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Health Hunters

Newsletter

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Food Toxicity: What Can I Eat?

by Dr. Ola Buhr

Our modern day foods at the super market are now inundated with chemicals and additives. At times it may feel overwhelming just choosing what to consume. I believe that knowing what to eat can be simple; however, following a pure whole foods lifestyle for some people may be very hard. Educating ourselves about the chemicals in our food and the ways certain foods are manufactured can give us the power to make better choices for ourselves and our bodies. This article will focus on all of the artificial 'made in a lab' chemicals that cumulatively are making us sick, overweight, depressed, and chronically ill as a society. I hope that, by uncovering the truth about these toxic ingredients, it will make us think twice about reaching for those energy bars, packaged cereals, cheetos, and donuts. Eating pure, organic, nutrient-dense, whole foods has always been a priority here at the Riordan Clinic. By consuming a diet predominantly of organic vegetables, fruits, grass-fed meats, legumes, sustainably caught fish, seeds, nuts, and whole grains we will promote our longevity, prevent illnesses, and even reverse chronic diseases...not to mention help us stay lean and feel beautiful.

Where do we start?

Anytime you take a packaged food product off the shelf at a grocery store, look at the ingredient label before you drop it in your cart. Remember, a food additive is "any substance added during the production, processing, or storage of food." And most of the stuff on the



shelves today is full of these man-made chemicals. Don't just pay attention to the amounts of calories, carbs, proteins, sugars, and fats in the product. Look at the ingredient list. Are you reading stuff that you can't pronounce? Does it sound like it came from Jekyll and Hyde's laboratory? Is the first or second ingredient listed sugar? Know what you're buying and know what you're consuming. Unfortunately, the majority of these food companies care about their bottom lines and not the quality of their product. These companies spend millions of dollars lobbying



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Contact the Editor

Please send any comments or suggestions to newseditor@riordanclinic.org.

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Editor

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Health Hunters Newsletter

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Brain Health continued from page 1...

government officials and the Food and Drug Administration (FDA) to vote on certain laws, rules, and regulations allowing these substances to enter our food supply. In the last 60 years the food science and technology field has greatly expanded from creating approximately 800 food additives in 1958 to having over 10,000 chemicals making their way onto our dinner plates now. Many of these chemicals have never been studied and are “generally recognized as safe”, and more than 5,000 ingredients aren’t even required to be listed. If research has taken place it is often performed by the food company itself, ingredients are tested on animals and often given for a relatively short time with unreliable doses. Generally, the cumulative effect of these ingredients is never explored. For an average person who may consume three processed meals a day, the potential toxicity of the additive amounts of pesticides, trans-fats, artificial colorings, preservatives, GMOs, and high fructose corn syrup is rarely considered.

FOODS THAT HARM:

Sugar a.k.a. the legal drug or “white death”.

Refined and processed sugar has entered nearly every food on the grocery store shelf. Yes, it may make food taste good and it adds to the flavor, but the large quantities in beverages, cereals, cookies, and crackers has lead us to be a very overweight nation. We already know that over-consuming sugar leads to a multitude of health conditions and we need to be vigilant in eating less and avoiding it if at all possible. A typical American now consumes about 22 teaspoons of sugar per



day! Manufacturers also know that sugar is addictive, it makes us feel better (temporarily), and it’s used as a comfort food. When we consume sugar it becomes stored in our tissues and fat cells in the form of triglycerides, giving rise to those dreaded love handles. Let’s not forget that half of the US production of sugar comes from GMO sugar beets, many of which are added to shelf stable foods and candies. Remember large food corporations like Kellogg’s, General Mills, and Kraft still use GMO sugar beets in their products.

Watch out for the sneaky high fructose corn syrup (HFCS).

This highly processed industrialized food product is very sweet syrup made from corn (usually the genetically modified kind). It is cheaper than sugar (because of the government farm bill corn subsidies) and therefore ubiquitous in our soft drinks, breads, flavored yogurts, and sauces. HFCS consists of glucose and fructose and, since there is no chemical bond between them, they skip the process of digestion and get rapidly absorbed into our bloodstream. Fructose directly enters the liver and begins a process of lipogenesis (which literally means fat production), creating fats like triglycerides and cholesterol. This is a major cause of fatty liver disease in our country, putting many people at risk for liver cirrhosis and early death. The absorbed glucose also causes insulin levels to spike (our body’s major fat storage hormone). Yes, high fructose corn syrup makes us fat, and if we care about our bodies and about the way we look we should avoid this chemical.

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Artificial Preservatives

These are synthetic chemicals, many of which are petroleum derivatives, used to preserve food and beverages. Hundreds of these compounds literally embalm thousands of packaged foods waiting to be purchased. These chemicals prevent foods from spoiling and going rancid. Not only are they integrated into the food itself, but are also present in plastic bags and packaging materials. Thanks to these preservatives, a McDonald's cheeseburger can sit on your kitchen counter for 4 weeks and still look the same. These preservatives can even prevent an ice-cream sandwich from melting. Natural preservatives include ascorbic acid, vinegar, and salt, and are safe to eat. Artificial preservatives that are "generally recognized as safe" by the FDA and include: calcium propionate, disodium EDTA, nitrates/nitrites, potassium benzoate, potassium sorbate, sulfur dioxide, and sodium propionate. Also avoid BHA and BHT, which are petroleum derivatives used to preserve fats and oils. They have shown to cause cancers in rodents and therefore are illegal in Europe.



Skip these additives whenever possible, choose the fresh stuff!

Artificial Colors

Thanks to the wonderful world of chemistry, we've created vibrant colors for our industrial 'food-like' products, and many of them have inundated the market for children's food. These products are made from anything but nature, and again, the majority of them originate from petroleum and coal tar...mmm coal tar. The main concerns about coal tar derivatives are that they cause cancer in animals, flare allergic reactions, and induce hyperactivity in children. FD & C (Food Drug and Cosmetic Colors) come in a wide variety of pigments, some of which include, but are not limited to blue # 1, red # 40, yellow # 5, and my personal favorite, "caramel coloring". I find it unfortunate that the majority of these compounds are found in foods advertised to children.

Refined and enriched flours

Most flour has been stripped of nutrients and fiber and then "enriched" with synthetic nutrients. In an attempt to look white and more desirable, many of these flours go through a process of bleaching with chlorine and peroxide. Sugar is then added to make it taste better. Look for ingredients that say "sprouted whole wheat" or "whole grain", and avoid the rest. Remember that commercially baked foods and flour-

based products at the grocery store are likely to be made from refined and enriched flour.

Dough Conditioners

These are substances that enhance the texture of dough and can be found in foods like cupcakes, breads, biscuits, and muffins. Try to avoid ingredients such as potassium bromate, monoglycerides, diglycerides, DATEM, and azodicarbonamide, which have shown to cause cancer in laboratory animals, and again, induce allergies and asthma in humans.

Growth hormones and antibiotics in meat

Whenever possible, please choose organically grown pasture-raised meats and free range eggs. Our modern day factory farming methods have had deleterious effects on our environment, compromised the safety of factory workers, and contributed to the inhumane treatment of animals. Not only are these animals injected with growth hormones to fatten them up quickly, they are fed a species inappropriate diet of GMO grains, and are also given antibiotics, because of their cramped and unsanitary living conditions. Bovine growth hormones cause the cow to grow quickly, but traces of these hormones may still be found in the fat, muscle, and milk of the animal. Observations made by two Japanese researchers, who published their study in *Annals of Oncology* in 2009, revealed that an increase of hormone-dependent cancers in humans paralleled the growth of beef consumption in Japan. The European Union and countries such as New Zealand, Australia, and Canada have banned the use of growth hormones on animals. Also, 80% of antibiotics used in this country are applied in the Concentrated Animal Feeding Operations (CAFO) and are rapidly contributing to the formation of antibiotic resistant bacteria, a.k.a. super bugs. "Organic Certified" means "free of growth hormones and antibiotics". On the other hand, a label like "natural" is basically a marketing term designed to make the consumer think they are buying something wholesome and real, but contrary to popular belief, these products are still manipulated and adulterated by food companies. As of today, there are no set standards created by the FDA for what qualifies a product as "natural". If the product says natural on the front label, make sure you look at the ingredient list on the back, too.



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PATIENT PROFILE

by Chris Brannon RN, BSN

If depression, anxiety, and bi-polar disorder were all weighing heavily on your daily life, how far would you look to find a possible answer to your causes? What if the answer involved specific nutrient testing and dietary changes that would lead to lifestyle changes for the rest of your life, could you do it? Your answer should be “YES!”

A co-learner came to our clinic in October 2013 looking for direction on how to make the necessary changes to control her mood changes. Since 1998, she has been on several different medications for her mood disorders that were not solving the problems, but slightly lessening the outbursts. The initial plan was to have a variety of nutrient and cytotoxic food sensitivity tests performed, and to then get a baseline of what we could change.

Once the results of these tests came back there was some work to do. Several vitamins, such as C, D, and B12, were “basically zero”. The food sensitivity testing showed that dairy and wheat were an issue for her as well. After about 6-9 months of supplementing these vitamin deficiencies and changing her “standard American diet” to cut out dairy and wheat, great changes were being noticed. She is now completely off of medications and is proud to say that she has a much happier, healthier mind that is well noticed by her husband and children.

This leads to her extended success. With the strides in her improvement, she wanted to help her daughter by seeing if she could get off of her anxiety medication that she had been on for over a year. After eliminating dairy from her daughter’s diet, improvements were seen as quickly as the first week. Over the course of a single month, she was able to stop the medication all together.

Nutrient testing and dietary changes helped this family, and may help you as well!

Artificial Sweeteners

Obesity has hit epidemic proportions and the diet industry is making billions of dollars every year from desperate Americans who want to lose weight. Low calorie sweeteners have no nutritional value and studies have shown that consuming them actually causes us to crave and eat more carbs. These sweeteners do not actually help with weight loss, but are nonetheless crammed into diet foods, beverages, candy, and other desserts. Artificial sweeteners include chemicals such as aspartame, acesulfame K, neotame, sucralose, saccharin, tagatose, erythritol, acesulfame potassium, and we know them by brand names like NutraSweet, Sweet’N Low, Equal, and Splenda.

Genetically Modified Organisms (GMOs)

Purchase foods that are either organic or have the “Non-GMO Project” verification label. Be aware that approximately 70% of processed food contains GMOs. Let us also be conscious of the fact that food corporations have spent millions of dollars in recent years making sure our foods don’t carry GMO labels (although it is mandatory to label these items in Europe). Please read the accompanying article in this newsletter for more details about Frankenfoods...I mean GMOs.



Let’s prevent lifestyle driven diseases.

Now is the perfect time of year to enjoy the myriad of farmer’s markets in your city. You can purchase fresh, local, organic foods that are in season. Foods grown on a local farm are more nutritious and flavorful. If you see a vegetable that’s new to you, be adventurous, buy it and give it a try! You may even discover a new favorite food.

As Mark Schatzker so eloquently wrote in his book ‘The Dorito Effect’, “a strawberry contains vitamin D, vitamin E, vitamin B6, biotin, folate, niacin, pantothenic acid, riboflavin, thiamin, calcium, potassium, magnesium, phosphorus, copper, boron, iron, iodine, manganese, molybdenum, zinc, omega-3s, histidine, isoleucine, leucine, phenylalanine, threonine, tryptophan, valine, and fiber—along with anywhere from three to five thousand known plant secondary compounds, including ellagic acid, lutein, zeaxanthin, and beta-carotene, and three hundred or so aromatic compounds, about eighty of which we can pin down...food companies have no idea how to make a cracker that complex...we can’t make food pleasurable without resorting to cheap thrills like fat, sugar, carbs, and MSG.” So let’s avoid the cheap, high calorie, nutrient-poor processed foods and enjoy what mother earth has provided us for thousands of years.



- American Academy of Environmental Medicine. Genetically Modified Foods. www.aaemonline.org
- American Cancer Society. Known and Probably Human Carcinogens. www.cancer.org
- Centers for Disease Control and Prevention. Antibiotic Resistance Threats in the United States. www.cdc.gov
- Environmental Working Group. EWG’s Dirty Dozen Guide to Food Additives: Generally Recognized as Safe—But Is It? www.Ewg.org
- Handa, Y., et al. Estrogen concentrations in beef and human hormone-dependent cancers. *Annals of Oncology* 20 (2009): 1610–1611.
- Schatzker, Mark. *The Dorito Effect*. New York: Simon and Schuster, 2015. Print.

GMO—A Good Thing or Too Risky?

By Karen Wheeler, APRN

During natural reproduction, plants and animals get their genes in pairs with one part coming from mom and the other from dad. It is these combinations that give each living thing its characteristics, such as eye and hair color. Genes can also influence how the immune system works so some plants and animals don't get sick as much as others. Normally, the strong plants and animals survive under bad conditions and weaker ones die. This is called natural selection.



In nature, plants only share their genes with other plants, usually of the same family. So a snapdragon will exchange genes from another snapdragon, but not with a bean plant. Animals also breed most naturally with others of the same kind, like a terrier mating with a bulldog so that the puppies will have characteristics of each parent dog. Some animals do breed with other species such as a male donkey mating with a female horse, which is how a mule is made. But the genes of the horse and donkey do not match so the female mule most of the time is not able to reproduce.

People have been breeding both plants and animals for certain characteristics for centuries. For example, if you breed a fast female horse with a fast male horse, then it is likely their offspring will be faster than other horses. Farmers would save seeds from years of having bumper crops and combine them to get stronger grains and better yields. This process can take years and many generations of the plant or animal to get the desired effect because, if the genes do not fit together correctly, the results do not make an organism that survives or is able to reproduce.

GMO stands for Genetically Modified Organism. This means that a scientist in a lab takes the genes for the qualities they want to give the plant or animal and insert it into their DNA. The genes can come from totally unrelated species which would NEVER happen in nature! For example, Bt-corn is genetically modified by inserting the genes of a bacteria that makes a poison known to kill the larva of the corn borer. So, when the corn borer larva eats the part of the Bt-corn that has this protein in it, it causes the worm's gut lining to break down so it dies. This poison does not have



this effect on other insects such as bees and is considered safe for other animals, including humans. But the process of natural selection is bypassed by this biotechnology, so the question is raised as to whether this is completely safe.

Since the mid-1990s, genetically modified crops have been

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WE APPRECIATE OUR VOLUNTEERS!

On May 8th, the 2015 Volunteer Appreciation Luncheon was held where volunteers and members of our staff enjoyed lunch together, followed by an afternoon excursion to Botanica Gardens.

The Riordan Clinic staff would like to thank our wonderful group of volunteers for their time and dedication given to help us help others. Our volunteers gave 1000s of hours of their time in all areas of our business: helping in the laboratory, research, and gardens; administrative filing, copying, and data input.

Your commitment has been invaluable to our mission. THANK YOU!

The following volunteers have 65 years of total combined service.

Carolyn Mitchell
Darrell Mitchell
Jo Ann Baugh
Juarlene "Jere" Woodard
Nancy Bramhall
Amanda Hall

BENEFITS OF VOLUNTEERING

Our volunteers at the Riordan Clinic are our greatest asset. In our 40 years of operation, we have had many volunteers giving countless hours of their services. As a non-profit organization, we count on our volunteers to maintain our beautiful campus, assist our staff with projects and daily responsibilities, help with fundraising events and educational services.

Here are a few of the many reasons to volunteer with us:

- Develop work skills.
- Meet fascinating people.
- Use and share your own talents.
- Participate in seasonal events.
- Be recognized for your hard work.
- Receive clinic services based on your cumulative service hours.
- Receive a 25% discount in our supplement store.

For information on volunteering, contact Christie Benton, at 316-927-4705



Health is...

2015 Contest Winners

1st Place

Art: Rebekah R, 6th grade, Central Christian Academy
Technology: Cael S, 5th grade, Discovery Intermediate
Essay: Kristin W, 7th grade, Central Christian Academy

2nd Place

Art: Ariana D, 5th grade, Bostic Traditional Magnet
Technology: Merina M, 5th grade, Bostic Traditional Magnet
Essay: Julia B, 6th grade, Derby 6th Grade Center

3rd Place

Art: Morgan B, 5th grade, Central Christian Academy
Technology: Brooke E, 5th grade, Central Christian Academy
Essay: Isabella A, 5th grade, Bostic Traditional Magnet

- 1st place prize: iPad Mini 16gb
- 2nd place prize: Kindle Fire HD6 8gb
- 3rd place prize: \$50 gift card



Thank you to all who participated this year!

Bostic Traditional Magnet



Derby 6th Grade Center



Central Christian Academy



Discovery Intermediate



Questions about 'Health Is...' for 2016?"

Erin Manning
316.927.4709

emanning@riordan.org

Winning entries are posted online at
RiordanClinic.org/Health-is-contest-information

WHAT "HEALTHY" IS

By Kristen W., 1st Place Essay

A year ago I decided that I would start being "healthy. At the time, I decided that being healthy meant losing a few pounds and eating strictly "healthy" foods, as well as working out to exhaustion. After a week of my new, "healthy" lifestyle, I stepped on the scale and saw that I had lost a pound! I was exhilarated. However, I didn't know how distorted this view of health really was, or how it would turn around and hurt me.


As time went on I ate less and less. The number on the scale decided how much I was worth, and counting calories became my life. I exercised at minimum an hour a day, and started making up strict rules for myself, like 30 chews per bite and absolutely no dessert. All of these seemingly healthy habits had turned into a full-fledged case of Anorexia Nervosa, an eating disorder.

I didn't accept that I was seriously ill at first. Losing 15 pounds seemed perfectly healthy because that's what most of the influential females in my life were doing. Eventually though, a nutritionist and a counselor worked with me to help me turn my life around.

After months of re-feeding and counseling, I began to finally accept my body and not obsess over the calories in different foods. As I thought about how far I had come, I remembered that this whole ordeal had started because I wanted to be "healthy". This led me to come up with better, real values of what health is, and how to become healthy.

Becoming aware of what you are really eating is the first step, which can be done by taking an inventory of the food in your house. If you have a lot of processed, packaged foods, and little fresh produce or protein, you may need to work on eating more "real" foods. What are real foods? They are simply the items that God has given us to nourish our bodies with, like fruits, vegetables, grass-fed beef, nuts, fish, and so on. Homemade soups, breads, and snacks are all much more wholesome than a pre-packaged cookie or milkshake, and have so many health benefits including essential nutrients, vitamins, and minerals.

You'll also want to find an activity that you enjoy doing, whether it be swimming, running, jumping on a trampoline, or playing a sport. Your body needs to be worked out so that you are fit and strong. Every day you have an opportunity to make small choices that can result in positive changes. For example, you could choose to get up from watching TV to go be active, or choosing to eat a banana instead of a cookie. Choosing to turn off your phone and go to bed at a reasonable time also helps your body recover from the day. Having a good body image can be a choice too, choosing to accept who you are now, but still striving for your own health and fitness goals for the future.

In conclusion, Health is when your body functions properly, because of being well nourished and cared for. It is also loving your body, and accepting that it is what God gave you. It is not striving to be perfect and using that image of perfection to define you. It is also not defined by what or how much you eat and work out. Health is being happy with yourself and giving yourself the whole, natural foods that God made for our bodies. 



To view Cael's video, visit: <https://riordanclinic.org/2015-health-is-contest-winners/>.



By Rebekah R.



Left: Kristen W Right: Rebekah R.

To view the other winners and their entries, please go to: <https://riordanclinic.org/2015-health-is-contest-winners/>

KNOW YOUR NUTRIENTS

Binding Cellular Impurities (BCI)

Available at our Nutrient Store **\$66.95**



Binding Cellular Impurities is a daily, nine capsules/soft gels regimen that can assist in detoxifying the body, improving blood circulation, helping to control chronic inflammation, and facilitate the process of removing toxic metals from the body. This supplement assortment is comprised of many ingredients, most notably:

- A comprehensive multi-vitamin containing tocotrienols, resveratrol, and Vitamin K2.
- Natural chelators such as alpha-lipoic acid and garlic.
- Omega-3 fatty acids that may reduce heart disease, high blood pressure, and stroke.
- Ginkgo biloba, which has a regulating effect on the vascular system, including veins, arteries, and capillaries.
- Primrose oil which contains naturally occurring gamma linolenic acid and cis-linoleic acid, which are essential polyunsaturated fatty acids.*

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Reference:

Penny Lasater. *Riordan Clinic Health Hunters Newsletter. Summarizing your Supplements-Beyond Chelation Improved (BCI). April 2011; 5*

GMO—A Good Thing or Too Risky continued from page 8...

developed as a way to build plants that are resistant to disease and herbicides and have better nutrient content. There are more than 40 types of plants worldwide that are GMO. Most of the corn that is GMO is used to make feed for livestock or turned into ethanol for fuel. But some is getting used to make corn syrup, corn oil or corn starch, so it is getting into human food as well. The Food and Drug Administration (FDA) has not approved any genetically modified meat or fish but there is a company seeking approval for their genetically modified salmon which can grow faster than natural salmon.

So is GMO food as safe as that put together by Nature? The FDA says it is. However, in Europe there are bans on GMO and mandatory labelling of products that contain GMO ingredients, but the literature cites economic and political reasons for this as much as scientific ones.

There are concerns that GMO foods can cause allergies or toxins in humans which can contribute to the development of illnesses such as cancer or autoimmune disease. There have been steady increases in the rates of these diseases worldwide since the 1950's. While there have been many things that have changed our lives in the past 60 years that can also be contributing to these health problems, the question remains that, if the Bt-corn can kill a corn borer larvae by destroying its gut lining, is it effecting the gut linings of humans or harming the good bacteria that live in our gut? What else might the altered DNA of our foods affect in the human body?

The answer to the question is often determined by who you ask and what their interest in the topic is. If you ask a person who makes their living in general agriculture, they are certain that GMO is safe and this is all needless worry and fuss. Those who are in favor of organic agriculture say it is not safe and that there is "big money" that is covering up studies that prove the harm. Those of us who just want to be healthy want straight forward answers and clear labels to know what is going into our bodies and those of our children! But straight answers are not readily available.

Those in favor of GMO crops refer to studies of animal feedings that argue that if the animals that eat the GMO grains are not getting sick or dying more than the animals did before GMO crops were developed, they must be safe. But now our livestock also get a lot more antibiotics and hormones to keep them healthy than were given in the past. So is this really a true measure of safety?



It is not ethical to do safety studies on human subjects to actually know the direct effects of this. Most chronic illnesses are caused by the interaction of genetics, environment, stress, and other factors, so it would be difficult to prove cause and effect in anything but a lab environment which is unrealistic as well.

Some companies are moving away from using GMO products because of the public concern. There is a lot of political debate as to whether or not companies need to clearly label if their products contain any GMO ingredients. Some states are taking this on even if the Federal Government does not want such labels to be required. And so the debate of GMOs continues and no clear answers are in sight. It is up to each of us as consumers to make wise choices. The safest thing to do is to eat organic, whole foods and avoid processed foods as much as possible. This way you can avoid GMO ingredients and pesticides.