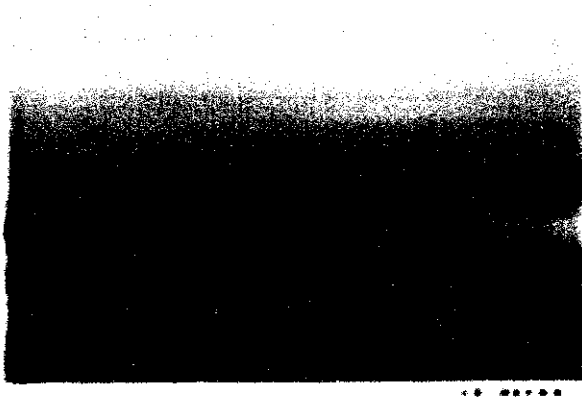


## MyPassion4Health

# PSYCHOBIOLOGICS – HOW THE BACTERIA IN YOUR GUT INFLUENCE MOOD



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One of the more amazing scientific revelations in the last few years is the discovery that the bugs in your gut can influence your mood and mental health (1,2). It's amazing because the traditional view of the brain has been that it is pretty well sealed off from the rest of the body, where it runs the show based on your neurotransmitter quotient, hormones and psychological experiences.

Instead, the real truth seems to be that many other physiological processes influence brain function including our immune systems and the microbial population of over 100 trillion bacteria that cohabit our inner spaces (3). Bacteria outnumber our human cells by 10 to 1. Even more astonishing is *that 99 percent of the genetic information we carry is also microbial*, which should make you at least wonder if the E Coli in your gut controls your destiny more than the methylation genes you inherited from your parents! One group of authors has referred to the 6 pounds of gut microbes we all carry as “The Collective Unconscious”(4)

It turns out that *certain bacteria secrete neurotransmitters themselves*. Lactobacillus Rhamnosus is one that produces large amounts of GABA (5). GABA, as many know, is the calming neurotransmitter. Medicines such as Xanax and Ativan both increase GABA production in the brain. In 2011, a researcher from Ireland showed that mice

given L. Rhamnosus performed as well as mice that were given Prozac or Zoloft when stressed out in a forced swimming test. They did not “give in to despair” and kept swimming away. Later experiments showed that the bacteria most likely influenced the closely guarded brain by stimulating the vagal nerve. The vagal nerve connects many physiological processes with the central nervous system, and assists with relaxation and recuperation <sup>(6)</sup>. A very recent psychiatric study showed, amazingly enough, that people who ate more fermented foods had many fewer symptoms of social anxiety <sup>(12)</sup>.

Research in this field continues to expand, and several researchers have suggested that a better term for some probiotics is “Psychobiotics”, a term that recognizes the profound influence of gut bacteria on mood <sup>(7)</sup>. One researcher who is documenting fecal neurotransmitters in infant monkeys believes that fecal transplants have the ability to transform behaviors and syndromes such as depression, anxiety and autism <sup>(8,2)</sup>.

At Arizona State, a team of researchers found that the gut of autistic children had fewer bacteria species than that of normal children. When the autistic children were given an antibiotic to diminish harmful bacteria, their behaviors improved significantly but reverted when the antibiotic was stopped. The same team is now carrying out research with microbial transplants in autistic subjects to repopulate fully the guts of autistic children<sup>(9)</sup>.

I have observed significant improvements in depression and anxiety from improving patient diets and gut function and by using L. Rhamnosus. In one “patient”, however, the only variable changed was adding L. Rhamnosus to her daily grain free feed. The “patient” was our older cat. From an early age, she had a habit of exhibiting symptoms that could only be termed separation anxiety. Whenever she couldn’t find one of us she grabbed her security blanket – a stuffed mouse she had since kittenhood – ran to another room, and then dropped “Mousie Lah” letting out bloodcurdling howls. We never left home without returning to a bedraggled stuffed mouse on the doorsill, indicating she had an episode while we were gone. She is not a shelter cat, was fed by her mother, and we brought her directly from her “ancestral” home to ours. She did have antibiotics at 6 weeks for feline respiratory infection, from when she almost died.

As she got older, the behavior only seemed to get worse, and nothing we did to reassure her seemed to help. Last fall, when I found out there were probiotics for pets, we started mixing her food with *Lactobacillus Rhamnosus*. Her coat and eyes seemed a little better, but her excessive weight did not budge. However this spring one of us realized that we had not heard her howl in a long time. Then we started noticing we did not trip over “Mousie Lah” when we returned home, and we have not been awakened even once since by her howling. The only variable changed in her life was the addition of *Lactobacillus Rhamnosus*. This is what is called in science a “n of 1” study, meaning it is low on the ladder of scientific validity. Nonetheless, it is amazing to watch a well-established 10-year dysfunctional behavior gradually disappear, and it sure has us convinced there is something to probiotics and mood. Moreover, it makes us wonder if the anxious behavior was caused by her relatively brief antibiotic exposure, and what that implies for antibiotic usage in infants.

The message from these increasingly common studies is clear. The bacteria in your gut play a crucial role in determining your mental health <sup>(10)</sup>. Anyone facing issues of depression, anxiety, autism or fatigue should make sure that they are focusing on the health of their gut as well as well as their brain if they want to see long-lasting, sustainable results. Fixing gut issues depends on many variables, and the most effective approaches require personalized advice from a knowledgeable healthcare professional.

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📅 July 12, 2015   👤 Mary Ackerley MD, MD(H)   📌 Autism, Gut bacteria, Lactobacillus Rhamnosus, Microbiome, probiotics, Psychobiotics

## 2 thoughts on “PSYCHOBIOPTICS – HOW THE BACTERIA IN YOUR GUT INFLUENCE MOOD”

**Natalie**

July 20, 2015 at 9:51 am

This is very interesting. Maybe I need to try this particular strain. I get terribly depressed from probiotics. (I have chronic Lyme, etc. and I 'm sure it is due to die off.)

Pingback: [PSYCHOBOTICS – HOW THE BACTERIA IN YOUR GUT INFLUENCE MOOD - AHIMA](#)

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From: MyPassion4Health mp4h@dakotacom.net  
Subject: RE: L. Rhamnosus  
Date: July 21, 2015 at 5:57 PM  
To: Mike and Mary Conway conwaysmm@bresnan.net



Dear Mary, Yes, take both.  
They work very differently. Best Regards, Alex Casler NC HMA

-----Original Message-----

From: Mike and Mary Conway [mailto:conwaysmm@bresnan.net]  
Sent: Tuesday, July 21, 2015 9:28 AM  
To: MyPassion4Health  
Subject: Re: L. Rhamnosus

Yes, please send me some. Do I still take the Prescript too? Should Julie be on this too? If so please send her a bottle too. Thanks.M.

On Jul 20, 2015, at 10:27 AM, MyPassion4Health <mp4h@dakotacom.net> wrote:

Thanks Mary! The L. Rhamnosus we provide is a patented type of probiotic originally developed to fight cancer but later studies showed it travels from the gut to the brain and controls anxiety. The product we offer is Del Immune V. Let us know if you need a bottle. Glad that Julie and yourself are progressing in so many positive ways!  
All the Best, Alex Casler NC HMA

-----Original Message-----

From: Mike and Mary Conway [mailto:conwaysmm@bresnan.net]  
Sent: Monday, July 20, 2015 8:51 AM  
To: Mary Ackerly  
Subject: L. Rhamnosus

Dr. Mary, I checked my Prescript probiotic and it did not have this ingredient you mention in your article. What do you suggest?

Hope your summer is going well. I'm currently building assemblages for my first one person show in the Fall. all the pieces are made from re-cycled stuff.

Off to see Julie on the 12th. Just helped her buy her first home.... a townhouse in Seattle. She's crazy excited!!! Now she truly will have a sanctuary to return to each day to nurture her healing.

Much love and gratitude to you from all of us. Mary