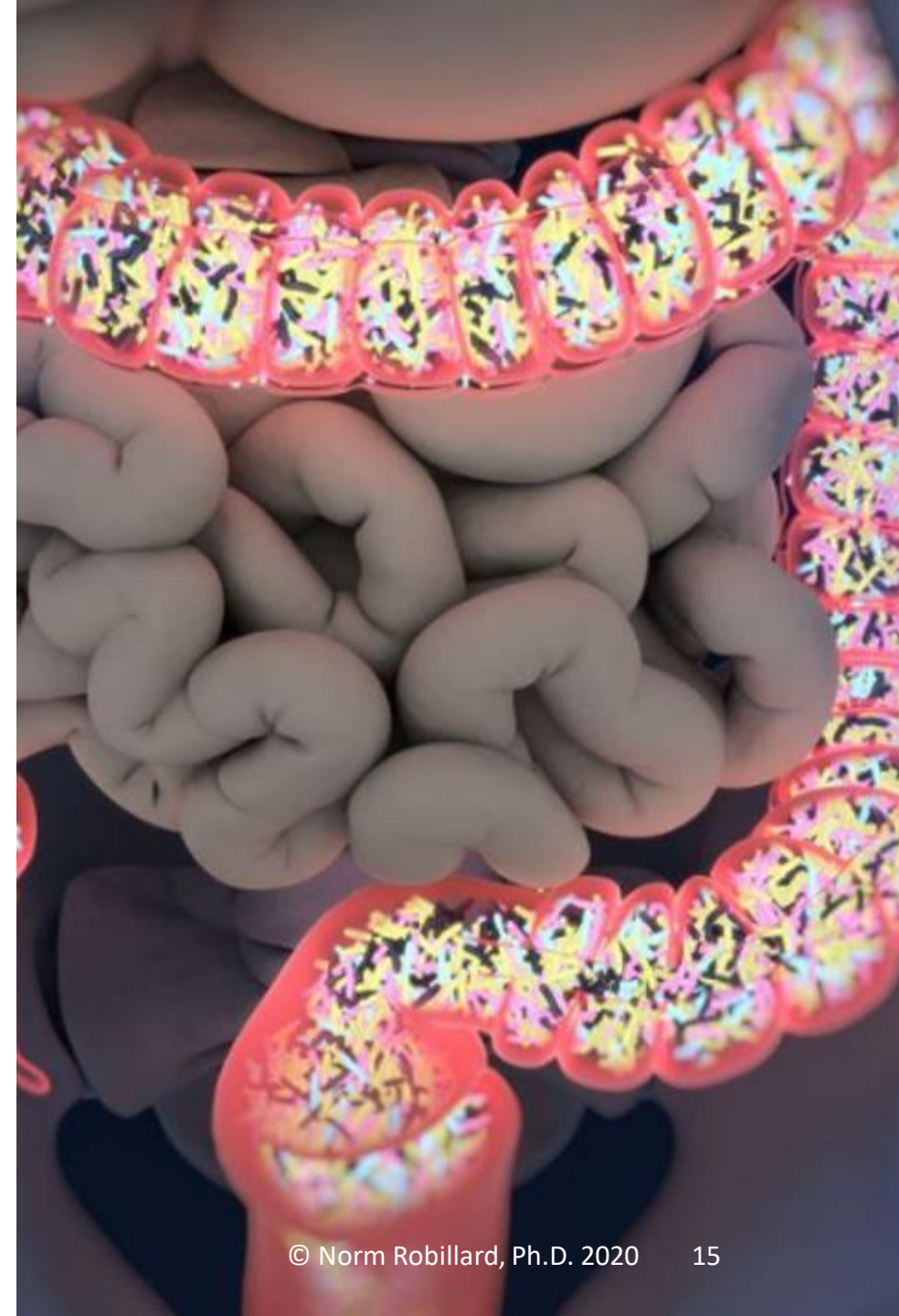
Diet for LIBO

Treatment:

- ✓ Limit fermentable carbohydrates including lactose, fructose, resistant starch, fiber and sugar alcohols (other than erythritol)
- ✓ Pro-digestion behaviors and practices
- ✓ Identify and address potential underlying causes (Fast Tract Diet- FTD)

Reducing fermentable carbs:

- Reduces SCFAs
- Increases colonic pH ([Brown 1974, Ringel-Kulka 2015 / Farmer 2014](#))
- Reduces Firmicutes / Bacteroidetes ratio
- Limits Ruminococcus growth





Diet for IMO (functional constipation)

Treatment:

- ✓ Reduce fermentable carbohydrates while increasing fats ([Fats for constipation 1927](#)) and proteins.
- ✓ Improve digestion / absorption with behaviors and practices
- ✓ Avoid undereating as [methanogen increase linked to anorexia](#)

(Fast Tract Diet – FTD)

- [Hoffman 2013](#): Methanogens positively associated with diets high in carbohydrates, but negatively with diets high in protein and fat.
- [David, Turnbaugh 2014](#) Higher fat, lower carb diet promotes *SRB which compete with methanogens – [Metabolic Niche SRBs](#)

What Else Can You Do?

Gut Friendly Behaviors

- Eat slowly and chew well (25 chews per bite)
- Choose ripe fruits and veggies
- Consume low FP vegetables and starches
- Cooked / peeled veggies are lower in FP
- Baked over boiled potatoes
- Cook rice properly
- Avoid left-over rice and potatoes
- Leave breaks between meals and fast
- Choose sprouted grains - lower in FP points

Dietary Supplements

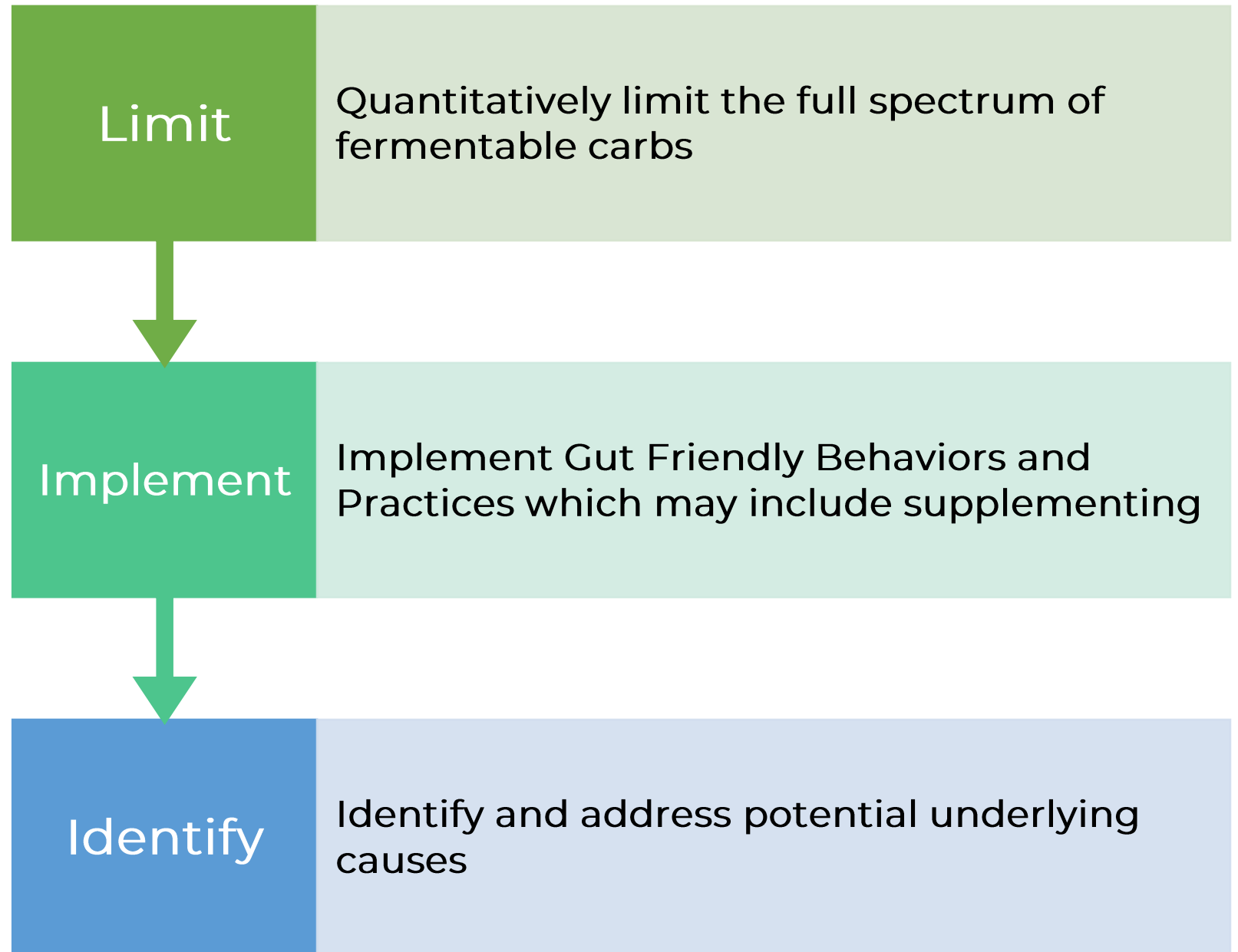
- **Digestive enzymes** - pancreas insufficiency, salivary amylase issues, disaccharidase deficiency
- **Betaine HCl** for suspected low stomach acid
- **Bile salts** for gall bladder, bile deconjugation issues
- **Probiotics** case by case for SIBO, constipation, diarrhea including *B. clausii*, Lacto/Bifido mix, *Bif. lactis*, *L. casei* Shirota, *Lactobacillus reuteri*
- **Gut healing** L-glutamine, N-Acetyl glucosamine (NAC), zinc carnosine, etc.
- **Vitamins (D, B12), minerals (mag, zinc, etc.)**
- **Antimicrobial herbal protocols** for challenging cases

Plant-based Diet Recommendations

- **Controlling FP:** Critical for dysbiosis. Focus on low FP veggies/herbs, nuts, seeds and sprouted legumes (I.E. kidney beans unsprouted 34 FP/cup vs. sprouted 6 FP/cup)
- **Micronutrients:** Vit B12, D, A, K2, B2 (riboflavin), B3 (niacin) and omega-3, zinc, iron, calcium, iodine, carnosine, taurine
- **Plant-based fats:** Focus on MUFAs and Saturated fats over too many PUFAs. In moderation eat nuts, seeds and nut butters, coconut oil, olive oil (limit), avocados (limit), edamame/tofu
- **Behaviors and practices:** Optimize digestion
- **Pro-digestion supplements:** digestive enzymes, etc.



Strategy for Addressing Dysbiosis





Fast Tract Diet (FTD)

New to FTD?

Free ebook at the DigestiveHealthInstitute.org
home page: <http://bit.ly/DHI-Home>

- FTD addresses dysbiosis and functional GI disorders
- FTD limits the full spectrum of fermentable carbohydrates based on a point system (FP)
- Covers a wide range of dietary preferences
- FP calculated based on glycemic index and nutrition facts data
- FP Calculator at the Digestive Health Institute website: <http://bit.ly/FP-Calculator>
- FTD is based on a 3-pillar approach: 1. dietary, 2. behavioral 3. identifying and addressing potential underlying causes

Let's Connect

- Free eBook, about me, blog articles and podcasts

<http://bit.ly/DHI-Home>

- Fast Tract Diet FB Group

<http://bit.ly/FB-FTD>



- Fast Tract Digestion books and Fast Tract Diet app

<http://bit.ly/DHIShop>

- 2 SIBO Masterclasses for the price of 1

<http://bit.ly/SIBOMasterclass>

- Individual consultation

<http://bit.ly/DHI-Consultation>

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