#### What is biofilm?

Biofilm is a very complex topic. Biofilm is a microscopic, sticky glue-like substance that cannot be seen by the human eye but allows bacteria to replicate and thrive in a protected environment. It coats the surfaces of almost everything we touch, including countertops, the plaque on your teeth, a moldy shower curtain, dirty tile and grout, a baby rattle, a reusable water bottle, and a yoga mat. As a culture, we fear bacteria, using antimicrobials to get rid of non-beneficial bacteria. However microbes continue to thrive and non-beneficial bacteria communities increase despite antimicrobial treatments. Aside from external biofilms, we develop biofilms internally in our GI tract from exposure to steroids, antibiotics and a high carbohydrate diet, which leaves us with an overgrowth of non-beneficial bacteria and yeast. There are many types of biofilms, but we're concerned with the type that hosts non-beneficial bacteria in our bodies.

#### How do you know if you have biofilm?

You can always expect that you have a certain amount of biofilm in your body, it's just a matter of whether or not it's running interference in your gut function or impacting your immune system. For example, if you have eczema or psoriasis on your skin, residual symptoms from Lyme or SIBO (Small Intestinal Bacteria Overgrowth) or recurrent infections from superbugs, you most likely have a biofilm situation. Furthermore, if you've had a lot of exposure to antibiotics, steroids and/or a high carbohydrate diet and you experience numerous unwanted symptoms, then suffice it to say that your gut developed unhealthy biofilm that needs to be shed in an effort to rebalance your gut flora. To confirm it, there are specialized tests that can be accessed through an integrative doctor.

You can also expect a certain amount of external biofilm in your work and home environment, which is why I use a specific probiotic cleaning product (mentioned below) for my body, office and home.

#### How do you shed biofilm?

To shed biofilm, the goal is to create a healthy environment by disrupting the non-beneficial bacteria's protective biofilm that they've housed themselves in. We do this by killing off non-beneficial bacteria and yeast while repopulating beneficial bacteria. This is done very specifically in a sequential fashion of diet modifications and a low-sugar and low-carbohydrate lifestyle, coupled with specific enzyme support, natural antimicrobials, prebiotics and probiotics. This should always be done under the guidance of an integrative or functional nutritionist or doctor because treatment must be customized.

#### How do you prevent biofilm?

It's important to know that if you are going to be on antibiotics or steroids, or if you eat a diet high in carbohydrates and/or sugar, then it's key to work with a practitioner who knows about mitigating the damaging side effects by implementing pre-and probiotic foods and supplements. Prebiotic foods include onions, leeks, dandelion greens and asparagus. Probiotic foods include kimchi, sauerkraut, and pickles.

My best advice to anyone who is going through a never-ending health journey is to learn how to recognize that you have the power to heal inside of you. Sounds easier said than done, but the turning point for me was when I stopped giving away my power to others who were telling me to do certain protocols or eat certain foods that didn't feel right to me. You know your body best. If broccoli makes you feel bloated, listen to that and get to the root cause. If gluten makes you feel sleepy, it's not for you. Trust yourself and start listening to your body. I wish my 20-year-old self had the courage to listen to my body more, and to listen less to doctors who were clearly guessing. I never want anyone to go through the hell I went through for 10 painful, traumatizing, exhausting and expensive years trying to figure out how to be healthy in a real way. For anyone out there suffering, I get it. I was there for far too long. Hang tight, and know there is a light shining in your future that's waiting to guide you in the right direction. My 10-year journey of chronic illness was a blessing in disguise. It amazes me that my own unraveling was the catalyst for something so much bigger than me. It has brought me to where I am today, feeling whole, healthy and strong enough to reconnect with the world. Today I'm in perfect health; I feel more open and alive. I got here after unwrapping the life that I've hidden for so long, and let myself be what I was always meant to be.

### Amie's All-Star Clean Supermarket Finds

Packaged foods can be sneaky! Don't be swayed by the packaging on products, it's what's inside that counts. Sadly, what's inside is often times 'sawdust' as I like to call it: fillers, additives and a lot of junk you don't want to eat. Here are a few of my favorite brands:

#### NATURE'S PATH QI'A CEREAL

Nature's Path is a brand I truly admire for their clean, wholesome ingredients and amazing flavors. This Oi'a Cereal is absolutely delicious: it's certified organic and super clean, made with hemp, buckwheat and chia seeds. Qi'a means 'energy' so you can rest assured this aluten-free, superfood cereal will give you the energy you need first thing in the morning. You can use 2 tablespoons daily on top of your yogurt, smoothies and more to get a boost of energy, protein and fiber as well as antiinflammatory omega 3's.

# R.W. KNUDSEN

These are by far the best fruit and vegetable juices I've ever tried. Trust me, dedicating yourself to clean eating doesn't mean you have to spend all day in the kitchen. If I'm short on time, these juices are my go-to ingredients to simplify homemade hearty sauces, marinades and soups, I swap out refined oils and sugarladen broths for these clean juices to infuse my gluten-free whole grains, such as rice and quinoa, with flavor. My favorite flavors are: Tomato Sriracha, Carrot Juice and Blueberry Nectar.

### **KEVITA**

I love the taste of KeVita drinks plus they are full of probiotic cultures. You can feel good about drinking one every day to support digestive health and immune function. These drinks have a super-clean ingredient list and satisfy me all year long in between meals and even as a naturally sweet post-dinner beverage.

# P2P PROBIOTIC CLEANERS

This is a great product line that I've used for many vears. You can use these products as a mouthwash. to clean your body. clean your pets and your entire home of non-beneficial bacteria. Each of these products are full of probiotics that can blast away biofilm and keep it from coming back. So you don't have to worry about nonbeneficial bacteria lurking in your environment, waiting to make you sick.

#### ALIGN PROBIOTIC

This probiotic is great for anyone looking to help fortify their digestive system with healthy bacteria in order to maintain digestive balance, especially throughout the holiday season when we're eating richer, heavier foods that often leave us fatigued and bloated. This probiotic is easy to travel with as well, so you can toss them into your suitcase if you're headed out of town.

Amie is the founder of our go-to website TheHealthyApple.com, where she shares recipes, health tips, practical advice and stories you won't find in a doctor's office.