

VEGAN

LIFESTYLE

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Helping
The
Planet

**ONE
PRODUCT
AT
A TIME**

Margaux Khoury



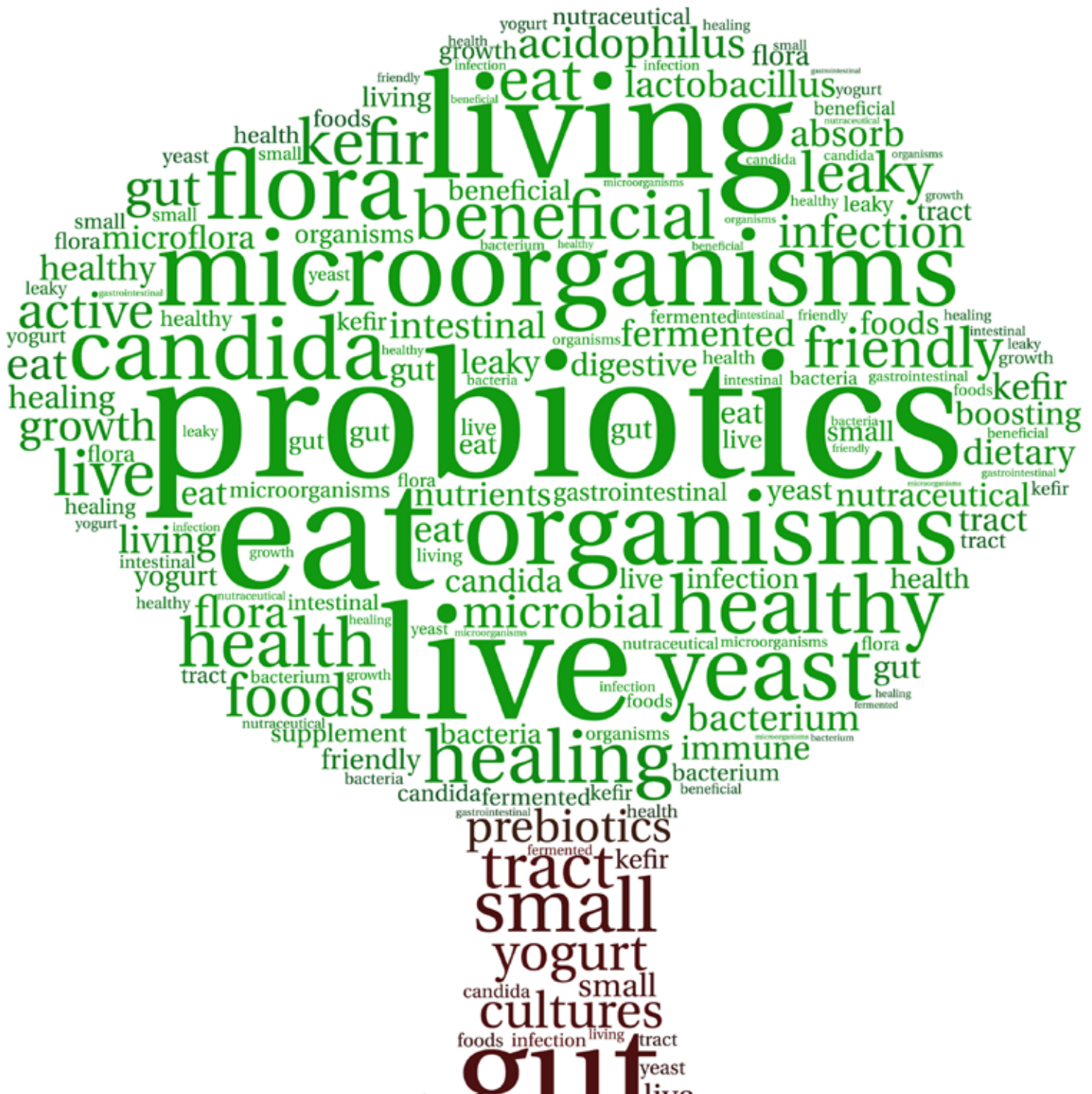
THE POWER OF PLANTS:

Adventures in Plant-Based Nutrition



By Emma Levez Larocque, RHN

THE GUT OF THE MATTER





I am fascinated by the gut. And the more I learn, the more I am fascinated. This is a topic choc-a-bloc full of interesting tidbits. Did you know, for example, that humans have more bacterial genes and cells in our bodies than human cells and genes? That's why some scientists studying this area now consider us to be human-microbe hybrids.

Most people have probably heard rumblings of the fact that we have been treating the bacteria that live in, on and all around us in a misguided fashion, especially since the advent of antibiotics. In recent years increasing numbers of people have become wary of the overuse of antibiotics and are aware that more is not better. But did you know that one 5-day course of antibiotics can suppress up to one third of the trillions of gut

bacteria that live in your gut? And that it can take months for our microbiome (another name for the gut), treated with care, to get back to the state it started from (Robynne Chutkan, *The Microbiome Solution*)?

As Chutkan explains brilliantly in her book, when we kill off bacteria with broad-spectrum antibiotics, we're not only wiping out the "bad" ones, but also the "good" ones. She challenges us to think of our microbiome as an ecosystem, and notes that the thousands of species of bacteria that reside there range from helpful (symbionts) to peaceful cohabitants (commensals) to harmful (pathogens). We don't need – and shouldn't strive – to get rid of large swaths of bacteria, not even those we view as harmful. Rather, our focus should be on keeping the overall ecosystem healthy so that the symbionts can keep the pathogens in check.

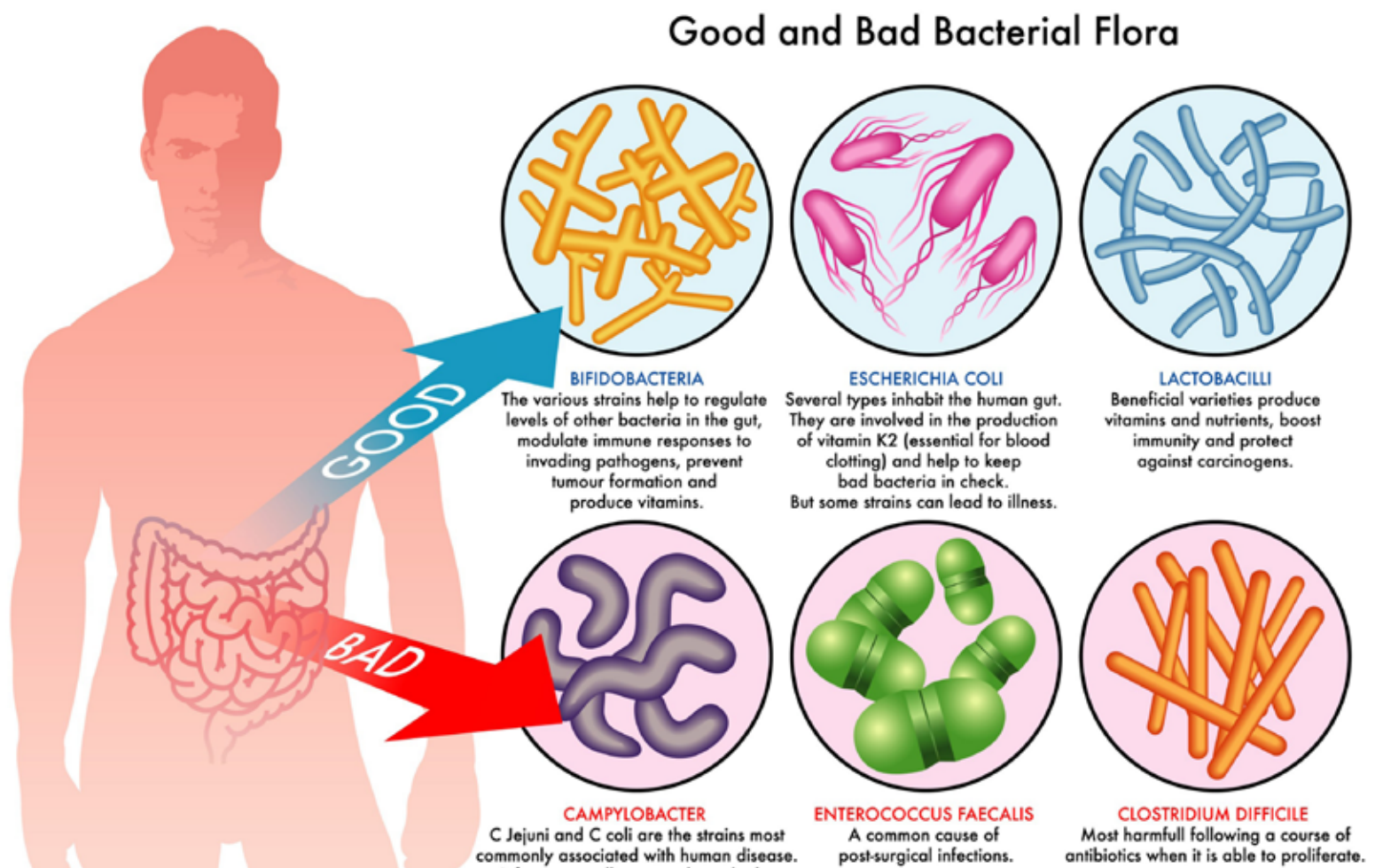
That way we will be able to reap the many health benefits (the extent of which we are still discovering) that a healthy, balanced microbiome offers.

How Do We Keep Our Microbiome Happy?

There are lots of things we can do, including avoiding antibiotic use unless it's absolutely necessary, using personal care and household products that are gentler on us and our environment (e.g. ditch the antibacterial soap, and the bleach swabbing of counters). For more details, I highly recommend getting yourself a copy of *The Microbiome Solution*. But the most important thing you can do is pay attention to what you are eating – because what you're eating is what your gut bacteria are eating, and the food available to them will have a huge effect on the type of bacteria living in your gut, and how healthy that ecosystem is.

Encouraging The Good Guys

Symbionts, the bacteria with helpful functions like improving immune function, assisting with digestion and absorption, and producing certain vitamins and proteins, like to eat plants, especially plants that contain a lot of resistant starch and fibre. Resistant starch (found in foods like lentils, uncooked rolled oats and white beans) doesn't get broken down in our stomachs or small intestine, so it makes its way down to our colon and provides food for helpful bacteria, encouraging them to go forth and multiply.



Eating these foods (called prebiotics) regularly goes a long way to keeping a good healthy balance in our microbiome. Fermented foods, such as sauerkraut, miso or kimchi (probiotics) are full of live bacteria. Regular consumption of probiotic-rich foods also helps us to keep a happy balance (small doses are better since the salt content is usually quite high in these foods). Postbiotics are foods that contain probiotics that have been heat-killed, for example, tempeh, which is a fermented soybean product. Probiotics are sensitive to heat, and will not survive cooking at high temperatures. But that doesn't mean you should avoid eating cooked fermented foods like tempeh because they have a lot of the same benefits of prebiotics, and have shown to be helpful in reducing inflammation in the body.

Discouraging The Bad Guys

On the other hand, pathogens can cause intestinal infections, and are known to produce carcinogens and other toxins, and what do they like to eat? They especially love sugar and refined foods. Interestingly, one of the reasons we crave sugar is because when we consume sugar, sugar-loving bacteria feast and multiply, and cause us to crave more – because THEY want more! So next time you are craving sugar, remember who's likely bossing you around!

Diets that are high in animal products, including meat, dairy and eggs, promote bacteria types that increase systemic inflammation, putting us at higher risk for chronic diseases like heart disease, type 2 diabetes and immune disorders. When we eat carnitine and choline-rich foods (like meat and eggs), for example, we know that

gut bacteria metabolize those substances into trimethylamine, or TMA, which then gets oxidized in the liver forming TMAO, associated with an increased risk of heart attack, stroke and a rise in inflammatory cells in our arteries. Interestingly, vegans and plant-based eaters don't appear to even harbour the gut bacteria that make this conversion since, once again, we grow the bacteria that we feed with our own food choices. Never before has it been so clear how important it is to choose wisely!

I have been making my own fermented foods for a number of years now – and it's a delicious way to get more probiotic-rich foods into your diet. Here's my favorite sauerkraut recipe, made with mineral-rich dulse flakes as part of the salt. It makes just a small batch, enough for myself and my husband for a couple of weeks. Once you taste it, you'll never go back to store-bought sauerkraut again!



Emma Levez Larocque is a Registered Holistic Nutritionist and a Certified Plant-Based Chef. She has been vegan for 7 years, and veg for more than 20. She is passionate about sharing the benefits of plant-based eating and living with others, and working to make the planet a kinder, more compassionate place for all who share it.

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Sauerkraut

By Emma Levez Larocque
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Ingredients:

- 1 small-medium purple cabbage, cut fine
- 1 tbsp sea salt
- 1/2 tbsp dulse flakes
- 2 thumbs ginger, grated

Directions:

1. Combine all ingredients, toss and let sit until the cabbage starts to release liquid.
2. Pack tightly into a clean jar – the liquid should be coming to the top, and there should be no air or air bubbles in the cabbage.
3. When you have almost filled the jar, place a cabbage leaf over top and then a heavy jar full of water/stones on top of that so that the sauerkraut is covered and submerged in the liquid it has released.
4. Cover the whole thing with a dish towel to keep dust etc out.



Press down periodically over the first 24 hours to make sure the sauerkraut is fully submerged in the liquid (you may want to leave the jar on a plate with a lip to catch any liquid, especially if the jar is very full). Leave for 5 – 7 days on the counter in a dark corner, then taste (if you are in a warmer climate, you won't need to leave the kraut as long). You can either leave it longer if you want it to be more vinegar-y and less salty, or eat it as is. Once it tastes the way you want it to, put it in a jar with a lid and keep it in the fridge.