

## MARY CLAIRE ATKINSON



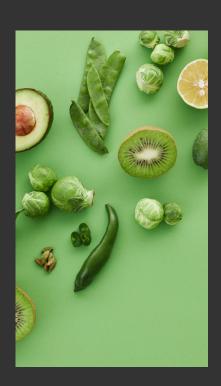
## MSU CAMPUS REC

"IMPROVING GUT HEALTH" HAS BECOME A POPULAR TAGLINE USED FREQUENTLY THROUGHOUT THE HEALTH AND WELLNESS COMMUNITY ATTESTING TO BE THE THE KEY INGREDIENT IN PROMOTING SEVERAL HEALTH BENEFITS. GUT HEALTH CLAIMS ARE MULTI-FACETED AND THE IMPACTS OF A HEALTHY GUT ARE DEVELOPING MORE AND MORE. LET'S DIVE INTO WHAT EXACTLY GUT HEALTH IS AND WHY IT IS IMPORTANT.

## October 2023







YOUR GUT INCLUDES YOUR ENTIRE GASTROINTESTINAL TRACT (GI), STARTING IN YOUR MOUTH! YOUR GI TRACT IS FILLED WITH MICROORGANISMS, INCLUDING BACTERIA. ALL THE MICROORGANISMS IN YOUR GUT, INCLUDING THE BACTERIA, MAKE UP YOUR GUT MICROBIOME. THE BACTERIA IN YOUR GUT CAN BE BOTH GOOD OR BAD. THE GOOD BACTERIA IN YOUR GUT, ALSO KNOWN AS PROBIOTICS, FIGHTS OFF BAD BACTERIA, AIDS IN DIGESTION, AND IS CRUCIAL IN MAINTAINING A BALANCED, HEALTHY BODY. TOO MUCH BAD BACTERIA, ON THE OTHER HAND, CAN RESULT IN COUNTLESS DIGESTIVE ISSUES AND INCREASE THE RISK OF CHRONIC DISEASE AND MENTAL HEALTH ISSUES.

SO HOW CAN WE EAT TO HELP OUR GOOD BACTERIA THRIVE?

# Foods that Promote a Healthy Gut



#### FIBER

EATING FOODS HIGH IN FIBER ARE CRUCIAL TO MAINTAINING A HEALTHY GUT. FOODS HIGH IN FIBER INCLUDE WHOLE-GRAINS, FRUITS, VEGETABLES, BEANS, PEAS, LEGUMES, NUTS AND SEEDS. FOODS RICH IN FIBER ARE OFTEN ALSO A GREAT SOURCE OF PREBIOTIC AND PROBIOTIC FOODS!

### PROBIOTICS

AS DISCUSSED, PROBIOTICS ARE THE LIVE BACTERIA THAT LIVE IN YOUR GUT THAT KEEP YOU HEALTHY. PROBIOTICS CAN BE FOUND IN A VARIETY OF FOODS SUCH AS YOGURT, SAUERKRAUT, PICKLES, TEMPEH, KIMCHI, SOURDOUGH BREAD, FERMENTED CHEESES, OLIVES, KOMBUCHA, AND MISO.





### PREBIOTICS

PREBIOTICS ARE PLANT FIBERS THAT PROMOTE THE GROWTH OF HEALTHY BACTERIA IN YOUR GUT. IN OTHER WORDS, THEY FEED THE PROBIOTICS! PREBIOTICS ARE MAINLY FOUND IN FRUITS AND VEGETABLES. NOTABLY, A HIGH AMOUNT OF PREBIOTICS CAN BE FOUND IN MUSHROOMS, GARLIC, BANANAS, APPLES, ASPARAGUS, OATMEAL, JERUSALEM ARTICHOKE, FLAXSEEDS, SOY BEANS, LEEKS, AND LEAFY GREENS.

IN GENERAL, A FIBER-RICH DIET FILLED WITH FRUITS AND VEGETABLES WILL CONTRIBUTE TO AN INCREASE IN THE DIVERSITY OF THE GOOD BACTERIA IN YOUR GUT!

## MSU Campus Rec



#### WHAT ELSE AFFECTS OUR GUT?

THE GUT IS A COMPLEX MACHINE, SO IT IS NO SURPRISE THAT EATING A WELL-BALANCED DIET IS NOT A ONE-STOP SHOP FOR IMPROVING GUT HEALTH. RATHER, GUT HEALTH IS INFLUENCED BY A MULTITUDE OF AREAS. YOUR SLEEP PATTERNS, EXERCISE ROUTINE, STRESS MAINTENANCE, GENETIC MAKEUP, AND EATING SCHEDULE ALL PLAY A CRUCIAL ROLE IN REGULATING THE MICROBIOTA THAT LIVES IN YOUR GUT.

#### **SLEEP**

THE RELATIONSHIP BETWEEN SLEEP AND GUT HEALTH IS SYNERGISTIC. OFTENTIMES, LACK OF SUFFICIENT SLEEP INCREASES OUR STRESS HORMONE, CORTISOL, AND LEADS TO OTHER HORMONE IMBALANCES IN THE BODY. SEVERAL STUDIES SUGGEST THAT LACK OF SLEEP CAN INCREASE THE PREVALENCE OF LEAKY GUT WHERE SPECIFIC TOXINS AND FOOD PASS THROUGH THE INTESTINE AND INTO THE BLOODSTREAM DUE TO THESE HORMONE IMBALANCES.

#### EXERCISE

EXERCISE HAS BEEN SHOWN TO INCREASE THE AMOUNT OF BENEFICIAL MICROBIAL SPECIES IN YOUR GUT, CONTRIBUTING TO BETTER IMMUNE HEALTH, DIGESTION, AND MOOD!

#### **EATING SCHEDULE**

IMPACTS ON THE GUT MICROBIOME CAN ALSO BE IMPACTED BY THE TIME IN WHICH YOU EAT. RESEARCH IS STILL DEVELOPING ON THE RELATIONSHIP BETWEEN CIRCADIAN RHYTHM'S, EATING BEHAVIORS, AND THE GUT MICROBIOME. SOME RESEARCH SUGGEST THAT EATING AT SIMILAR TIMES EVERYDAY CAN HAVE A BENEFICIAL EFFECT ON GUT HEALTH.



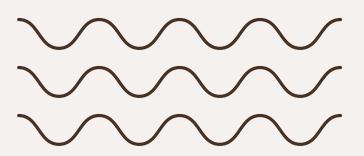
#### **GUT-BRAIN CONNECTION**

ONE OF THE BIGGEST RESEARCHED AREA OF GUT HEALTH IS THE COMPLEX RELATIONSHIP BETWEEN OUR BRAIN AND OUR GUT. CALLED THE "GUT-BRAIN AXIS", THERE IS A PROFOUND CONNECTION BETWEEN THE STATE OF OUR GUT AND THE STATE OF OUR BRAIN. SO MUCH SO THAT THE GUT IS OFTENTIMES REFERRED TO AS THE "SECOND BRAIN".

WITH THIS IN MIND, IT MAKES SENSE THAT THOSE LIVING WITH IBS AND FUNCTIONAL BOWEL PROBLEMS HAVE A HIGHER RATE OF MENTAL HEALTH ISSUES SUCH AS ANXIETY AND DEPRESSION. SEVERAL STUDIES HAVE DEMONSTRATED THE IMPACT THAT EATING PREBIOTIC AND PROBIOTIC FOODS HAS IN REDUCING OVERALL STRESS-RELATED BEHAVIORS.

## Benefits of a Healthy Gut

OVERALL, HAVING A DIVERSE, HEALTHY GUT FILLED WITH GOOD BACTERIA CAN LEAD TO NUMEROUS HEALTH BENEFITS. MAINTENANCE OF THE GUT MICROBIOME IS ESSENTIAL IN REGULATING IMMUNITY, DIGESTION, METABOLISM, AND INFLAMMATION IN THE BODY. IT IS CRUCIAL IN DECREASING THE PREVALENCE OF CHRONIC DISEASE, SUCH AS DIABETES. ADDITIONALLY, IT CAN AID IN WEIGHT MAINTENANCE, PROMOTE STABLE ENERGY LEVELS, AND LOWER CHOLESTEROL. LASTLY, A HEALTHY GUT CAN HAVE NOTABLE EFFECTS ON MENTAL HEALTH AND MOOD.









- 1. HTTPS://WWW.HOPKINSMEDICINE.ORG/HEALTH/WELLNESS-AND-PREVENTION/YOUR-DIGESTIVE-SYSTEM-5-WAYS-TO-SUPPORT-GUT-HEALTH
- 2. HTTPS://WWW.HSPH.HARVARD.EDU/NUTRITIONSOURCE/MICROBIOME/
- 3.HTTPS://WWW.NCBI.NLM.NIH.GOV/PMC/ARTICLES/PMC4425030/
- 4. HTTPS://MEDICINE.MISSOURI.EDU/NEWS/STUDY-FINDS-GUT-MICROBIOME-PLAYS-IMPORTANT-ROLE-SLEEP-REGULATION
- 5. HTTPS://WWW.NCBI.NLM.NIH.GOV/PMC/ARTICLES/PMC5357536/
- 6. HTTPS://WWW.NCBI.NLM.NIH.GOV/PMC/ARTICLES/PMC5914376/
- 7. HTTPS://WWW.NCBI.NLM.NIH.GOV/PMC/ARTICLES/PMC4367209/
- 8. HTTPS://WWW.HOPKINSMEDICINE.ORG/HEALTH/WELLNESS-AND-PREVENTION/THE-BRAIN-GUT-CONNECTION