



Riordan
Clinic

Health Hunters

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Riordan Clinic is a world-renowned, academic medical center that has led the world in integrative oncology and complex chronic illness care since 1975. The Riordan Clinic was established as a 501 (c)(3) non-profit organization with missions in research, provider education, and patient education. The Health Hunter Newsletter has been published since 1986 as an educational resource to providers and patients.



CHECK YOUR HEALTH: FALL 2024

IT'S THAT TIME AGAIN!

Twice a year, the Riordan Clinic hosts the “Check Your Health” event, offering a valuable opportunity to assess your “health tank” by measuring your nutrient reserves at a significant discount. With our labs’ “open door” policy, you can self-order these profiles—no doctor’s order needed. When you choose the Mega, Nutritional, or Advanced Wellness panel, you’ll also receive a 30-minute consultation with one of our providers to discuss your results.

We often hear from current patients or those with upcoming appointments wondering if they can take advantage of the discounted labs, the great news is, as a Riordan Clinic patient, you already receive the discounted price. Please note, these tests are not designed to replace the oncology or discovery profiles for new patients. The Check Your Health event is specifically designed for those looking to optimize their health.

The Fall 2024 Check Your Health event kicks off on Monday, September 16th, and runs through the 27th. Due to the high demand for these discounted prices, we encourage you to schedule your blood draw today to secure your spot.

The Nutrient Store Sale will take place from September 23 to 26, and don’t miss our Lunch & Lecture on September 19th titled “The Power of Measurement: The Riordan Approach to Data-Driven Health Insights.” To register for the Lunch & Lecture, scan the QR code on the back page or visit riordanclinic.org/events-archive/the-power-of-measurement/. Spread the word—we hope to see you there!

The Importance of DATA-DRIVEN Health Insights

WHY TEST

The term data-driven is trending in every area of life. We use data to make decisions about investing money, what cars to buy, where to advertise, when to buy a home, among many other things. It makes sense apply the same decision making tactic to our health, right? Otherwise, you are just taking a shot in the dark, and why would you want to do that when it comes to your health? Unfortunately, the majority of patients and providers are doing just that everyday, with every decision they make when it comes to medicine.

Dr. Ron uses the analogy, “How do you know when to get gas or how much gas to get, if you can’t see what is in the tank via your gas guage.”

Nutrient testing is the core of what we do at the Riordan Clinic. Every person is biochemically unique meaning we all have different nutritional needs based on several components: hereditary and environment factors, diet, lifestyle choices, and changes at every stage of life.

The Bio-Center Laboratory’s signature profiles focus on the direct measurement of nutrients and their clinical relevance in fighting or preventing disease. Results from these specialized profiles will help direct a daily nutrition and supplementation plan for your specific needs. Don’t just guess on what supplements you need – make decisions based on real results. Take a look at the panels that can give you the data needed to make an informed and educated decision about your health.

“In my 30 years of practicing nutritional medicine, there is nothing I have discovered that is more important than understanding your own individual nutrient levels. This is a cornerstone in building a nutritional protocol, diet, and lifestyle that will strengthen and fuel your biochemistry,”

– Dr. Ron Hunninghake, MD



MEGA

Our more comprehensive evaluation of your nutritional status and overall wellness. More than 75 tests including vitamins, minerals and hormones. A holistic analysis of your health, identifying potential deficiencies that could lead to chronic illnesses.

HORMONE PROFILE

Gain insight into hormonal imbalances. Includes thyroid hormones and more.

ADVANCED WELLNESS

Elevate your health insight. Includes detailed assessments of select vitamins, minerals, hormones, and more.

NUTRITION WELLNESS

Helps you understand the effectiveness of your supplementation. Helps identify potential nutrient deficiencies. Comprehensive testing for all vitamins and minerals, amino acids.

BASIC

Starting point for health assessment. Includes some unique vitamins, minerals, and hormones. Also includes common tests like CBC, Chemistry profile and CRP.

CHECK YOUR HEALTH PROFILES

Advanced Nutrient Testing

Test	Mega	Nutrition Wellness	Advanced Wellness	Basic	Hormone
List Price	\$4,025	\$2,666	\$1,852	\$744	\$875
CYH Price	\$2,050	\$1,435	\$960	\$405	\$475
A	•	•	•		
Beta Carotene	•	•	•		
B1	•	•			
B2	•	•			
B3	•	•			
B5	•	•			
B6	•	•	•		
B12	•	•	•		
Folate	•	•	•		
C, Plasma	•	•	•		
C, Urine	•	•		•	
D	•	•	•		
E	•	•	•		
Boron	•	•			
Chromium (Serum)	•	•			
Copper (RBC)	•	•	•		
Magnesium (RBC)	•	•	•	•	
Maganese (RBC)	•	•	•		
K/Na Ratio	•	•			
Selenium (RBC)	•	•			
Strontium	•	•			
Zinc	•	•			
DHEA-S	•				•
Estrodiol	•				•
Free T3	•		•	•	•
Free T4	•		•	•	•
Progesterone	•				•
Testoterone	•				•
TSH	•		•	•	•
Essential Acids	•	•			
Homocystene	•				
AA-Gutamine	•	•			
AA-Taurine	•	•			
Fatty Acids	•	•	•		
Lipid Profile	•		•	•	
Lp (a)	•				
Hemoglobin A1c	•		•	•	
Estimated Average	•		•	•	
CBC	•		•	•	
Chemistry Profile	•	•	•	•	
Coenzyme Q10	•	•	•		
CRP-hs	•		•	•	
Lutein	•	•	•		
Lycopene	•	•	•		
Pyrroles	•				



Riordan Clinic is often asked, “Why all the nutrient testing?” There are a variety of reasons, but all focus on the biochemistry of the individual. Just as standard pharmaceuticals do not work the same on every individual or produce the same side effects; neither does every individual metabolize the foods and nutrients eaten in the exact same way. Therefore, when a patient/colearner comes to our clinic, our care providers strive to determine what the variety of symptoms is telling him or her about that individual’s unique biochemistry. Our nutrient testing gives the clinical staff a view into each unique patient.

Various medications, lifestyle choices, and medical conditions may also deplete or prevent adequate uptake of nutrients. Acid blockers or proton pump inhibitors (PPIs) such as Prilosec have been shown to block uptake of calcium and increase its loss from bone. They have also been shown to prevent the uptake of magnesium and iron especially from non-animal sources as the form of iron is changed by stomach acid to make it absorbable. Due to blocking acid production in the stomach, this class of medication may interfere with proper digestion and subsequently uptake other important nutrients. One is B12, which is protein bound and available primarily from animal protein. Without adequate stomach acid, B12 is not released from the binding protein and not available for uptake.

PPIs have also been shown to cause hypermobility of the gut, which can mimic irritable bowel syndrome (IBS) and cause a misdiagnosis as IBS. Long term use can also lead to *C. difficile* infection in the colon, which is serious and causes chronic diarrhea. While there are alternative forms of supplementation that might help mitigate the effects of PPIs, the only way to know the status is by testing or the appearance of deficiency symptoms.

In recently published findings at Riordan Clinic, many conditions increase inflammation including cancer, arthritis, and Fibromyalgia, just to name a few. One marker present in the body that gives clinical staff an indication of inflammation is C Reactive protein (CRP). While any healing wound will cause acute inflammation and thus an increase in CRP, many degenerative diseases result in a chronic inflammation state. Typically active disease increases CRP and other disease markers; while vitamin C in higher doses can reduce the CRP level and improve the prognosis of the patient. However, the levels of Vitamin C and supporting nutrients or levels of CRP and disease markers can only be determined through testing.

References:

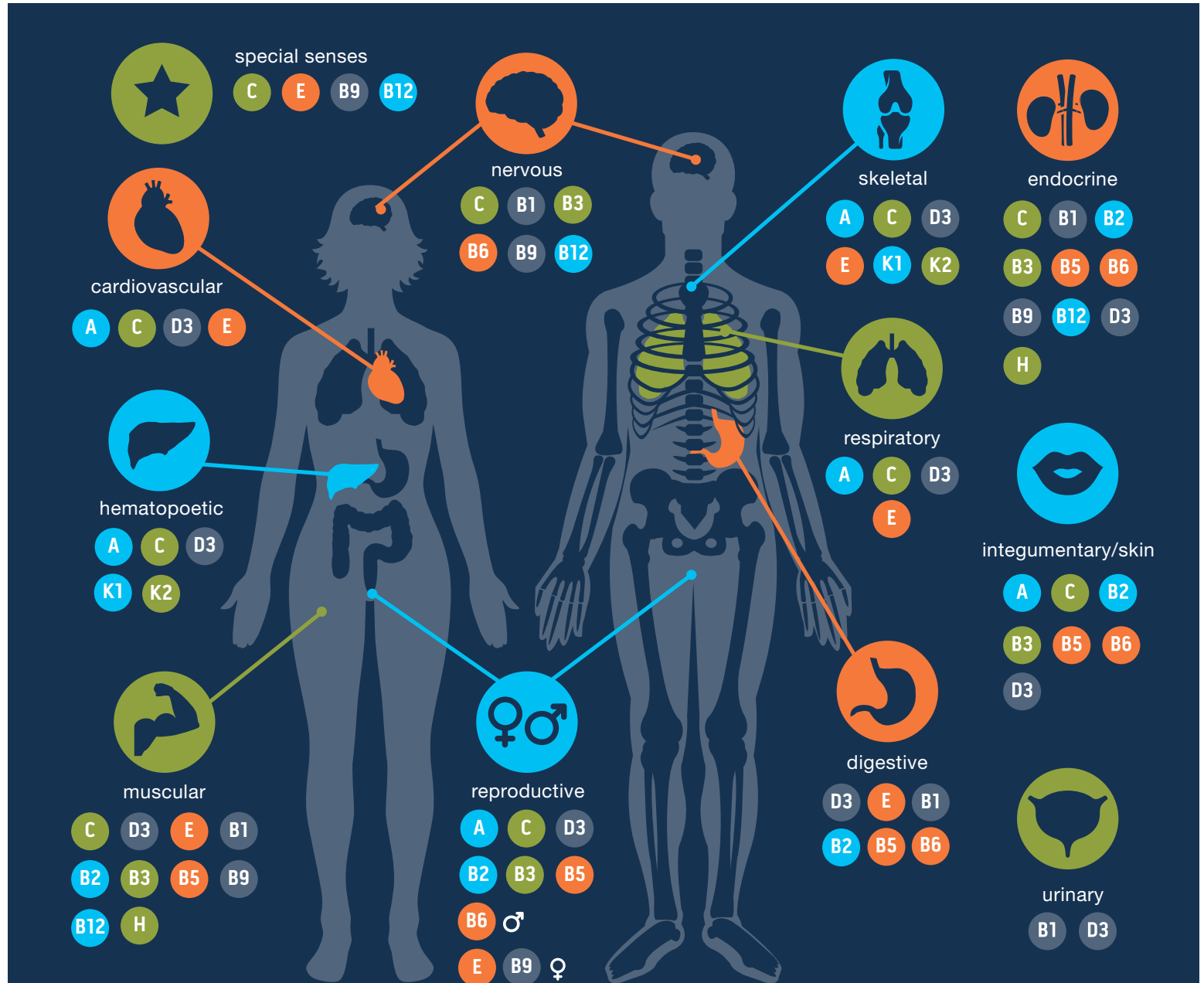
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Medication-Induced Nutrient Depletion List: Prescription medications work to alleviate symptoms because they disrupt certain biochemical pathways. However, do we take the time to consider what other effects they are having on us? By shutting down a biochemical pathway, you could be having an impact on the utilization of certain nutrients. Or by taking a particular drug, you could be stressing the liver resulting in the depletion of nutrients. All of these have an impact on our nutrient reserves and can contribute to the progression of chronic disease. On the following page we have shared the most common medications prescribed by providers along with the nutrients that they deplete within the body.

CLASSIFICATION	DRUG	INDICATIONS FOR USE	NUTRIENTS DEPLETED
ACE Inhibitor	Vasotec	High Blood Pressure	Zinc, Sodium
Anti-diabetic	Metformin, Glucophage, Actos, Avandia	Diabetes, Pre-diabetes	Folic Acid, B12, CoQ10
Benzodiazepines	Valium, Klonopin, Xanax	Anxiety	Melatonin
Beta Blocking Drugs	Atenolol, Corgard, Lopressor, Tenormin, Toprol XL, Metoprolol	High Blood Pressure	Coenzyme Q10, Chromium, Melatonin
Beta-2 Adrenergic Receptor Agonist	Albuterol, Aerosol, Brethine, Proventil, Tonalate, Ventolin, Xopenex	Asthma, COPD	Potassium, Calcium (possibly), Magnesium, Phosphorus
Bisphosphonate	Fosamax, Actonel, Boniva, Didronel, Skelid	Osteoporosis	Calcium, Magnesium, Phosphorus
Calcium Channel Blocking Drugs	Amlodipine (Norvasc), felodipine (Plendil), Nifedipine (Procardia, Adalat), nimodipine (Nimotop), nisoldipine (Sular)	High Blood Pressure	Vitamin D
Cardiac Glycoside	Digoxin, Digitek, Lanoxin, Lanoxicaps	Heart Failure, Arrhythmias	Calcium, Magnesium, B1, Phosphorus, Potassium
Conjugated Estrogen	Premarin	Hormone Replacement Therapy	B6, Vitamin D, Calcium, Zinc, Magnesium, Folic Acid, B12
Corticosteroid	Flonase, Beclovent, Beconase, QVar, Vancenase, Vanceril	Asthma, Allergic Rhinitis	Beta-Carotene, B6, Folic Acid, Vitamin C, Vitamin D, Calcium, Magnesium, Potassium, Selenium, Zinc, Melatonin
Corticosteroid	Prednisone, Deltasone, Celestone, Cortisone, Cortef, Cortone, Dexamethasone, Decadron, Hydrocortone, Medrol, Methylprednisolone	Severe Inflammation, Autoimmune	Beta-Carotene, B6, Folic Acid, Vitamin C, Vitamin D, Calcium, Magnesium, Potassium, Selenium, Zinc
Fluoroquinolone Antibiotic	Levaquin, Avelox, Cipro, Floxin, Noroxin, Penetrex, Trovan	Bacterial Infection	Biotin, B1, B2, B3, B6, B12, Zinc, Healthy intestinal bacteria
Loop Diuretic	Furosemide, Lasix, Ethacrynic acid, Edecrin, Bumex	High Blood Pressure, Heart Failure	B1, B6, Vitamin C, Calcium, Magnesium, Zinc, Phosphorus, Potassium
Macrolide Antibiotics	Erythromycin, Azithromycin, Biaxin, Zithromax	Infection	Healthy Intestinal Bacteria, B1, B2, B3, B6, B12, Vitamin K, Folic Acid, Biotin, Inositol
Opiate	hydrocodone/acetaminophen	Narcotic for pain relief	Folic Acid, Vitamin C, Iron, Potassium
Oral Contraceptives	Ortho-cyclen, Lo-Ovral, etc.	Contraception	Folic Acid, B1, B2, B3, B6, B12, Vitamin C, Zinc, Trace minerals, Selenium
Penicillin Antibiotic	Amoxicillin, Amoxil, Trimox, Penicillin	Infection	Healthy Intestinal Bacteria, Inositol, Biotin, B1, B2, B3, B6, B12, Vitamin K, Folic Acid
Potassium Sparing Diuretics	Amiloride, Spironolactone, Triamterene, Aldactone, Dyazide, Dyrenium, Maxzide	Heart Failure, High Blood Pressure	Calcium, Magnesium, Phosphorus
Proton Pump Inhibitor	Omeprazole, Prilosec, Prevacid, Nexium, Protonix, Aciphex	GERD, severe gastric ulceration	Beta carotene, B1, B12, Folic Acid, Calcium, Zinc
SSRIs (Selective Serotonin Reuptake Inhibitors)	Prozac, Zoloft, Paxil	Depression	Sodium, Folic Acid, Melatonin
Statin Drugs	Lipitor, Crestor, Lescol, Pravachol, Zocor, Mevacor	Lowering Cholesterol	Coenzyme Q10
Sulfonylurea	Glyburide, Glipizide, Glimepiride, Amaryl, Diabeta, Glucotrol, Glynase, Micronase	Diabetes	Coenzyme Q10
Synthetic Thyroid	Levothyroid, Synthroid	Hypothyroidism	Calcium
Thiazide Diuretic	Hydrochlorothiazide	High Blood Pressure	Vitamin D, Calcium, Magnesium, Phosphorus, Potassium, Zinc, Coenzyme Q10
Tricyclic Antidepressants	Amitriptyline, Clomipramine, Doxepin, Imipramine, Anafranil, Asendin, Elavil, Tofranil, Vivactil	Depression	Coenzyme Q10, B2, Sodium
NSAID	Ibuprofen, Naproxen	Inflammation, Pain	Folic Acid, Iron, Vitamin C
Acetaminophen	Tylenol	Pain, Fever	Coenzyme Q10, Glutathione
Antacids	Amphojel, Aluminum Hydroxide plus Magnesium, Gaviscon, Gelusil, Maalox, Mylanta, Basaljel	Gastritis, GERD	Beta-Carotene, Folic Acid, Vitamin D, Calcium, Magnesium, Chromium, Iron, Zinc, Phosphorus
Aspirin		Pain, Inflammation, Fever (adults)	Folic Acid, Vitamin C, Iron, Potassium, Zinc
H2 Inhibitors	Famotidine, Pepcid, Tagamet, Zantac	Ulcer, GERD	Folic Acid, B1, B12, Vitamin D, Calcium, Iron, Zinc
Laxatives with Bisacodyl	Correctol, Dulcolax, PMS-Bisacodyl	Constipation	Calcium, Potassium

THE BENEFITS OF COMPREHENSIVE EVALUATION OF NUTRITIONAL STATUS

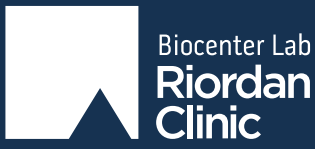
The human body is comprised of water (60%), plus 60 essential vitamins, 10 essential amino acids, and two essential fatty acids (40%). Essential, in this case, simply means that all 89 of the preceding listed nutrients must be obtained from the diet and not be manufactured in or by ourselves. Fortunately, most of the required nutrients have multiple functions, and to a point, a deficiency of a single nutrient can be masked by other nutrients. Examples of this include two well known causes of anemia, iron deficiency and vitamin B12. We continue to function at reduced efficiency with either deficiency, but severe and prolonged deficiency will cause death. The following graphic, constructed from studies and conducted at the University of Maryland, shows which body systems are affected by 13 of the essential vitamins.



B1 = Thiamine
 B2 = Riboflavin
 B3 = Niacin

B5 = Pantothenic Acid
 B6 = Pyridoxine
 B9 = Folic acid

B12 = Cobalamin
 H = Biotin (also known as B7)



AUTHOR
 Charles Hinshaw, MD



45% OFF

SELECT LABS

September 16-27

CHECK YOUR HEALTH

SCHEDULE YOUR LABS

Call 1-800-447-7276 x1385 or x1302 to schedule your lab draw appointment

The Check Your Health Lab Profiles are not recommended for co-learners with active cancer or a history of cancer. The Oncology Lab Profile is designed specifically for individuals with a cancer diagnosis. This Profile gives our providers the required data to adequately assess a cancer patient's terrain and formulate a comprehensive care plan. To inquire about becoming a patient and scheduling the Oncology Profile lab draw, please contact the New Patient Coordinator team at 1-800-447-7276, ext. 1354.

SCAN THE QR CODE TO VIEW THE COMPARISON OF LAB PROFILES OR VISIT RIORDANCLINIC.ORG/CHECK-YOUR-HEALTH



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Mon-Thu 8am-5pm | Fri 8am-4pm



LUNCH AND LECTURE

The Power of Measurement: The Riordan Approach to Data-Driven Health Insights

September 19 11:30 am - Lunch Provided

Registration opens August 19

This free event will focus on the critical importance of understanding your nutrient levels to optimize your health and well-being. Whether you're a current patient, a health enthusiast, or simply curious about the power of nutrient measurement, this lecture promises to be both educational and empowering.

Join us and take the first step towards a healthier,



TO REGISTER:

Visit riordanclinic.org/events or Scan QR Code
Call 316.682.3100

Watch the Lunch & Lecture Now on YouTube



Dr. Ron Hunninghake, MD
Jen Nolan, MS,BS,ONC

Karen Shrum, BS,NTM, ONC
Dr. Kirsten West, ND, LAc, FABNO



What You'll Learn:

- The role of nutrition in cancer prevention
- Dietary strategies for supporting patients during treatment
- Nutritional approaches to support survivorship
- Practical tips for incorporating nutrition into everyday life

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