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Riordan Clinic is a not-for-profit 501(c)(3), nutrition-based health facility in Wichita, Kansas cofounded in 1975 by Olive W. Garvey and Hugh D. Riordan. We have integrated lifestyle and nutrition to help you find the underlying causes of your illness. Since our inception in 1975, the mission has been clear and unwavering to "...stimulate an epidemic of health."

Novel Treatment for Inflammation and Autoimmunity: Low Dose Naltrexone (LDN)



AUTHOR

Gael Wheeler, DO

What if we had a therapy that is effective, nontoxic, and affordable, to address inflammation and autoimmune conditions? We may have the answer with a novel use of the drug Naltrexone.

This medication was synthesized in 1963 as an opioid receptor antagonist, meaning it blocks opioid receptors. It was approved in 1984 for the treatment of opioid addiction at a typical daily dose of 50-100 mg.

Low Dose Naltrexone (LDN) refers to doses of the drug Naltrexone that are 1/10th or less than the typical opioid addiction treatment dose. Taken at bedtime at the low dose level of 1.5-4.5 mg, LDN has paradoxical properties including: analgesic, immune-modulating, and anti-inflammatory effects, which are not seen at higher doses. LDN has been used clinically since the 1980's. The first published human trial was presented in 2007, demonstrating the effectiveness of LDN in patients with fibromyalgia. At the end of the study over half of the patients receiving LDN reported feeling "much improved" or "very much improved."

In theory, LDN works by a couple of mechanisms of action. First, LDN increases the amount of endorphins made by the body, by briefly blocking opioid receptors during the time of sleep when opioids are normally their highest. This triggers the body to upregulate production of endogenous opioids (endorphins) and opioid receptors. Endorphins play a role in immune modulation. It has been noted that persons with fibromyalgia typically have lower endorphin levels, and this may partially explain why LDN often helps reduce the symptoms of fibromyalgia.

Second, LDN has been shown to have neuroprotective effects by inhibiting excessive activation of microglia in the brain and spinal cord. Microglia are central nervous system immune cells that, once activated, produce inflammatory factors that can cause pain sensitivity, fatigue, cognitive disruption, sleep and mood disorders and general malaise. When chronically activated, the resulting inflammation can become neurotoxic. By suppressing excessive microglial activation, LDN reduces the production of free radicals and other neurotoxic chemicals. The analgesic, anti-



Continued on page 2

KNOW YOUR OILS:

Bergamot



Source

- Citrus family
- Cold pressed rind or peel

History

- It is grown in Italy and the Ivory Coast.
- Christopher Columbus is credited with bringing bergamot to Italy from the Canary Islands.
- Italians used to cool and relieve fevers, protect against malaria and expel intestinal worms.
- The French use it for indigestion, infection, inflammation, intestinal parasites, insect bites, varicose veins, and wounds.

Benefits

- Analgesic, antibacterial, antiseptic, digestive, sedative, and uplifting for mood
- Supports the digestive system, emotional balance, and radiant skin
- Aromatic Influence: relieves anxiety, stress, and tension.
- Opens heart chakra.

Uses

- Apply to forehead, temples, and Vita Flex Points.
- Can be applied as deodorant.
- Use as flavor in hot tea (Earl Grey uses the flavor of bergamot!)

Safety concerns: Avoid during pregnancy. Not for people with epilepsy or high blood pressure. Citrus oils sensitize the skin to UV rays, so always use sunscreen after applying if going in the sun.

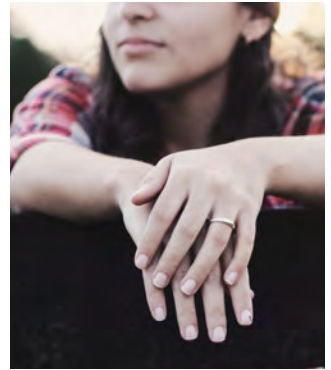


Jocelyn Pickard is a dedicated volunteer at the Riordan Clinic. Her health journey led her to essential oils 17 years ago. She is an avid learner and has extensive knowledge and training in how to incorporate essential oils into your daily life.

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inflammatory and neuroprotective effects of LDN do not appear to be related only to actions on opioid receptors.

Another interesting effect of opioid-blocking therapies is their role in modulating cell growth related to pathological states such as cancer. Inhibition of cancer cell proliferation by LDN was first noted in 1981 with the first full reports published in 1983. A series of studies have found LDN to be a useful adjunct in the treatment of breast and pancreatic cancers. The multiple actions of LDN on inflammation and the immune system also open the door to the potential treatment of diseases of neurodegeneration and diseases of the immune system such as HIV/AIDS.



Other chronic conditions have been observed to improve with LDN's anti-inflammatory and immune-modulating properties, including Crohn's disease, Hashimoto's autoimmune thyroid disease, multiple sclerosis (MS), rheumatoid arthritis, and more. Most of the published studies have used a dose of 4-4.5 mg, though some patients prefer starting at a lower dose. A minimum of two months on LDN is needed to achieve efficacy.

LDN has virtually no side effects. Some patients note more vivid dreams on starting the therapy but this tends to normalize in a few weeks. There are no reports of LDN interactions with other medications, though in theory LDN could potentially block the action of opioid medications, reducing the effectiveness of these medications. No cases of severe side effects have been reported with LDN and there are no withdrawal symptoms when LDN is stopped. The cessation of LDN usually results in a slow return of symptoms to where they were before starting the therapy.

LDN does not have any euphoric effects and does not cause dependence or addiction. Studies have not shown any toxicity with chronic use. Naltrexone is a generic drug and so is low cost. It must be compounded to achieve a low dose and is usually not covered by insurance. While pricing can vary by region, LDN is usually considerably lower than most medications.

With its record of efficacy in addressing autoimmune and inflammatory conditions, and its low side effect profile, LDN is a good addition to the toolkit to treat these conditions. It is, however, not a magic bullet and is best used alongside nutritional and lifestyle changes, in order to truly move toward a better balance of health.

Medicine, Dr. Gael Wheeler focuses on empowering patients to create a path to optimal health. Dr. Wheeler is currently accepting new patients at the Riordan Clinic, Overland Park location. To schedule an appointment with her, please call 316-682-3100.

Acid and Alkaline Foods: The Real Story

This article was originally published by the Orthomolecular News Service (OMNS) on July 18, 2019. A free subscription to OMNS can be found at: orthomolecular.org/subscribe.html. Additional articles can be found at: orthomolecular.org/resources/omns/index.shtml. (OMNS July 18, 2019)



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Andrew W. Saul



Alkalizing foods are sometimes believed to be healthier because they prevent acid buildup in the body. This is a myth. [1-3]

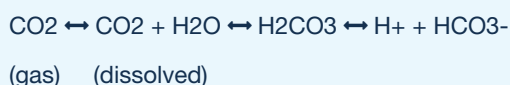
Alkalizing foods such as vegetables, fruits and nuts are healthy: not because they prevent acid buildup, but because they contain more essential nutrients, fiber, and a healthy balance of carbohydrates and fats. [3]

Foods in the diet contain a variety of biochemicals and essential nutrients. Some foods are acid, some neutral, and some alkaline. During digestion, all foods are acidified by very powerful

stomach acid. In the metabolic process, some foods such as meat, cheese, fish, and eggs generate acid (low pH). Other foods such as vegetables, fruits, and nuts cause alkalinity (high pH).

How your body manages pH

The pH of the blood and body organs is kept within very tight limits near 7.4 (between 7.35 to 7.45). This is accomplished by several mechanisms. The pH of blood and body organs is largely controlled by the level of carbonic acid (H₂CO₃), which is in equilibrium with the bicarbonate ion (HCO₃⁻). More carbonic acid in the blood plasma causes lower pH, and less carbonic acid causes higher pH. [4]



On the scale of seconds to minutes, pH is regulated by the rate of breathing. Faster breathing exhales more carbon dioxide from the

IT IS NOT NECESSARY TO BE CONCERNED ABOUT ACIDITY OF THE BODY OR THE URINE WHEN CHOOSING FOODS TO EAT.

lungs. Since carbonic acid in the blood is in equilibrium with carbon dioxide in the lungs, faster breathing removes acidity from the body, causing higher pH.

On the scale of hours to days, pH is also regulated in the kidneys by less or more excretion of bicarbonate and other ions such as ammonia, causing the urine to be more or less acidic. Acid urine is the natural consequence of eating foods that contain acid or generate acid in the metabolic process. Mountain climbers must breathe faster to get enough oxygen, but this causes their blood to lose carbonic acid and become more alkaline. Indeed, too alkaline. They must often rest at high altitudes for several weeks to allow their kidneys to secrete enough sodium bicarbonate to lower the pH to normal. [4,5]

While pathological relative acidity (pH ~7) is a problem, the healthy body carefully controls pH to keep it in the physiological range (~7.35 - 7.45). That includes the effect of acid foods and acid-causing foods. The body regulates blood pH by breathing faster (to increase pH), by breathing slower (to reduce pH) and by excreting acid or alkaline components into the urine to keep the pH within range. For example, when you consume ascorbic acid (vitamin C), the urine turns acidic but the blood will not. Yes, the ascorbic acid was absorbed into the body and bloodstream. But the blood nevertheless maintains a constant pH of 7.35- 7.45.

The process of maintaining a nearly constant level of acidity is done automatically by the body. We may not always know why we breathe faster or slower -- there are a multitude of reasons -- but one is to maintain a close control of blood acidity. It is not necessary to be concerned about acidity of the body or the urine when choosing foods to eat. Antacids taken to lower the acidity of the stomach will interfere with normal digestion and absorption of food, including magnesium, which is deficient in a majority of people who eat the "modern diet," especially the elderly. [6]

Cancer and acidity

Some have believed that eating foods that cause acidity can promote cancer because cancer thrives in an acidic environment. In the early 20th century, Otto Warburg and others found a correlation

between cancer and low blood pH. We now know that cancer can thrive in a low-oxygen environment because it stops using the citric acid cycle and instead metabolizes sugar by fermentation, releasing lactic acid. It is now generally agreed that Warburg got the cause and effect in reverse. That is, many types of cancer thrive in low-oxygen environments (e.g. tumors without much blood supply) because they don't require oxygen to utilize sugar as an energy source. Then when the cancer releases lactic acid (which requires oxygen to be fully metabolized) the body pH goes down. The acid is an effect, not a cause for cancer. [7-9]



There may be some interaction between a low-oxygen environment and cancer, because when cancer cells are evolving due to mutations in DNA, the mutant cells in a tumor that thrive without oxygen are the ones that grow the fastest.

Other normal body cells can survive for a while without oxygen. For example, retinal photoreceptors in some animals go virtually anoxic every night and rely on fermentation of glucose. [10,11] They release lactic acid which the body very effectively counteracts to prevent the blood pH from going lower than 7.35. Muscle cells generate lactic acid in intense exercise because their need for ATP is greater than can be supplied by the citric acid cycle. When lactic

acid accumulates in the blood, we get “tired” and need some time to recover. The body accomplishes this by oxidizing the lactic acid with the citric acid cycle. [4]

However, the situation is more complicated than this. In a way, oxygen is a poison. Reactive oxygen species (ROS), oxidized molecules of many types, are a severe problem for all cells, and can cause genetic mutations in DNA. [12-14] Scientists of Warburg's time didn't know about all these details. Cancer was once thought to be one specific disease, but we now know that it is not one disease but many. There are thought to be many initiating factors, among them ROS, other toxins, and radiation. Some other types of mutation-causing mechanisms even originate within normal cells.

However, Warburg was correct in believing that toxins are a major cause of cancer, which in later stages can lead to pathological acidity in the body. And he was correct in believing that nutrients from vegetables in the diet are a big boost to the body's recovery -- and can help to prevent cancer and other progressive diseases. So in retrospect, his later emphasis on removing toxicity and supplying a healthy diet with lots of vegetables was correct. It just turns out that the diet heavy in vegetables is “alkalinity-generating.”

An excellent diet

An excellent diet can comprise a variety of foods, including moderate portions of: high-protein foods such as meat, eggs, and fish; high-fat foods, including cheese, butter, nuts, avocados; small portions of starchy carbohydrates such as bread, pasta, sweet potatoes, and brown rice; a variety of colorful vegetables eaten raw such as tomatoes, carrots, radishes, peppers, salad greens; generous portions of cooked colorful vegetables such as winter squash, broccoli, Brussels sprouts, green beans, kale/collards; and fruits such as oranges, cherries, berries, kiwi, peaches, and apples. The proportion of different foods may be important for individual choice or biochemistry.

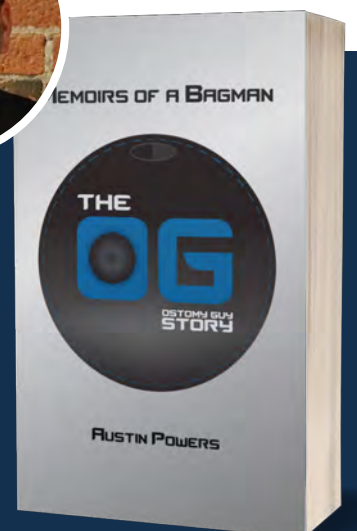


Living (and Thriving!) with Crohn's and Colitis: The Ostomy Guy

FREE LECTURE AND BOOK SIGNING

Wednesday, November 13th
Noon – 1:00 pm @ Wichita Campus

Meet Wichita, Kansas native Austin Powers, author and host of The Ostomy Guy podcast.



Rationale for supplements

When served a portion of processed carbohydrates such as white rice, bread, or pasta, that is made from grain products that do not contain the original whole-grain components, it is prudent to eat only a small quantity and balance that with a portion of fat-containing food

if possible. Then, take supplements containing the nutrients that were lost in the processing, such as magnesium, B vitamins, and vitamins C and E in adequate doses. And eat healthy portions of vegetables whenever possible.



Dr. Robert G. Smith is Associate Research Professor of Neuroscience at the University of Pennsylvania Perelman School of Medicine and is Associate Editor of the Orthomolecular Medicine News Service . He is the author of The Vitamin Cure for Eye Diseases and coauthor of The Vitamin Cure for Arthritis .

Andrew W. Saul, OMNS founder and Editor-in-Chief, has coauthored four books with Abram Hoffer, MD, and is editor of the textbook The Orthomolecular Treatment of Chronic Disease.

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Contact the Editor

Please send any comments or suggestions to newseditor@riordanclinic.org. Thank you for reading.



Dr. Anne Zauderer
Editor

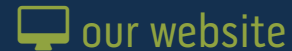
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LEAH CHISCHILLY, MSAC., L.AC

Leah's Story: "Part One – I'm Not Even Sick (but I'm a patient anyway)."



LOOK FOR PART 2 IN DEMEBER'S HEALTH HUNTERS

The following post was written by a co-learner, and shared with her permission, on her blog at leahchischilly.com. Thank you, Leah, for chronicling your experience as a new patient and sharing it with your own followers as well as our Riordan Clinic community.

I'm getting ready for my first appointment at the Riordan Clinic. If you aren't already familiar with the Riordan Clinic, it is widely known for nutrition therapy, specifically Intravenous Vitamin C therapy and alternative cancer treatments.

I found out about the Riordan Clinic in a very roundabout way. I am always interested in learning more about nutrition and how to use food, vitamins and other supplements to treat various issues and to maintain great health. So, one day I was

having a lazy afternoon (seriously, when does that happen?!), and decided to check out a documentary called "That Vitamin Movie." It was a great film and I recommend you watch it. The film was my first introduction to Vitamin C therapy, and it featured Dr. Ron Hunninghake of the Riordan Clinic. I was intrigued by this film and

YOU DON'T HAVE TO WAIT UNTIL YOU ARE SICK OR BROKEN TO SEEK OUT SUPPORT.

Vitamin C therapy, but had absolutely no clue that the Riordan Clinic was literally down the street from where I now live in Wichita, KS. It wasn't until I was driving by and a sign that said "Vitamin C Therapy" caught my eye. I can't even tell you how excited I was to discover that this place was so close to me!

I immediately went home to google everything I possibly could about the Clinic and enrolled in a 21 Day Detox class that they hold onsite a couple of times per year. Dr. Anne Zauderer, who taught the class, is obviously whip-smart, and boy, does she

Upcoming Events

For more information or to register for any of these events, please visit RiordanClinic.org/events or call 316.682.3100

Living (and Thriving!) with Crohn's and Colitis: The Ostomy Guy

Wednesday, November 13th

Noon – 1:00 pm @ Wichita Campus

Austin Powers

Cost: FREE

Please join us for a special lecture and book signing with Austin Powers, The Ostomy Guy. Austin was born and raised in Wichita, Kansas. He was diagnosed with severe Crohn's and colitis at a young age. He has written a book entitled, "The Ostomy Guy Story: Memoirs of a Bagman," which documents his experience living with a chronic disease. His account of his experience will help find the humor and hope in otherwise difficult times and let those who have a chronic disease know that they are not alone.

RIORDAN CLINIC CLOSED

November 28th – 29th

Thanksgiving Holiday

December 25th

Christmas Holiday

(closes at noon on December 24th)

January 1st

New Year's Day

know her nutrition! Even better, she made the information very approachable and easy to understand. I got so much out of the class that I wanted to become a patient there as well.

Here's the thing – I'm not sick. I eat mostly organic, I take supplements, I exercise (although probably not as much as I should), and I feel pretty good. So, why would I go see a doctor?

I can think of a few reasons:



I DON'T WANT TO GET SICK

This isn't in a paranoid sort of way, but in a way that if there is something small I can be doing right now that might help me out down the road, then I want to know about it and implement it as soon as possible.



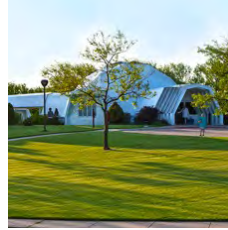
GUESSWORK ONLY GOES SO FAR

I've learned a lot about nutrition and health over the last decade or so. I can tell when I'm low on iron or magnesium, and I know I could use some extra Vitamin D (because who couldn't?), but I've never gotten an exact read on all of my nutrient levels. I supplement until I feel better, but don't have the numbers to show me I'm in the clear. I feel like the labs alone will be worth the trip.



TO WALK MY TALK

When it comes to acupuncture, I tell people all day long that they need to be getting treatments even when they feel good. It's preventative medicine, not just restorative medicine. As a healthcare provider myself, it's important that I practice what I preach.



TO LEARN

I want to see what it is like to be a patient and how the program helps me. I want to learn all about the services that the Riordan Clinic offers, so when someone else needs them I know where to send them. It's always important to me to send people to

places and products that I have tried and I trust.

The moral of the story: You don't have to wait until you are sick or broken to seek out support. As humans, no matter how much research we do or how smart we think we are, we will always have blind spots. It's that second set of eyes that can see what we don't (in health or otherwise) that helps us feel better and be more than we are today. And, isn't that always the goal?

I'm excited to see what my time there will bring and what discoveries I make about my own health. I will be sharing my entire experience along the way in hopes that someone else can benefit from it as well.

BLACK FRIDAY SALE



20% OFF

In-Store **DEC 2** Online **NOV 29 - DEC 2**

store.riordanclinic.org | code: **BF19**

Holiday OPEN HOUSE

HAYS

**Tuesday,
November 19th**
2-5pm

1010 E 17th Street
Hays, KS 67601

OVERLAND PARK

**Tuesday,
December 10th**
4-7pm

6300 W 143rd Street, #205
Overland Park, KS 66223

WICHITA

**Tuesday,
January 28th**
4-7pm

3100 N Hillside Street
Wichita, KS 67219

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