

NOURISHMENTAL

November | December 2023

nourishmental.com

UNDERSTANDING YOUR GUT MICROBIOTA

Your body's intestinal flora
affects more than you think!

BROACHING THE SUBJECT

Read an interview with a
Registered Dietician Nutritionist.

US \$5.99 | CAN \$6.99



GUT MICROBIOTA



In recent years, the intricate relationship between the gut and the brain has become a captivating focus of scientific inquiry, giving rise to the field of psychobiotics. Psychobiotics are live bacteria that, when ingested in sufficient amounts, provide mental health benefits. One fascinating development in this field is the revelation that the gut microbiota plays a pivotal role in influencing the efficacy of medications used for mental health disorders.

The gut-brain axis is a bidirectional communication system between the central nervous system and the gastrointestinal tract. An intricate network of neurons, immune cells, and signaling molecules facilitates this communication. The gut microbiota, composed of trillions of microorganisms—bacteria, viruses, and fungi—emerges as a key player in modulating this axis. Recent research explores how gut microbes impact the metabolism of medications, particularly those used in psychotherapy.

Many foods affect gut flora eubiosis, the balance within the gut microbiota. Excessive consumption of highly processed and sugary foods, including sugary beverages and artificial sweeteners, may promote the growth of less beneficial bacteria. Diets low in fiber, lacking in whole grains, and high in saturated or trans fats can reduce microbial diversity. Striking a balance with a diet rich in fiber, whole foods, and fermented options supports a healthier gut microbiota and intestinal flora.

Recent studies spotlight the gut microbiota's role in metabolizing and absorbing medications. Enzymes with-

in this microbial community, similar to those found in the liver, including the famed cytochrome P450, dance to a different tune. Their activity in the gut can influence how medications like SSRIs and antipsychotics are processed, potentially altering the pills' absorption and effectiveness.

Beyond metabolism, our gut microbes are experienced in the production of neurotransmitters—our brain's own messengers. These can greatly affect depressive symptoms. For example, they play a role in the synthesis of serotonin, a neurotransmitter crucial for mood regulation. Gut bacteria contribute to this synthesis, adding a new layer to the delicate balance of mental health.

Short-chain fatty acids, produced by our own gut microbes, are another key player in the diverse intestinal flora. Butyrate, propionate, and acetate, among others, influence brain function and gene expression related to neurotransmitter production. It's like the gut microbiota is producing a backstage crew that fine-tunes the

performance of mental health medications and psychotherapy.

This newfound understanding holds promise for a more personalized approach to mental health treatment. Imagine tailoring treatments based on an individual's unique gut microbial

profile, fine-tuning the effectiveness of medications. The future may see probiotics and prebiotics playing a supporting role, promoting a healthier gut environment and possibly optimizing some medication outcomes.

As we unravel the secrets of the gut-brain axis, a new movement is born, transforming how we perceive and approach mental health. This isn't just about pills; it's about nurturing the entire system. The quest to harness the potential of the gut microbiota could lead us to a harmonious symphony, where mental health medications play their part, guided by the subtle influence of our gut microbes.

It's like the gut microbiota is a backstage crew that fine-tunes the performance of mental health medications.

Welcome to a new era in mental health care.●

you are the only
person who knows
what you are
going through.

breathe.

BAKING ISN'T EASY, BUT IT SHOULD BE SIMPLE.

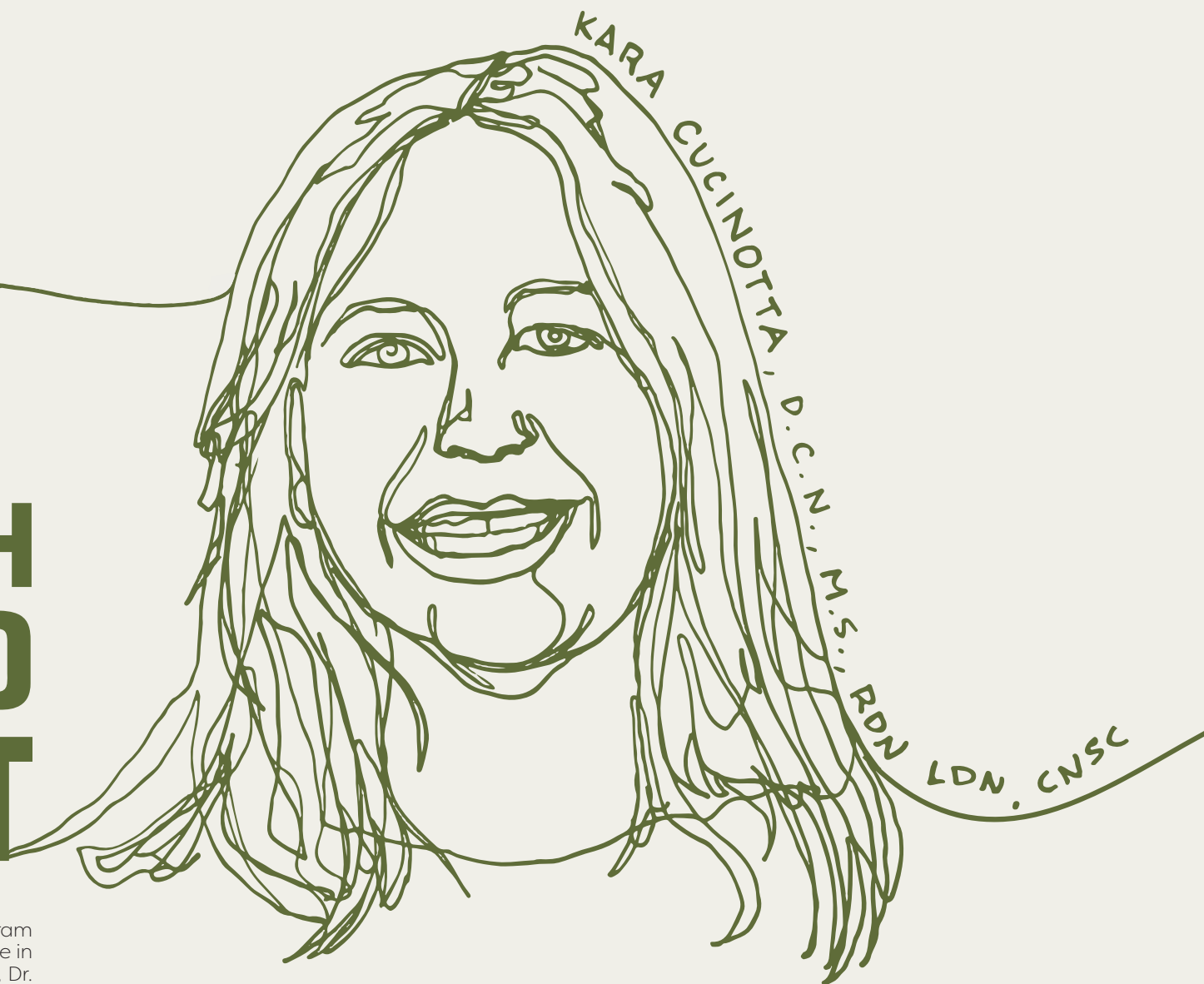
At Bakely we use ingredients
you know and recipes you'll
love. One bite, and we know
you'll have a smile for the
rest of the day.



bakely
SIMPLY GOOD COOKIES.

broaching the subject

AN INTERVIEW WITH AN EXPERIENCED NUTRITIONIST



Kara Cucinotta, an Associate Professor and Director of the Dietetics and Applied Nutrition Program at Johnson & Wales University, is well educated in the field of nutrition. With a Master of Science in Nutrition and a Doctorate of Clinical Nutrition focused in Integrative and Functional Nutrition, Dr. Cucinotta has dedicated her career to helping others with their nutrition and health.

Could you share your personal journey and what led you to pursue a career in nutrition? What experiences or realizations sparked your interest in the field?

When I was first looking at colleges, I wasn't exactly sure what I wanted to do for a career or what I wanted to major in. At the time, I wanted to be a chef and own a restaurant but I was also interested in nutrition. I realized after about 2 years working towards my culinary arts degree that I wanted to focus more on helping people, especially kids, and that a career in nutrition was more aligned with my personal and professional goals.

What are common misconceptions about nutrition, and how can addressing them contribute to improved well-being, both in physical and mental health?

I think a very common misconception is that an "all or nothing" approach is needed to be considered "healthy". Many people express their confusion and frustration about "the best way to eat" when so many diets are diametrically opposed (e.g. carnivore vs. vegan, high fiber vs. low carbohydrate diets)... It's difficult for folks to accept that small changes and enjoying all foods in moderation is healthy!

How does nutrition influence social interactions, and what strategies would you recommend for making healthier food choices in social settings?

Food is a huge part of so many aspects of our lives: sustenance, celebration, cultural identity, etc. While I believe we should be thoughtful about food choices, I also strongly believe that we should enjoy the whole experience of eating food. Try to choose meals and snacks that incorporate nutrient-dense foods like vegetables, fruits and plant-based proteins, but enjoy the gathering and leave guilt and shame at the door!

With the abundance of dietary information available, what advice would you give for navigating and making informed choices for mental and physical well-being?

Media outlets and social media influencers will oftentimes sensationalized headlines and study results to get views. It's best to get nutrition information from trusted, non-biased sources, especially Registered Dietitian Nutritionists who are the food and nutrition experts. ■

WHEN YOU WORK, WE WORK.

With a 95.4% career outcome rate, Johnson & Wales University prepares students with career-focused class rooms, internship opportunities, and real-life experiences. Located in the heart of Providence, RI, Johnson & Wales provides the perfect mix of city and campus, ideal for everybody.

Apply today at apply.jwu.edu!

JOHNSON & WALES
UNIVERSITY