## EXPLAINED:

SUPPLEMENTS AND NUTRITION INTERVENTIONS
FOR EATING DISORDER CLIENTS

Dr. Heather Finley







## SUPPLEMENTS

are they necessary?

## THE LESSON

Supplements can be utilized in combination with other interventions to improve outcomes



## ABOUT ME Dr. Heather Finley

#### REGISTERED DIETITIAN

Experience in clinical settings, outpatient treatment and now virtual private practice

#### **GUT HEALTH SPECIALIST**

Focused my doctorate training on gutrelated research and have my own personal experience with 20+ years of digestive issues

## PLAN FOR TODAY



COMMON GI COMPLAINTS



## PLAN FOR TODAY

1

COMMON GI COMPLAINTS



SUPPLEMENTS
CAN BE
HELPFUL



## PLAN FOR TODAY

1

COMMON GI COMPLAINTS 2

WHEN SUPPLEMENTS CAN BE HELPFUL



HOW TO USE SUPPLEMENTS





## MEET MARY

BLOATED

CONSTIPATED

FRUSTRATED



## "ONLY EAT 5 FOODS BECAUSE OTHERWISE BLOAT"

## "I CANNOT EAT MEAT/HIGH PROTEIN BECAUSE IT SITS IN MY STOMACH LIKE A BRICK"

## TERMS

Dysbiosis: An imbalance between the types of organism present in a person's natural microflora, especially that of the gut, thought to contribute to a range of conditions of ill health

Probiotic: Probiotics are live microorganisms promoted with claims that they provide health benefits when consumed, generally by improving or restoring the gut flora

Prebiotic: Prebiotics are compounds in food that induce the growth or activity of beneficial microorganisms such as bacteria and fungi.



## POSSIBLE REASONS FOR NOT TOLERATING CARBS

DYSBIOSIS

LOW AMOUNTS OF "GOOD" BACTERIA

SHORT BOWEL SYNDROME

PANCREATIC INSUFFICIENCY

CELIAC DISEASE

FOOD INTOLERANCES

## POSSIBLE REASONS FOR BLOATING AFTER EATING

CONSTIPATION

BLOATING

LOW STOMACH ACID

POOR MEAL HYGIENE

LACK OF DIGESTIVE ENZYMES

SLOW GUT MOTILITY

FOOD INTOLERANCES

## POSSIBLE REASONS FOR FOOD SITTING LIKE A BRICK

#### CONSTIPATION

LOW STOMACH ACID

LACK OF DIGESTIVE ENZYMES

POOR MEAL HYGIENE

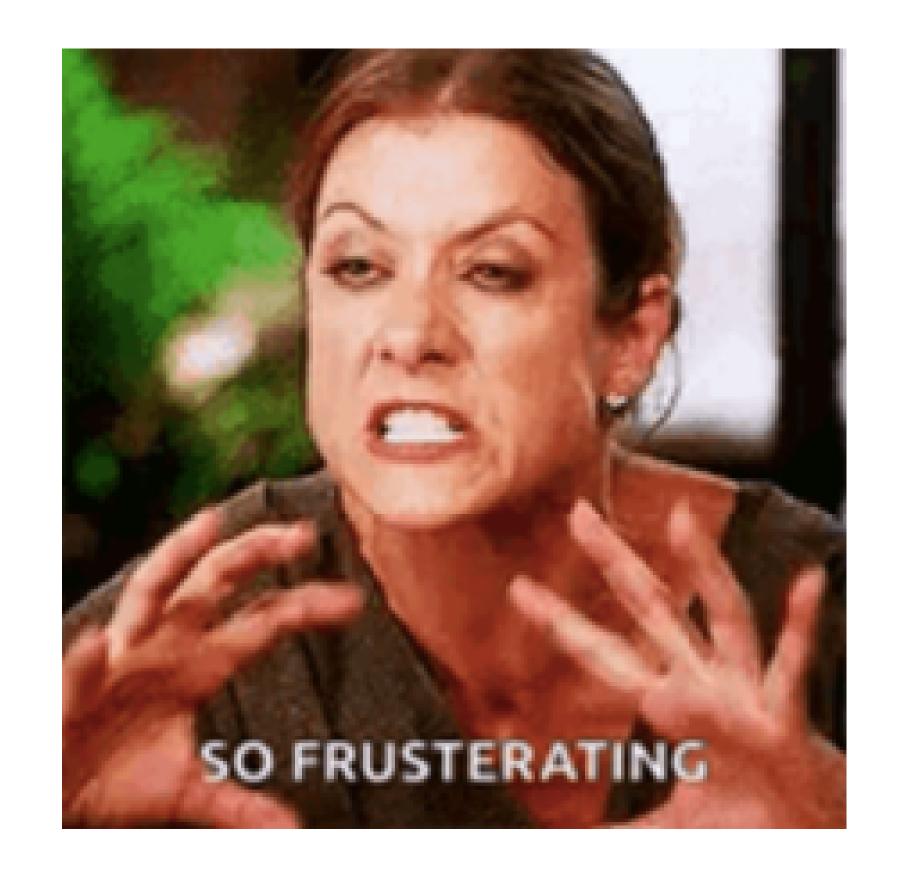
POOR BILE FLOW

DAMAGED VAGUS NERVE

SLOW GASTRIC EMPTYING

## AND STRESS, UNDEREATING, BINGING, PURGING ETC. IMPACT ALL OF THESE

## WHATIT FEELS LIKE TRYING TO IMPROVE INTAKE



Review > Clin J Gastroenterol. 2015 Oct;8(5):255-63. doi: 10.1007/s12328-015-0611-> Epub 2015 Oct 26.

#### Gastrointestinal symptoms and disorders in patients with eating disorders

Yasuhiro Sato 1 Shin Fukudo 2 3

Affiliations + expand

MID: 26 10.1 15-0611-x

#### Abstr

The two most clinic asserio a sating disorders are servosa as a vosa. As a for this as and few fatnessead patients with horexia a vosa each to restaucheir foot take or the pure self-in and vomit and/orgative abuse or reduce their body weight to much less than the normal range. A drive for thinness leads patients with bulimia nervosa to binge-eat then purge but fail to reduce their body weight. Patients with eating disorders present with various gastrointestinal disturbances such as postprandial fullness, abdominal distention, abdominal pain, gastric distension, and early satiety, with altered esophageal motility sometimes seen in patients with anorexia nervosa. Other common conditions noted in patients with eating disorders are postprandial distress syndrome, superior mesenteric artery syndrome, irritable bowel syndrome, and functional constipation. Binge eating may cause acute gastric dilatation and gastric perforation, while self-induced vomiting can lead to dental caries, salivary gland enlargement, gastroesophageal reflux disease, and electrolyte imbalance. Laxative abuse can cause dehydration and electrolyte imbalance. Vomiting and/or laxative abuse can cause

Review > Nutrients. 2021 Feb 3;13(2):500. doi: 10.3390/nu13020500.

#### The Role of the Gut Microbiome, Immunity, and Neuroinflammation in the Pathophysiology of Eating Disorders



There is a growing recognition that both the gut microbiome and the immune system are involved in a number of psychiatric illnesses, including eating disorders. This should come as no surprise, given the important roles of diet composition, eating patterns, and daily caloric intake in modulating both biological systems. Here, we review the evidence that alterations in the gut microbiome and immune system may serve not only to maintain and exacerbate dysregulated eating behavior, characterized by caloric restriction in anorexia nervosa and binge eating in bulimia nervosa and binge eating disorder, but may also serve as biomarkers of increased risk for developing an eating

> Clin Gastroenterol Hepatol. 2020 Oct;18(11):2471-2478. doi: 10.1016/j.cgh.2019.12.030. Epub 2020 Jan 7.

## Frequency of Eating Disorder Pathology Among Patients With Chronic Constipation and Contribution of Cartroir stinal Crecific Anxiety

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PMID: 31923640 DOI: 10.1016/j.cgh.2019.12.030

#### **Abstract**

**Background & aims:** Individuals with eating disorders (EDs) frequently have constipation-related symptoms, although the mechanisms of this relationship are not clear. We examined the frequency of and relation between EDs and constipation in patients with chronic constipation referred for

Journal List > PLoS One > PMC5479564

#### PLOS ONE



PLoS One. 2017; 12(6): e0179739.

Published online 2017, Jun 21. doi: 10.1371/journal.pone.0179739

PMCID: PMC5479564

PMID: 28636668

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Francesca 20 go, Concapadalization, Data duration, Formar analysis, Investigation, Visualization, Writing – original draft, Alessandra Riva, Data curation, Formal analysis, Visualization, Writing – original draft, Alberto Benetti, Investigation, Resources, Maria Cristina Casiraghi, Investigation, Resources, Sara Bertelli, Investigation, Resources, Stefania Garbossa, Investigation, Resources, Simona Anselmetti, Investigation, Resources, Silvio Scarone, Resources, Supervision, Antonio E. Pontiroli, Conceptualization, Funding acquisition, Project administration, Resources, Supervision, Validation, Writing – review & editing, Giulia Morace, Conceptualization, Validation, Writing – review & editing, Conceptualization, Funding acquisition, Project



> Nutrients. 2020 Jun 3;12(6):1661. doi: 10.3390/nu12061661.

#### The Role and the Effect of Magnesium in Mental Disorders: A Systematic Review

Andrea Botturi 1, Valentina Ciappolino 2, Giuseppe Delvecchio 3, Andrea Boscutti 2,

AS 1/12/061

#### Abstract

Introduction: Magnesium is an essential cation involved in many functions within the central nervous system, including transmission and intracellular signal transduction. Several studies have shown its usefulness in neurological and psychiatric diseases. Furthermore, it seems that magnesium levels are lowered in the course of several mental disorders, especially depression.

**Objectives:** In this study, we wish to evaluate the presence of a relationship between the levels of magnesium and the presence of psychiatric pathology as well as the effectiveness of magnesium

## PRIMARY GOALS

ADEQUATE CALORIE INTAKE

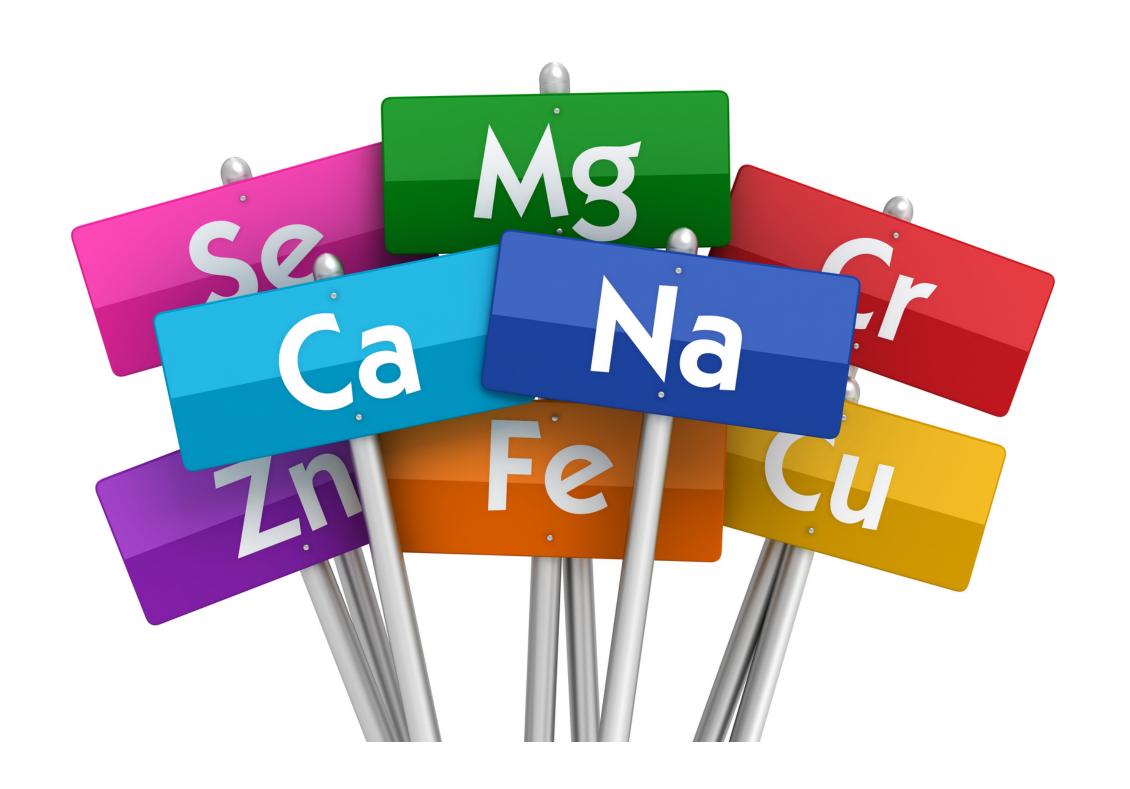
BLOOD SUGAR BALANCE

ADEQUATE HYDRATION

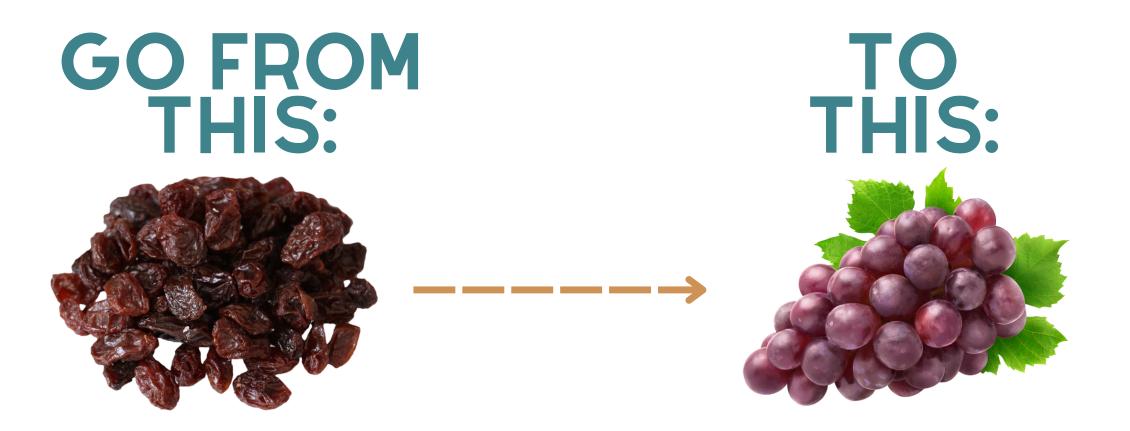
DIVERSITY

## TODAY WE WILL COVER SOME BASIC SUPPLEMENTS THAT ARE SAFE TO USE AND CAN BE USED FOR A VARIETY OF CONDITIONS

## THE FOUNDATION IS MINERALS



## MINERALS HELP THE CELLS



and healthy, hydrated cells improve gut function, energy and gut motility!

## FOUNDATION MINERALS

SODIUM

POTASSIUM

MAGNESIUM

#### MINERALS ARE THE SPARK PLUGS OF THE BODY









## MAGNESIUM



# First step: Decide which form you need

## MAGNESIUM FORMS

MALATE: ENERGY, MUSCLE SORENESS

THREONATE: MEMORY AND BRAIN HEALTH

GLYCINATE: BIOAVAILABILITY AND SLEEP

CITRATE: RELAXATION AND BOWEL MOVEMENTS

CARBONATE: ANTACID

## MAGNESIUM FORMS

- ANTI-STRESS MINERAL
- IMPROVES INSULIN SENSITIVITY
- HPA AXIS SUPPORT
- ENERGY PRODUCTION (MG-ATP)
- INVOLVED IN HUNDREDS OF PROCESSES IN THE BODY

### MAGNESIUM DOSING

- START WITH 200MG
  - INCREASE BY 100 MG EVERY 3-4 DAYS
- UPPER LIMIT IS ANYWHERE BETWEEN 350-800 MG DEPENDING ON WHERE YOU LOOK
- IF YOU REACH HIGHER LEVELS OF MAGNESIUM YOU NEED TO LOOK AT SODIUM

## POTASSIUM

### POTASSIUM

NERVE IMPULSES

THYROID METABOLISM

HYDRATION

HORMONES AND BLOOD SUGAR

BLOOD PRESSURE

### POTASSIUM SOURCES

#### LIQUIDS:

- ORANGE JUICE
- ALOE VERA
- COCONUT WATER

#### FOOD:

- POTATOES
- CITRUS
- SQUASH
- BEETS
- MANGO

### POTASSIUM SOURCES

#### SUPPLEMENTAL

• LOOK FOR WHOLE FOOD FORM VERSUS SYNTHETIC







## SODIUM

### SODIUM

TOO LITTLE CORRELATED WITH HIGHER CORTISOL

BLOOD PRESSURE

HYDRATION

STRESS RESPONSE

NERVE IMPULSES

DIGESTION AND STOMACH ACID

### EXAMPLES OF FOODS:







#### SODIUM

**MAGNESIUM** 

Celtic salt
Redmond real salt
Fermented foods
Seafood
Cottage Cheese
Celery

Pumpkin seeds
Chia seeds
Oatmeal
Kidney beans
Brown rice
Cocoa

Avocados
Bananas
Coconut water
Brussels sprouts
Squash
Pumpkin seeds

# HERBALS

# GINGER

### GINGER

- GASTRIC MOTILITY
- EFFICIENT DIGESTION
- NAUSEA RELIEF
- REDUCES GAS
- BENEFITS LIPASE (PANCREAS) AND AIDS DIGESITON
- IMPROVES CONSTIPATION

### DOSING

- 1100 MG AT NIGHT (TYPICALLY 2 CAPSULES)
- AVOID WITH REFLUX
- AVOID RIGHT BEFORE BED

# BITTERS

### BITTER HERBS

- BITTER TASTE STARTS DIGESTIVE PROCESS
- SIGNALS MORE SALIVA PRODUCTION
- IMPROVE STOMACH ACID PRODUCTION
- INCREASE BOWEL ACTIVITY
- IMPROVE ACID REFLUX SYMPTOMS
- IMPROVE STOMACH PAIN, GAS, CRAMPING

### DOSING

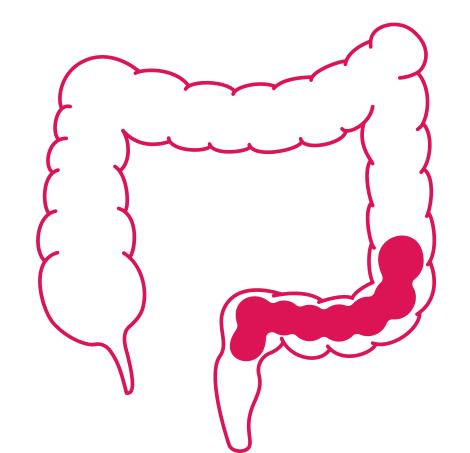
- 1 FULL DROPPERFUL BEFORE MEALS
- TAKEN UP TO 6 TIMES PER DAY





# COMPLAINT

CONSTIPATION



### MAGNESIUM

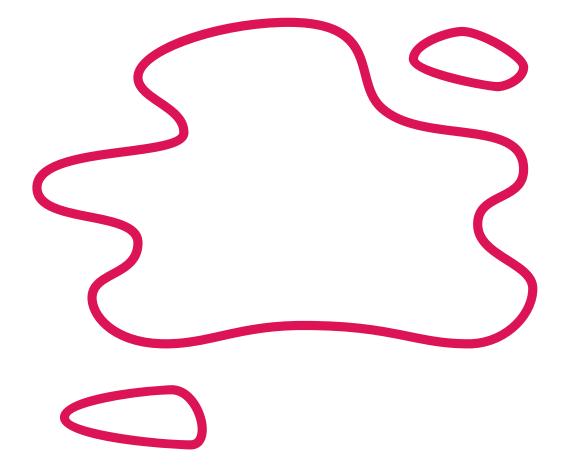
### POTASSIUM & SODIUM

GINGER

DIGESTIVE BITTERS

# COMPLAINT

DIARRHEA



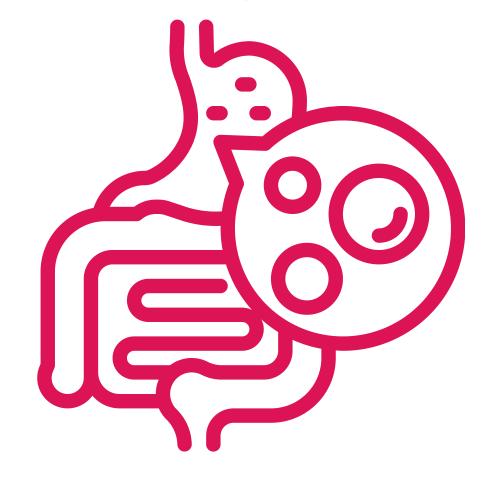
### SODIUM (MAYBE POTASSIUM)

### DIGESTIVE BITTERS

MAGNESIUM

# COMPLAINT

BLOAT



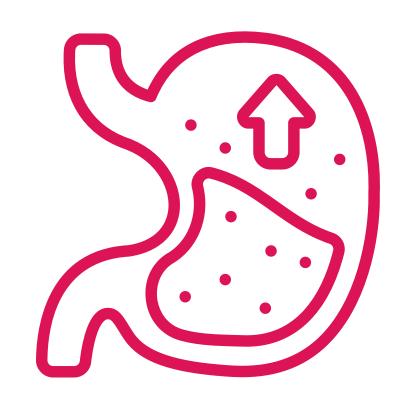
#### RESOLVE CONSTIPATION

DIGESTIVE BITTERS

SODIUM/POTASSIUM

# COMPLAINT

ACID REFLUX

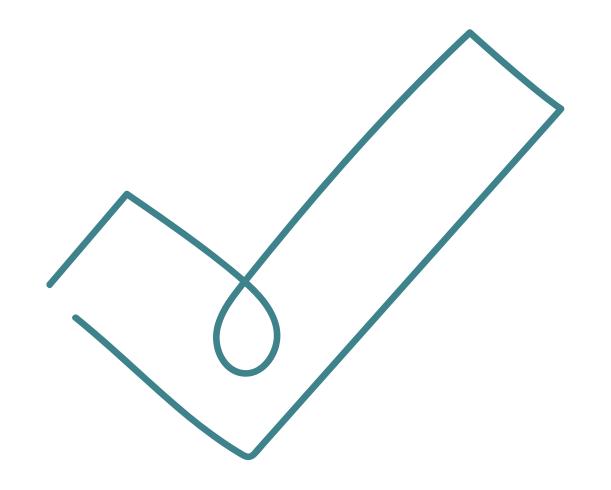


### MAGNESIUM

DIGESTIVE BITTERS

SODIUM/POTASSIUM

### COMPLIANCE...



# BUT NOT RELIANCE

### SIMPLE INTERVENTIONS WITH SUPPLEMENTS COULD IMPROVE COMPLAINCE WITH RECOMMENDATIONS

# DO YOU WANT THE CHECKLIST?



Visit:

drheatherfinley.co/digestivechecklist



### HOW WE CAN CONNECT



@drheatherfinley

#### ON LINKED IN

Dr. Heather Finley Dietitian Heather, LLC

#### MY PODCAST

Love your Gut with Dr. Heather Finley



### QUESTIONS?

#### **KEY REFERENCES**

Front. Psychiatry, 12 January 2021 | https://doi.org/10.3389/fpsyt.2020.611677

Mörkl S, Lackner S, Müller W, Gorkiewicz G, Kashofer K, Oberascher A, Painold A, Holl A, Holzer P, Meinitzer A, Mangge H, Holasek S. Gut microbiota and body composition in anorexia nervosa inpatients in comparison to athletes, overweight, obese, and normal weight controls. Int J Eat Disord. 2017 Dec;50(12):1421-1431. doi: 10.1002/eat.22801. Epub 2017 Nov 13. PMID: 29131365.

Speranza E, Cioffi I, Santarpia L, Del Piano C, De Caprio C, Naccarato M, Marra M, De Filippo E, Contaldo F, Pasanisi F. Fecal Short Chain Fatty Acids and Dietary Intake in Italian Women With Restrictive Anorexia Nervosa: A Pilot Study. Front Nutr. 2018 Nov 29;5:119. doi: 10.3389/fnut.2018.00119. PMID: 30555830; PMCID: PMC6281687.

Alcock J, Maley CC, Aktipis CA. Is eating behavior manipulated by the gastrointestinal microbiota? Evolutionary pressures and potential mechanisms. Bioessays. 2014 Oct;36(10):940-9. doi: 10.1002/bies.201400071. Epub 2014 Aug 8. PMID: 25103109; PMCID: PMC4270213.

Slyepchenko A, Maes M, Jacka FN, Köhler CA, Barichello T, McIntyre RS, Berk M, Grande I, Foster JA, Vieta E, Carvalho AF. Gut Microbiota, Bacterial Translocation, and Interactions with Diet: Pathophysiological Links between Major Depressive Disorder and Non-Communicable Medical Comorbidities. Psychother Psychosom. 2017;86(1):31-46. doi: 10.1159/000448957. Epub 2016 Nov 25. PMID: 27884012.

Hanachi M, Manichanh C, Schoenenberger A, Pascal V, Levenez F, Cournède N, Doré J, Melchior JC. Altered host-gut microbes symbiosis in severely malnourished anorexia nervosa (AN) patients undergoing enteral nutrition: An explicative factor of functional intestinal disorders? Clin Nutr. 2019 Oct;38(5):2304-2310. doi: 10.1016/j.clnu.2018.10.004. Epub 2018 Oct 9. PMID: 30527539.

Borgo F, Riva A, Benetti A, Casiraghi MC, Bertelli S, Garbossa S, Anselmetti S, Scarone S, Pontiroli AE, Morace G, Borghi E. Microbiota in anorexia nervosa: The triangle between bacterial species, metabolites and psychological tests. PLoS One. 2017 Jun 21;12(6):e0179739. doi: 10.1371/journal.pone.0179739. PMID: 28636668; PMCID: PMC5479564.

Anna Herman, Armand Bajaka,

The role of the intestinal microbiota in eating disorders – bulimia nervosa and binge eating disorder, Psychiatry Research, Volume 300, 2021, 113923, https://doi.org/10.1016/j.psychres.2021.113923.

Quentin Leyrolle, Renata Cserjesi, Maria D.G.H. Mulders, Giorgia Zamariola, Sophie Hiel, Marco A. Gianfrancesco, Julie Rodriguez, Daphnée Portheault, Camille Amadieu, Sophie Leclercq, Laure B. Bindels, Audrey M. Neyrinck, Patrice D. Cani, Olli Karkkainen, Kati Hanhineva, Nicolas Lanthier, Pierre Trefois, Nicolas Paquot, Miriam Cnop, Jean-Paul Thissen, Olivier Luminet, Nathalie M. Delzenne, Specific gut microbial, biological, and psychiatric profiling related to binge eating disorders: A cross-sectional study in obese patients, Clinical Nutrition, Volume 40, Issue 4, 2021, Pages 2035-2044,

Parazzini F, Di Martino M, Pellegrino P. Magnesium in the gynecological practice: a literature review. Magnes Res. 2017 Feb; 30(1):1-7. English. doi: 10.1684/mrh.2017.0419. PMID: 28392498.

Gagliardi A, Totino V, Cacciotti F, lebba V, Neroni B, Bonfiglio G, Trancassini M, Passariello C, Pantanella F, Schippa S. Rebuilding the Gut Microbiota Ecosystem. Int J Environ Res Public Health. 2018 Aug 7;15(8):1679. doi: 10.3390/ijerph15081679. PMID: 30087270; PMCID: PMC6121872.

Murray HB, Flanagan R, Banashefski B, Silvernale CJ, Kuo B, Staller K. Frequency of Eating Disorder Pathology Among Patients With Chronic Constipation and Contribution of Gastrointestinal-Specific Anxiety. Clin Gastroenterol Hepatol. 2020 Oct;18(11):2471-2478. doi: 10.1016/j.cgh.2019.12.030. Epub 2020 Jan 7. PMID: 31923640

Butler MJ, Perrini AA, Eckel LA. The Role of the Gut Microbiome, Immunity, and Neuroinflammation in the Pathophysiology of Eating Disorders. Nutrients. 2021 Feb 3;13(2):500. doi: 10.3390/nu13020500. PMID: 33546416; PMCID: PMC7913528..

Murray HB, Flanagan R, Banashefski B, Silvernale CJ, Kuo B, Staller K. Frequency of Eating Disorder Pathology Among Patients Wit

Botturi A, Ciappolino V, Delvecchio G, Boscutti A, Viscardi B, Brambilla P. The Role and the Effect of Magnesium in Mental Disorders: A Systematic Review. Nutrients. 2020 Jun 3;12(6):1661. doi: 10.3390/nu12061661. PMID: 32503201; PMCID: PMC7352515.h Chronic Constipation and Contribution of Gastrointestinal-Specific Anxiety. Clin Gastroenterol Hepatol. 2020 Oct;18(11):2471-2478. doi: 10.1016/j.cgh.2019.12.030. Epub 2020 Jan 7. PMID: 31923640.