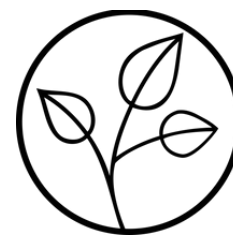


# The Leaflet

## Folia Health



### About the Leaflet

Learn more about the ins and outs of Folia and all of its offerings. Each issue will also include a medical digest and a profile of a current Folia user.



### New this month: The January Challenge

Setting new goals and adding positive habits to daily routines has been a theme heading into 2023.

Social Media



@foliahealth





## Introducing: Dan

This quarter, we want to feature Dan. He is the Co-founder, CTO, and provider of music. He is also husband to his wife, Mercedes, and dad to his two kids Mila (11) and Aiden (7).

Dan's favorite part of working for Folia is that it allows him to help individuals on complex journeys. Up until Mila's birth, Dan had little exposure to the medical system. He and his wife felt they were suddenly on their own in an unfamiliar world. His inspiration at Folia comes from that feeling, as he knows how lonely and bewildering it is, and wants to help others in similar situations.

Outside of the office, Dan has a massive record collection with approximately 1500 records. He also DJs once or twice a year so he can share his records with friends. A former runner, Dan enjoys being involved in his kid's athletic pursuits as their baseball and soccer coach. If he had a free weekend, he would spend it hanging out in the yard with his family, playing catch, and building a bonfire. However, he claims this would never happen. He is also a huge listener of Jojo Siwa, per Mila's recommendation.



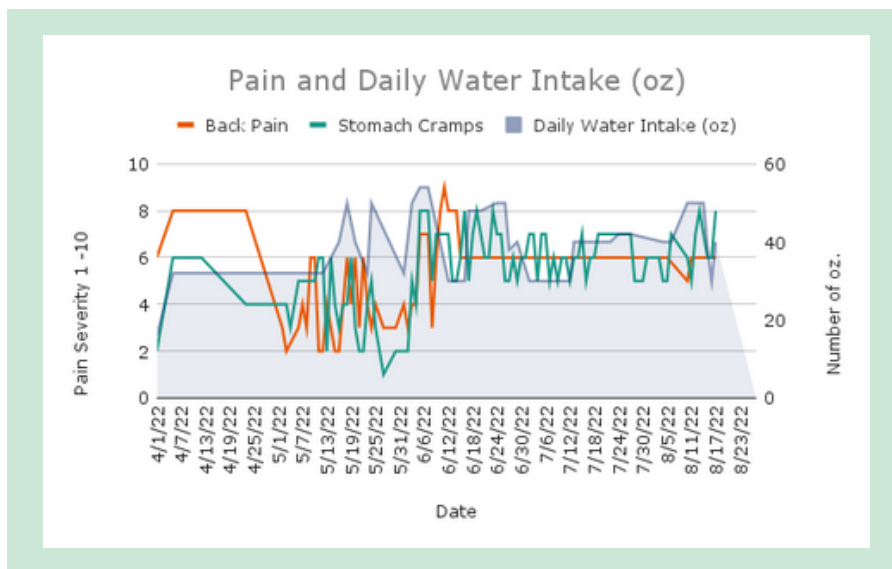
# This Quarter's Latest News

Little insights into whats been happening at Folia!

## Tracked! Reports

This winter, we introduced the Tracked! Reports. These customized reports are being hand delivered to individuals who requested them. They provide graphs and insights that go beyond the offerings of the app.

If you didn't sign up in time this year, don't worry! This new feature was more popular than we anticipated, and we are so excited to continue offering similar types of analysis in the future. If you requested a report and have yet to receive it, it is coming your way soon.



This example Tracked! graph shows the relationship between an individual's pain level and water intake.

## January Challenge

To kick off the year with positive habits, Liz, one of our program managers, launched the January Challenge. The goal of the challenge was to add something to a daily flow, track this action, and then pick and track a symptom that may be influenced by this new habit.



Members of the Folia community chose to drink more water, do 15 minutes of daily exercise, or try new incorporating new foods into their meals, and then track energy levels, acne, or mood. The combinations and possibilities are endless.

We are always trying to think of new ways to make trying new things fun, so if you have ideas about future challenges and community events, please let us know.

## Upcoming: Community Conversations

In the past, we have used Community Conversations as an opportunity to connect with members of the Folia community, and share specific features of the app. We received some incredible feedback which inspired the next Community Conversations on Wednesday January 25 at 8 pm EST / 5 pm PST. We will be doing a demo for how to set up a profile from scratch, and how to customize it to fit your needs.

All are welcome, and the event is free. Please RSVP [here](#) so we can send you the zoom link.



# Community Spotlight

## Navigating a journey to diagnosis

We are so grateful for such a supportive and active core community. This week, we are excited to introduce Gretchen, a mom and businesswoman who has navigated a lengthy journey to diagnosis.

"Folia points out when I am sticking to good habits, and tells me when I need to get back on track"



In 2015, at age 43, Gretchen finally received a diagnosis that was fitting of her symptoms: POTS. However, her health journey began over 25 years before this moment. In high school, Gretchen began to experience pre-syncope symptoms, typically as a result of heavy periods or standing up too quickly. Pre-syncope is the feeling you get before you are about to faint. The symptoms may include feelings of dizziness, nausea, general weakness, sweating, trouble hearing, or experiencing a visual “gray out”. Despite experiencing these symptoms, Gretchen didn’t have a supportive environment that would allow her to feel heard. She felt that without objective symptoms, she couldn’t say much.

In the five years leading up to her diagnosis, Gretchen was an active stay at home mom to two boys. Then, in February of 2015, she had a mild angioedema (swelling underneath the skin) with high blood pressure. Additionally, her heart rate was typically around 100 bpm, give or take.

At this point in time, she did not feel ready to accept blood pressure medication, so she started to document her symptoms.

She felt blessed to finally have a team of medical professionals that listened to her, and they started her on a path to diagnosis. By August of 2016, she was working part time, and was beginning to understand her limits, and how hard she can push herself.

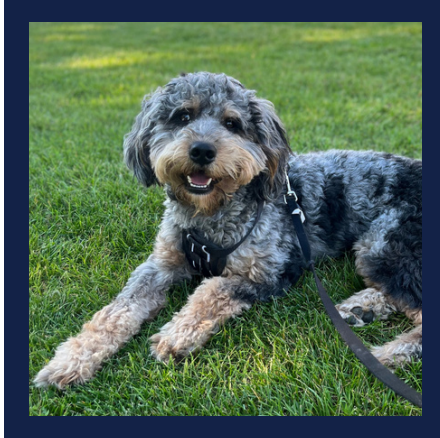
By 2020, most of Gretchen's POTS symptoms were under control, but she was struggling with GI issues, and how to go about finding solutions. Much to her dismay, she was advised by a care provider to begin the FODMAP diet. This diet is incredibly restrictive, and should not be practiced without the guidance of a medical professional. It cuts out a majority of common allergens, and then they are slowly reintroduced. While Gretchen wasn't thrilled about this sudden lifestyle change, she went along with it, more because she wanted to "prove [the provider] wrong". While Gretchen was right to a degree, she also found she is highly sensitive to gluten, fresh dairy, and any forms of garlic and onion. She continues to have GI issues, and speculates that they are related to the various autonomic aspects of a POTS diagnosis.

In July 2022, Gretchen watched the Dysautonomia Annual conference. She learned about new research, and practical daily living tips she didn't previously know. She wishes she learned these tips back in 2015. She is back to juggling work, family, and her health, but this time with the help of knowledge, a strong support system, and of course, Folia.



# Folia Fun: An objective ranking of the pets of Folia

Most likely to be a Muppet:



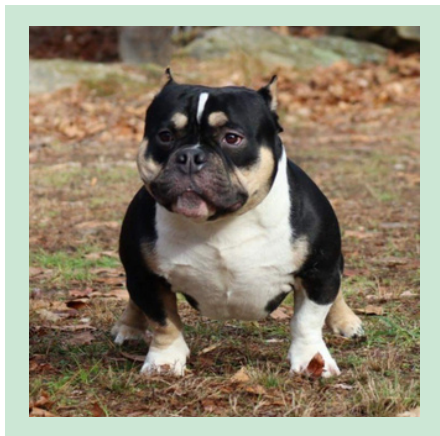
Ollie



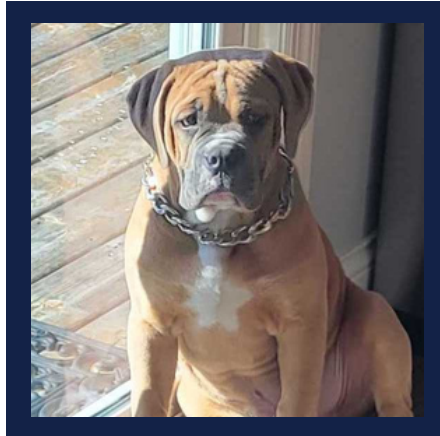
Fiona

Class clown:

Freeway



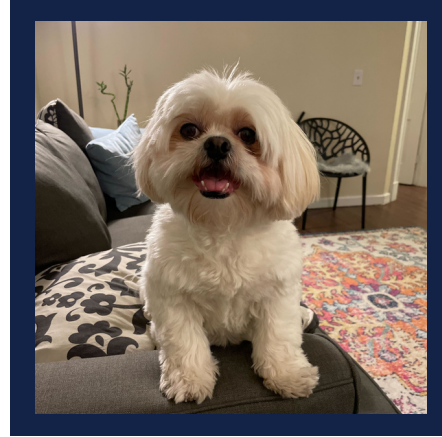
Walter



Asks to go outside at the worst times:

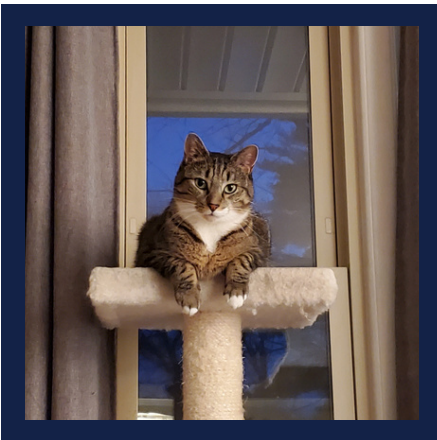


Rosie

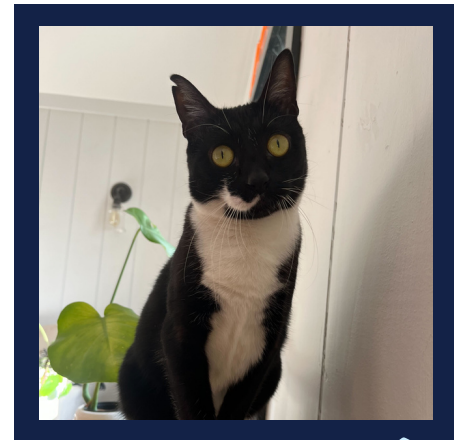


Julie

Is probably judging you right now



Sonoma  
(L) Stevie  
(R)



Willow



Lemongrass  
Chicken aka LC



## Scientific Digest: What is POTS?

An estimated one to three million individuals in the United States are living with POTS. It typically affects adolescents, and symptoms can begin during puberty. If this condition is so prevalent, why is it so difficult to diagnose?

POTS stands for Postural orthostatic tachycardia syndrome. POTS can present as a wide range of symptoms that affect the body at various times. Additionally, the symptom that is most prevalent varies between individuals. (1) The average time to get a diagnosis is between 5 and 11 months. (2) Common symptoms of POTS include dizziness or lightheadedness, headaches, shaking and sweating, heart palpitations, fainting, brain fog, and poor sleep. POTS can also be characterized by a rise in heart rate of at least 30 bpm from sitting to standing position. A pale face and purple discoloration of limbs lower than the level of the heart are also hallmark symptoms of POTS. (3)

POTS is a condition that falls into a wider umbrella of conditions that are caused by issues with the autonomic nervous system (ANS). The ANS is the part of the nervous system that controls involuntary bodily functions. These functions aren't consciously controlled, such as heart rate, breathing, digestion, or body temperature. (4) When the ANS doesn't function properly, there can be issues with any of these internal systems, and it can cause issues with breathing, or blood pressure. Dysautonomia is the term for this group of conditions. Other dysautonomic conditions include diabetes, lupus, Sjogren's syndrome and celiac disease.

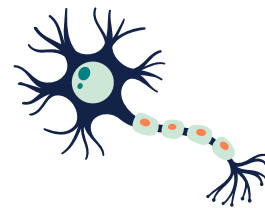
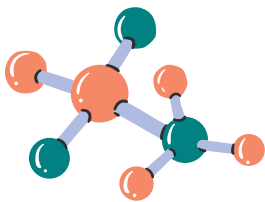
POTS is a form of dysautonomia, and isn't technically considered a disease, but instead it is a cluster of symptoms that typically present together. Because POTS isn't a disease, it is thought to be caused by something else, and this adds to the delay in diagnosis. Most of the time, the root cause is not able to be figured out, and the symptoms are treated as they come. This type of POTS, where the root cause is unknown, is called Primary or Idiopathic POTS. POTS is considered to be secondary when another known medical condition is present, and contributes to POTS symptoms. (5)

One major risk factor for dysautonomia is having certain autoimmune diseases. (6) An autoimmune disease is when the body's immune system attacks healthy cells. Recent research shows that POTS may actually be an autoimmune disease. In an article that was published this month, scientists and researchers share that the imbalance of antibodies in individuals with conditions such as POTS are giving them reason to believe that there is possible criteria to diagnose as an autoimmune ANS imbalance. (7)

Even though individuals with POTS experience symptoms such as memory loss, severe fatigue, and pain, laboratory and instrumental analyses aren't able to detect any differences from normal or expected values. Furthermore, researchers believe that dysautonomic conditions might be associated with an imbalance of autoantibodies to G protein-coupled receptors (GPCRs).



GPCRs are found in almost every type of cell in the body. Patients with rheumatic diseases such as systemic lupus erythematosus or rheumatoid arthritis have concentrations of GPCRs that deviate from normal (either higher or lower concentrations). Clinically healthy individuals have a presence of anti-GPCR, and so if this natural production of anti-GPCR is altered in any way, then the development of autoimmune conditions may be triggered. Patients with POTS symptoms due to post-COVID syndrome were found to have an irregular number of anti-GPCRs. (8)



Nearly four years before this article was published, another group of researchers raised the same question, because they found that POTS is associated with elevated G-Protein coupled receptor autoantibodies. Their research is driven by the fact that POTS “is often misdiagnosed as chronic anxiety or a panic disorder because the autonomic failure in these patients is not severe”. Yet, living with POTS is a major shift in daily life.

This group of researchers collected detailed clinical symptoms of 55 patients diagnosed with POTS. They coupled these details with various blood tests to show the G-protein receptors in each individual. They observed that in most cases, patients with POTS have at least 1 elevated G-protein coupled adrenergic autoantibody. (9) In more simple terms, the evidence they collected supports their hypothesis that POTS may be an autoimmune disorder.

Because POTS has so many potential symptoms, it can be difficult to speak to a doctor or medical professional and feel understood. Here are a couple of tips for preparing for an appointment.

1. Take detailed notes on symptoms as they occur. Utilize your graphs and summaries to show objective measurements.
2. Print out a copy of all previous test results.
3. Prepare a list of questions you want to ask.
  - a. Example: If my anxiety/stress/depression is taken away, what medical condition might account for my symptoms? What tests would you run for these? (10)

If you don't feel heard, it is okay to get another opinion.



Folia Community - you are wonderful, and we love hearing from you!

If you have any feedback, ideas for future stories, or want to be featured in a future edition of The Leaflet, please do not hesitate to reach out!

You can contact us via email - [info@foliahealth.com](mailto:info@foliahealth.com), on intercom, or through social media - [@foliahealth](#) on all platforms.