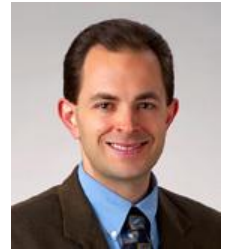


In Good Hands

A Newsletter for the Friends and Patients of Dr. John Falkenroth, D.C.
Back Pain And Sciatica Clinic ♦ (831) 475-8600 ♦ www.RepairMyBack.com
Open Monday, Tuesday, Wednesday and Thursday 9am – 12noon and 2pm – 6pm



**Convenient and affordable relief of back pain, neck pain and sciatica.
No long-term treatment plans. Walk-ins welcome. No appointment needed.**

“Most of the change we think we see in life is due to truths being in and out of favor.” ~ *Robert Frost*

Can Your Diet Increase Your Future Children's Risk of Obesity and Diabetes?



Also this month:

- ✓ **What you need to know about “ultra-processed foods.”** Did you know nearly 50% of American’s calories are coming from ultra-processed food items?
- ✓ **Does eating a specific and restrictive diet negatively impact your health even if you lose weight?**
- ✓ **The penguin that became an Internet sensation.** The incredible story of a man who saved a penguin’s life and how that penguin shows its gratitude...

It’s an old debate. What’s more important, nature or nurture? Clearly, they both play a role in our development, but scientists have discovered that nurture affects nature in some fascinating ways most people have never heard of.

For example, the DNA in your cells was pretty much fixed on the day you were conceived. You were born with it. It is what it is.

Or is it?

See, the DNA in our cells is wrapped around proteins called “histones.” The DNA and

histones are covered with chemical tags that form a layer called the “epigenome.”

The epigenome causes some genes to activate and others to fall dormant.

Now here’s something very important...

While the DNA code remains fixed for life, the epigenome is flexible and can be influenced by things from the outside environment such as diet and stress.

The epigenome is incredible and can turn genes on and off quickly in reaction to an ever-changing environment, which could be a good thing or a bad thing...

For example, a new study published by the German Research Center for Environmental Health claims that you are what your parents ate.

In other words, both diet-induced obesity and diabetes can be epigenetically inherited by children through both the oocytes and sperm. (An oocyte is an immature female egg.)

In the study, researchers fed mice a diet designed to induce diabetes. Then, they used sperm from the male mice to fertilize eggs from the female mice through in vitro fertilization and placed the eggs in healthy, non-overweight surrogate mothers. This way, if the offspring had similar glucose sensitivity to their parents, that trait would have to have come via genetics and not from learned behaviors.

Later observations showed that the offspring did indeed inherit their parents' glucose sensitivity, and the female mice in particular became quite obese.

Lead investigator Dr. Martin Hrabě de Angelis writes, *"This kind of epigenetic inheritance of a metabolic disorder due to an unhealthy diet could be another major cause for the dramatic global increase in the prevalence of diabetes since the 1960s."*

Dr. de Angelis and his colleagues note that the increase in diabetes observed throughout the world in recent decades could not be the result of DNA mutation alone because it has occurred too fast. However, it can be explained through epigenetic inheritance.

This may seem like terrible news, but it is not. It is just information, and this information can be used to make HUGE positive changes.

For example, epigenetic inheritance is not permanent like genetic inheritance. In fact, it is reversible, and scientists see this as a new possibility to curb both the obesity and diabetes epidemics.

It has never been more obvious that everyone should eat as healthy a diet as possible. It has also never been clearer that two people trying to have a child should be EXTRA careful about what they eat.

But sadly, many are not listening. In fact, a recent article in *Health News* references a study that says that more than half of the average American diet is composed of "ultra-processed foods."

What are "ultra-processed foods?" According to researchers, *"Ultra-processed foods are concoctions of several ingredients, including salt, sugar, oils and fats. They also contain chemicals not generally used in cooking, such as flavorings, emulsifiers and other additives designed to mimic real foods."*

These ultra-processed foods also make up 90% of the excess sugar calories Americans consume.

Common ultra-processed foods include: soda, packaged snacks, candy, ice cream, packaged baked goods, instant noodles and soups, and reconstituted meat products, such as chicken and fish nuggets.

While it's probably harmless to enjoy some of these foods from time to time, there are plenty of studies indicating that people who eat more servings of fruits and vegetables and healthy proteins and fats are less likely to gain weight or have high blood pressure, and are better able to manage their blood sugar, etc.

So, not only will eating a healthier diet benefit you today, it may also benefit the kids you haven't had yet.

Don't forget, if you ever have any questions or concerns about your health, talk to us. Contact us with your questions. We're here to help and don't enjoy anything more than participating in providing you natural pain relief.

THANK YOU... 

Thank you to those of you who referred your family, friends, co-workers and neighbors to our practice. When we see your name as the person who referred a new patient, we get reassured that you're happy with your experience at our clinic. Thank you for your trust and thank you again for your referrals.

The Incredible Story of a Man Who Saved a Penguin's Life and How That Penguin Shows Its Gratitude...

There is a very good chance you have already heard about this story because it went viral across the Internet. But that may not have been a good thing. Here is why...

Most of the versions of this story that spread all over the web were very “loose” with the facts. Some are pretty much full of bologna. There is no reason for the exaggerations and falsehoods because the REAL story is amazing enough all by itself.

What’s the real story of this Brazilian man and the penguin he rescued? Here it is as explained by João Paulo Krajewski, a biologist with a PhD in Ecology, after he spent two days with the penguin Dindim and the man who saved him, Mr. João Pereira de Souza (a retired brick layer).

From his Facebook page:

“Dindim is a Magellanic penguin that was rescued in May 2011 by Mr. João Pereira de Souza, in Provetá Beach, Ilha Grande, Rio de Janeiro State.

“The penguin was covered in oil and could barely move. Mr. Joao cleaned and fed the penguin for days until, according to Joao’s judgment, Dindim was strong enough to be released in the sea. Joao took the penguin in a boat, went to a nearby island and released the animal.

“The same day the penguin went straight back to Joao's backyard at Provetá beach, stayed there until [February the] next year and then went out to the sea. Next June, Dindim returned to Mr. Joao’s house and made several vocal calls when he saw the man.”

Many of the viral versions of this story state things like “penguin travels 5 thousand miles every year to see his rescuer.” Some even present a map showing Dindim’s annual migration path. Dr. Krajewski says all this was never mentioned in his story, and it is also highly unlikely. In fact, they do not know where Dindim goes when he goes out to sea. They just know he leaves and comes back. Why does he keep coming back and hanging out with João Pereira de Souza? According to Dr. João Paulo Krajewski...

“Magellanic penguins are usually very loyal to their partner. They live for more than 25 years and usually the same couple nests in the same hole every summer in Patagonia.

“The penguin Dindim certainly displays this same loyalty by changing the usual nesting site of the species by the place where it was rescued and fed in Brazil.

“His rescuer, Mr. João, is now like family for him. Professionals who work with animal rescues make the most to avoid relationships like this so they are able to reintroduce the animal into the wild.

“But this isolated case in Brazil certainly allowed Dindim to live and was the best this humble and kind man could do for the penguin.”

Dindim was rescued and fed by Mr. Joao for almost a year. Dindim most likely imprinted Ilha Grande as its land-based home and that is why he returns, and he obviously has a strong bond with the man who cared for him. There’s no need for people to exaggerate this story. It's incredible enough on its own merits and shows how a little bit of kindness can have unforeseen benefits.

Like penguins, people also feel gratitude to those who show them kindness and who help them get through tough times in their lives. Be sure to show gratitude to your dear friends and family.

If you know anyone with back pain, neck pain or sciatica, encourage them to call us. We love helping our patients and their friends and family through their tough times and getting them feeling better. Remember that early treatment is key to a full and complete recovery. Don’t wait until you can no longer move!

Did You Know?...

Does Eating a Specific and Restrictive Diet Negatively Impact Your Health Even If You Lose Weight?

Do you find yourself buying and eating the same types of food over and over, week in and week out? Well, if your pantry and fridge tend to always include the same items, then you may be restricting your gut health, and with it, your overall health... even if what you're eating is helping you lose weight!

First, you must understand “gut health.” There is a very intricate balance of bacteria in your gastrointestinal (GI) tract. In fact, According to a New York Times article, *“Bacteria in the gut produce vitamins and break down our food; their presence or absence has been linked to obesity, inflammatory bowel disease and the toxic side effects of prescription drugs. Biologists now believe that much of what makes us human depends on microbial activity. The two million unique bacterial genes found in each human microbiome can make the 23,000 genes in our cells seem paltry, almost negligible, by comparison.”*

Researchers are also finding out that a greater diversity of gut bacteria is a very good thing. According to a recent study in *Molecular Metabolism*, *“Like all healthy ecosystems, richness of microbiota species characterizes the GI microbiome in healthy individuals. Conversely, a loss in species diversity is a common finding in several disease states. This biome is flooded with energy in the form of undigested and partially digested foods, and in some cases drugs and dietary supplements.”*

The study states that during the past 50 years, the prevalence of obesity, type 2 diabetes, and inflammatory bowel diseases has increased sharply. A shared discovery for each of these pathologies is a reduction of the GI microbiome biodiversity. What causes lack of diversity? One of the causes cited by the study that you can control is diet. If you exclude certain types of food from your diet, you may also exclude certain types of good bacteria that you need for optimal gut health. In the end, your gut (and subsequently the rest of your body) would probably benefit from eating a wider variety of foods than you're probably eating now.

Tip Of The Month

Take Advantage of Spring Produce!

It's that time of year again when certain fruits, vegetables, and herbs begin to appear in the produce department at grocery stores, as well as at local Farmers Markets. Taking advantage of seasonal produce can not only mean a better tasting meal or snack, but it can also provide you an opportunity to gain some added health benefits.

- **Grapefruit** - A great breakfast or midday snack, this citrus fruit has been associated with higher intakes of vitamin C, magnesium, potassium, dietary fiber, and improved diet quality. Grapefruit is known to interact with certain medications, so check with your doctor before adding it to your shopping cart.
- **Strawberries** – Recent research into strawberry consumption has revealed that adding these berries to a balanced diet may help improve insulin sensitivity in people with insulin resistance issues. Another study concluded that eating strawberries may “enhance motor performance and improve cognition, specifically working memory.”
- **Artichokes** – This edible thistle has as many benefits as it has layers. People who consumed an artichoke and then filled out an online questionnaire stated that they felt happier and had less indigestion than those who didn't. Researchers also claim that artichokes are rich in natural antioxidants and can improve cholesterol levels.
- **Asparagus** – While finding asparagus in the store is common all year, they are best in the spring. Delicious and easy to prepare, they are also known to help prevent hypertension and preserve renal function.
- **Mint** – Mint is rich in phenolic compounds, which is known to help prevent cardiovascular diseases, tumors, and degenerative diseases. It has also been known to help soothe stomach ailments.

Remember, we're always here to help you and your friends and family get pain relief and maintain your independence and the active lifestyle that you all deserve. After you're done with this newsletter and the enclosed flyers, please pass them on to someone you know who has back pain, neck pain or sciatica. Thank you.

The information contained in this newsletter and in the inserted flyers is solely advisory, and should not be substituted for medical advice. Any and all health care concerns, decisions, and actions must be done through the advice and counsel of a healthcare professional who is familiar with your updated medical history. We cannot be held responsible for actions you may take without a thorough exam or appropriate referral. If you have any further concerns or questions, please call our office at (831)475-8600.