



Riordan
Clinic

Health Hunters

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History in the Making:

*Riordan Clinic Chosen As Research
Center For Ground-Breaking Vitamin
C Technology*



AUTHOR

Bill Sardi, Ph.D.



It was futurist Ray Kurzweil who said the speed of information is accelerating at such an exponential rate that discoveries are being made that can't be put into practice before another more advanced innovation is reported that would replace it.

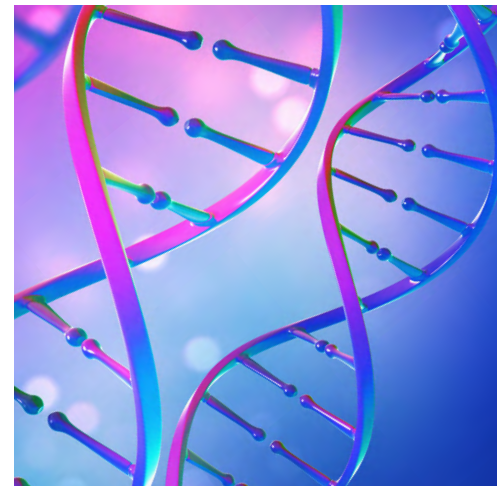
A giant leap in modern medicine's understanding of vitamin C is now taking place. The Riordan Clinic is leading the way. It is the chosen research center for a remarkable discovery in progress. With no exaggeration, this may be the greatest development ever in the history of medicine. Here is why.

There is no misplaced or undeserved hyperbole to say the restoration of internal vitamin C synthesis in humans would be the greatest health discovery of all time.

Homo Sapiens: universal genetic flaw

Humans are genetically flawed – most mammals internally produce vitamin C. Fruit bats, Japanese kill fish, primate monkeys, guinea pigs and humans do not. Animals that endogenously synthesize vitamin C do not have heart attacks, do not exhibit brain plaque, maintain a youthful appearance throughout most of life, and will not develop cancer, even when cancer cells are injected into their tissues and organs.

The single-gene genetic flaw is in the liver. Four enzymes produced in the liver convert circulating sugars (glucose, sucrose, fructose) to a sugar-like molecule called ascorbate (aka vitamin C). Sometime long ago in human history the GULO gene that produces the last of those four enzymes (Gulonolactone oxidase)



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."

Continued on page 2

mutated. This single-gene mutation made humans totally reliant upon the diet to maintain healthy vitamin C levels.

Full correction of gene mutation never achieved

Decades ago it was biochemist Irwin Stone who said this gene mutation has never been fully corrected by the diet. Stone estimated humans once produced 1800-4000 milligrams of vitamin C daily, and more under stress. Modern Americans consume ~110 milligrams of vitamin C from their diet. Even most avid dietary supplement users still fall short of what the human body internally produced many generations ago.

When physical or emotional stress occurs, animals release sugar stores into their blood stream in order to provide extra energy to flee a threat to life, such as when animals face predators. Under stress, a 170-lb goat will produce thousands of milligrams of vitamin C. With the loss of internal vitamin C synthesis, humans have lost their ability to biochemically respond to stressful conditions.



The fact that oral vitamin C from the diet and supplements is rapidly excreted in urine flow makes it difficult to maintain healthy blood levels of this essential nutrient.

A simple answer to this problem is to take vitamin C throughout the day. A 500-milligram ascorbic

acid pill taken every 4-6 waking hours would approximate what Irwin Stone proposed long ago. But that doesn't meet the demand for vitamin C under stressful conditions. Diseases such as diabetes and cancer, infection and progressive aging massively increase the need for vitamin C. Health habits like tobacco use, alcohol intake, and eating iron-rich foods deplete vitamin C.

Revealing animal study: can data be extrapolated to humans?

A remarkable animal study, recently conducted by researchers in Canada, reveals more of the dynamics involved in vitamin C. Laboratory mice were genetically altered so their GULO gene was not operational. GULO-gene intact animals lived 24 months. Additional vitamin C did not extend their lifespan. The GULO-gene mutated animals only lived 8.5 months. This experiment mimics the current human condition.

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Biologists now believe humans, like these lab animals, only live about a third as long as they were designed to live due to the lack of vitamin C. So a group of the GULO-gene flawed mice was given supplemental vitamin C to achieve the same blood levels (60 micromole concentration) as mice with an operational GULO gene. The vitamin C-fortified mice lived approximately 24 months. Their full lifespan and health span was restored!

Humans are a bit more complicated than animals that are confined to a laboratory cage. Modern humans are exposed varying degrees of solar radiation, toxic chemicals, heavy metals, and an over-abundance of food that induces metabolic challenges.

Oxidation: electron donor needed

Virtually every human malady, including aging, involves the process of oxidation.

About 5% of the oxygen humans breathe becomes potentially toxic free-radicals, which are atoms in oxygen that lose an electron and become unstable. Vitamin C is an electron donor. When atoms become unbalanced (oxidized) they lose an electron and seek to borrow one from an adjacent atom and thus destroy tissues in the process.

Vitamin C is THE master electron donor of the body. Animals that internally produce vitamin C do so 24-hours a day. Animals that endogenously produce vitamin C pour out volumes of electrons on an as-needed basis.

Taking vitamin C pills would be akin to continually using fire extinguishers to put out the flames of oxidation. However, if the flawed GULO gene could be corrected, this would be like having a built-in sprinkler system to automatically douse the flames of oxidation on demand.

Editing the GULO gene

As biologists gained a greater understanding of human genetics, they realized the genetic START and STOP signals to produce the GULO enzyme are intact. But there is an inherited premature STOP code in the GULO gene that results in a partial protein (enzyme) being produced, which is then discarded. That is the human predicament.

Now to face the challenge of how to edit the GULO gene to restore its function. Biologists have learned that antibiotic molecules can read-through STOP codes and correct single-gene mutations. Is there a molecule on the planet that can do that to the GULO gene?

Serendipitous discovery

Researchers in Europe were testing a molecule extracted from olives

for safety. They employed a high dose and gave it to humans. All of the tests of urine, blood, liver enzymes, blood sugar, were normal except one – unexpectedly, vitamin C levels doubled!

Did the biologists realize they may have edited the GULO gene with an olive molecule? We don't know because subsequent genetic tests have not yet been done.

Historical review of past medical literature reveals a few reports of humans who were found to produce their own vitamin C, including fetuses in their mothers' womb, children in a tribe in Africa, and a few others. Did these people somehow edit their GULO gene?

Formulation

The olive extract was assembled into a dietary supplement with co-factors (zinc, vitamins A & D, and bioflavonoids) that activate white blood cells. This formulation of nutrients has been branded under the trade name FORMULA-216.

Let's go back to those lab animals. When vitamin C levels were dietarily restored in GULO-gene flawed mice, they lived 24 months, as long as the mice that naturally secreted vitamin C. These C-supplemented animals lived most of their lives without the visible symptoms of aging – grey hair, wrinkles and diminished vision. Could this be achieved in humans?

The possibility of achieving healthy longevity in humans via correction of this gene flaw became real. The vitamin C-fortified lab animals lived 2.7 times longer than animals with a dysfunctional GULO gene. If this data were extrapolated to humans who now live 60-80 years, then humans could live an astounding 162-216 years. That is how FORMULA-216 got its name.

The first results are in

FORMULA-216 was put to the test at Riordan Clinic. The urine levels of the first five human subjects showed elevated amounts of vitamin

C were being excreted. Research moved forward to blood tests – on average, vitamin C blood levels doubled in all five subjects taking FORMULA-216! These test subjects achieved blood concentrations similar to the long-living laboratory mice. Did the

PERHAPS A NEW ERA WILL BE USHERED IN WHEN AGE-RELATED DISEASE IS ONLY EXPERIENCED AT THE END OF A VERY LONG AND HEALTHY AND YOUTHFUL LIFE.

ingredients in FORMULA-216 edit the flawed GULO gene?

More intriguing, it appears FORMULA-216 facilitates a 24-7 production of vitamin C – that is, it is the world's first stress-responsive vitamin C pill.



Some of the initial anecdotal reports received from FORMULA-216 users include sharper visual acuity, fast recovery from colds and sore throats, and even abolishment of hangover symptoms. Is this really happening?

What was only imagined is now becoming reality

Irwin Stone could only dream of the day when geneticists would restore vitamin C synthesis in the human body. Perhaps that day is upon us. Riordan Clinic may be leading modern medicine away from treating each and every age-related disease as they occur, towards a day when health is maintained for far longer periods of time than ever imagined.

Will humans one day soon look back at the archaic days when people only lived 60-80 years? Will we be able to look in the mirror without grey hair and wrinkled skin? That is what vitamin C-secreting animals experience. Perhaps a new era will be ushered in when age-related disease is only experienced at the end of a very long and healthy and youthful life. For those individuals who fear living so long, the answer to the question “how long do you want to live?” is “as long as I am healthy.”

Riordan Clinic is continuing rigorous testing of FORMULA-216 and will include it in various therapeutic and preventive protocols. Stand by for further test results.

Bill Sardi, Ph.D. is a health journalist and dietary supplement formulator working from La Verne, California. You can find more information about him and his articles at www.knowledgeofhealth.com and EncodeNutrition.com.

FRIDAYS,
MAY 17TH, 24TH &
31ST, JUNE 7TH

21-DAY DETOX PROGRAM

12-1PM

This program will help with the elimination of poor quality, inflammatory foods and will help replace them with nutrient-dense, antioxidant-rich foods. If you've ever been interested in how or why to detox, this is a great class for you!

This four class series includes weekly body composition analysis, and a detox booklet

\$39*

*paid in advance



RSVP 316-682-3100 or
reservations@riordanclinic.org

3 Easy Home Detox Baths

Spring is quickly approaching, and now is a great time to try a home detoxification regimen that will prime your immunity and cleanse your system. At the end of a long day, a calming bath soaks away tension. You can take your bath to the next level by simply incorporating a few household ingredients to create a powerful detoxification therapy that will refresh and rejuvenate you.

Salons and spas will charge a high price to restore your inner peace with extravagant baths. I am a huge fan of water therapies, and want to share a few of my home favorites that will not break your bank. The purpose of detoxification baths is based on the idea of drawing toxins out of your body through the skin.

The first tub treatment incorporates a few common ingredients you probably already have, such as: Epsom salts, baking soda, sea salt, and ground ginger. The second and third treatments include the use of a more specialized and powerful agent, Bentonite Clay, and I suggest either a bath or hand and foot therapy treatment.

BAKING SODA, or sodium bicarbonate, provides a naturally alkaline substance with a reputation for helping to remove toxins.

SEA SALT has been used in healing bath waters for millennia. The soothing, rejuvenating properties imparted by minerals in the salts can reduce arthritis pain, deep muscle fatigue, and irritation from eczema and psoriasis.

EPSOM SALT, named for a bitter saline spring at Epsom in Surrey, England, is not a salt but rather a naturally occurring pure mineral compound of magnesium and sulfate. Long known as a natural remedy for many ailments, its benefits expanded to beauty, household, and gardening-related uses as well.

Studies show that magnesium and sulfate are readily absorbed through the skin, making Epsom salt a great ingredient for the detoxification and rejuvenation bath. Magnesium plays a number of roles in the body, including regulating the activity of over 325 enzymes, reducing inflammation, enhancing muscle and nerve function, and assisting in the prevention of hardening of the arteries.



The natural sulfates help improve the absorption of nutrients, flush toxins, and ease migraine headaches.

GINGER is a pungent herb that has an anti-inflammatory effect on rheumatoid arthritis. Externally, it is the base of treatments for muscle sprains and fibrositis. It is also an excellent stimulator for peripheral circulation, which may cause flushing of the skin in this detox bath.

LAVENDER OIL is an essential oil used in small amounts as an anti-inflammatory for the treatment of rheumatic complaints, and is a relaxing nervine, antidepressant, and promotes natural sleep.

AUTHOR

Laurie Roth-Donnell
Master Herbalist and
Holistic Health Practitioner

LEMON OIL is an essential oil used to reduce anxiety and depression, and increase concentration and memory power. It assists in a “winding down” of the nerves to ease into sleep.

ROSEMARY OIL, applied externally, helps ease muscle pain, sciatica, and neuralgia. It acts as a follicle stimulant and improves scalp circulation. It is an antidepressant, antimicrobial, rubefacient, and may lessen migraine pain. Just use several drops in the tub!

THERAPY #1: Easy Detox Bath (Allow 45 minutes for full benefits)

Base Ingredients:

- 2 cups Epsom Salt (additional 1 cup for every 50 lbs you are over 100)
- 1 cup Sea Salt
- 2 cups Baking Soda
- 1/3 cup Ground Ginger

Three drops of an essential oil of choice.

Simply run a hot bath, add ingredients, and circulate until fully dissolved. Soak for 45 minutes in water as warm as possible. You will notice your skin turning color and you will begin to sweat—normal parts of a detox. The more ginger you use, the more heat you will experience. Listen to your calming music or even read a book while soaking. After 45 minutes, pat the skin dry with a cotton towel and relax for 15 additional minutes.

Therapies #2 and #3 incorporate **BENTONITE CLAY**. Bentonite Clay is another powerful natural detoxification agent used in expensive spas around the world. This clay is easily found online, and it has amazing results when you want to experience a full body detoxification. Below are several ways to use Bentonite at home.



THERAPY #2: Tub Therapy with Bentonite Clay

Fill your bathtub with warm/hot water, whatever is comfortable, and add the clay. The hotter the water the better, as it opens the pores of the skin, and stimulates the lymph system, enhancing the detoxification process. Slowly mix in the clay with your hand or a non-metal utensil to keep the clay particles from clumping. Use 1 cup of clay for children and up to 2 cups for adults, soaking in the tub for 10 to 20 minutes.

WARNING: Anyone with chronic conditions, such as high blood pressure or heart conditions, should check with your doctor prior to a clay therapy bath, and begin with ½-cup clay, soaking in the tub for just 10 minutes, easing into a full tub therapy session.

When you are finished with your bath, drink a glass of water to re-hydrate and then shower off. It is a good idea to allow the body to rest while it continues to adjust to the detoxification process.

When you are finished, let your tub water run for an extra 2 minutes to allow all the clay to move out from the pipes. If you have old pipes or are concerned about the clay clogging your drain, wait a few hours for the clay to settle to the bottom of the tub, then use paper towels to scoop out the settled clay.

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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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Health Hunters Newsletter

Join our mailing list to receive this monthly newsletter FREE.

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at information@riordanclinic.org



IVC Academy

OCTOBER 3-5, 2019

Riordan Clinic @ Wichita, KS

Professional training for doctors and clinicians wanting to safely and effectively implement IV Vitamin C into their practice

Questions?

Erin Manning - *Director of Marketing*
emanning@riordanclinic.org or 316.927.4709

**VISIT IVCANDCANCER.ORG
FOR MORE INFORMATION
AND TO REGISTER**

The Bentonite Clay bath will increase mobility, reduce inflammation, and is a powerful natural detoxification agent. This clay is constituted of negatively charged ions that “capture” positively charged ions in your system. The super absorption property literally pulls toxins, chemicals, and heavy metals out of the body, while re-mineralizing your entire system. The clay’s amazing restorative properties are derived from numerous minerals such as calcium, iron, iodine, magnesium, zinc, selenium, copper, manganese, chromium, chloride, sodium, and potassium – all natural substances each body requires.

THERAPY #3: Hand and Foot Heavy Metal Detox with Bentonite Clay

Place 1/4 cup of Bentonite Clay in a glass container that seals. Add warm, distilled, or filtered water (not boiled water). Using a non-metal utensil, mix to make a paste similar to or a little thinner than butter. Apply the paste once a day to one entire foot or hand and let dry (10 to 20 minutes).

Wash off. The next day, apply to an alternate hand or foot. Toxins effectively leave through the hands and feet, and you should see evidence in the darker dried clay. Complete this cycle 2 times.

Fill a drinking glass with good quality water, turn on some relaxing music, and have a fluffy cotton towel, robe, and slippers handy to melt into!

I hope you try these at-home therapies, and as with all new health care regimens, consult your physician prior to undertaking a new therapy.

Sources:

Upon a Clay Tablet by Jason Eaton

www.saltworks.us

www.livestrong.com

Contact the author: LaurieDonnell@hotmail.com

Upcoming Events

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

Vitamins and Nutrients in Food

The third of four classes in our **NEW** Food as Medicine series

Wednesday, April 3rd

11:30am – 1:00 pm @ Wichita Campus 📺

Anne Zauderer, DC

Cost: FREE

Most people have heard the term “superfood.” This is a food that has great nutritional value. What makes these foods so great? What types of nutrients are in these foods and what do those nutrients do for our bodies? In addition, there are foods like sugar that, in addition to making us gain fat and dysregulating our blood sugar, actually rob the body of these essential nutrients. In this class we will discuss the best foods to eat for the maximum nutritional value.

Food as Medicine

Wednesday, May 1st

11:30am – 1:00 pm @ Wichita Campus 📺

Anne Zauderer, DC

Cost: FREE

This in-depth course will connect all of the classes in the series and address some fundamental questions behind how our diet impacts our health and well-being and how it contributes to the progression of chronic disease.

All four classes of the Food as Medicine series will be recorded and available at youtube.com/user/healthhunter1



Beat Spring Allergies!

With help from the
Riordan Clinic Store



\$30⁹⁵

MSM Plus

180 Caplets



\$35⁹⁵

AllerPlex

120 Capsules



\$19⁹⁵

Guai-Aid

100 Capsules



\$25⁰⁰

Sinus Cleanser



\$14⁹⁵

C-1000

100 Capsules

These products were designed to provide comprehensive support for seasonal allergies caused by common environmental triggers. The natural substances found in these products support healthy histamine levels, mucosal tissue health, immune response, and promotion of viscosity of mucus. This powerful combination actively promotes healthy nasal and sinus passages for individuals with elevated histamine and respiratory irritation. **Buy them in-store or online at store.riordanclinic.org**

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

Upcoming Events

21-Day Detox Program

Fridays, May 17th, 24th, 31st & June 7th

12:00pm – 1:00 pm @ Wichita Campus

Anne Zauderer, DC

Cost: \$39

Dr. Anne will lead classes in a group setting discussing how to properly do a detox program. She will walk participants through a detox program while also discussing important topics related to avoiding toxins in our environment. Class is limited to 20 participants. Class includes: weekly BIA, group class/discussion on detox, jump drive with recipes, detox booklet, and guest lecturers.

Food 101: Nutrition Basics

Wednesday, June 5th

11:30am – 1:00 pm @ Wichita Campus

Anne Zauderer, DC

Cost: FREE

This class will explore the basics of diet and nutrition from a functional medicine perspective. This is an essential piece to understand how your body uses a variety of foods, differently. Some of the topics we will look at are: the differences between a fat, carbohydrate, and protein and how each fit into our dietary needs; why we need fiber (from plants) in our diet; what *exactly* is metabolism and what can we do to support it; and much more!

Previously recorded and
available on youtube



#ichooserealhealth

RIORDANCLINIC.ORG/REAL-HEALTH

3RD PLACE STUDENT CONTEST, 2013

MILLIE BIRCHFIELD, 5TH GRADE • MCCOLLOM ELEMENTARY



Imagine this...your body is like a temple. You can either build it up to make it stronger or you can slowly tear it down. To build a strong temple means every action you make has to favor the temple. Just like if you want to be a healthy person, all your body parts have to take part and they all have to work together in order to be physically fit.

First, being healthy also has to do with your spirit and positivity. My personal thoughts are that you have to believe in yourself, think good thoughts about yourself and others, and keep your head held high. If your mind doesn't do these things, your body won't have the motivation to take care of itself. Motivations are the things you love so much; they inspire you to go further. Also, incentives like your family will make you want to be at a healthy weight so you can have more energy to do things with them.

Secondly, goals are milestones that you arrange in your path of being healthy that you plan to reach. Without goals, you wouldn't know how far to go and what you wanted to do next. What I would suggest is to think about a road trip. You have to make stops and different marks along the way. Just like in life, the things on your bucket list are your ultimate destinations, but you are going to have to take stops and rests along the way. In this case, say running a marathon is one of your goals to stay healthy. Maybe you could

run a 5k first and keep practicing until you can finally get the self confidence, determination, and proper training to run a marathon.

Finally, the two most important parts of being healthy are exercising and keeping a balanced diet. Exercising helps to make you stronger so you can easily do more things. Some people think of exercising as "alone time" where they get to do something for themselves. Sometimes people can get caught up doing things for others but when you're exercising, you're doing it for yourself. By exercising, you can transform your body into what you want it to be. The best part is, you can exercise while doing the things you love. You can exercise while playing sports. You can exercise by walking around the mall. You can even exercise by roaming around, sight-seeing. As long as you're moving you're helping your body. The only other thing you have to do besides working hard and enjoying yourself is keeping a balanced diet and eating healthy. That includes eating fresh vegetables and fruit and not a lot of sweets. Turns out, a lot of foods that are healthy are better than sugary, greasy foods. Another way to take care of your body is by keeping it hydrated by drinking lots of water.

Health is...a very important aspect of life. Evidence shows that having goals, motivations, keeping a balanced diet, and exercising are all contributions to being a healthy person. With that said, I hope you will achieve this goal of being healthy.

Also Available: **Thyroid & Carotid** thermography

~~\$215~~
\$189*

infrared **BREAST** *thermography*

A non-radiation, non-contact screening
for women of all ages and sizes

*Only available in Wichita - Sale Ends April 30



To schedule an appointment, call **316.682.3100**