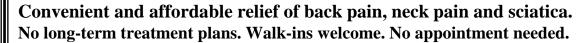
In Good Hands

A Newsletter for the Friends and Patients of Dr. John Falkenroth, D.C. Back Pain And Sciatica Clinic ◆ (831) 475-8600 ◆ www.RepairMyBack.com





"Honesty pays, but it doesn't seem to pay enough to suit some people." ~ Kin Hubbard

How Important Are Music and Art to Your Happiness?

What Happens to Your Brain
When You Observe Art or Listen to
Music Might Surprise You...



Also this month:

- ✓ What Your Pupils Tell You When You Listen to Music...
- ✓ Why We Enjoy Sad Music and What Our Music Listening Habits Say about Mental Health.
- ✓ Does Coconut Oil Help Yeast Infections?
- ✓ Man Saves 400 Pound Bear from Drowning and 14-Year-Old Saves 20,000 Pets' Lives!

ere is something you will find very interesting, especially if you like to listen to music or look at art.

Researchers have reported on the first real-world demonstration of what happens in the brain when people observe artwork.

A team of University of Houston scientists analyzed brain activity data collected from more than 400 people who wore EEG headsets as they viewed an exhibit at the Menil Collection, offering evidence that usable brain data can be collected outside of a controlled laboratory setting.

The researchers said that conducting a study in the lab is artificial and they wanted to look at how to measure brain activity both in action and in context.

Compared with baseline readings, they found significant increases in functional, or task-related, connectivity in localized brain networks when the subjects viewed art they considered aesthetically pleasing.

By looking at brain activity alone, the researchers could predict with 55 percent accuracy whether the participant was looking at a complex piece of art, a moderately complex piece of art, or a blank wall.

Researcher Dr. Jose Luis Contreras-Vidal notes, "I don't think we will understand the mystery [of how art is created]. The conception

of art is a very individual process, built on the artist's experiences, skills, memories, values and drives. But we will know what happens in the brain. We might find that there are people who are very attuned to visual art, or to music, or poetry, and there might be an underlying common neural network. If we know that, we could optimize the delivery of art for therapy, for teaching."

What About Music?

One thing is clear, our eyes are amazing and very complex. Here is something you probably know: Pupils reflexively adjust— getting bigger and smaller— based on the amount of light available at any given time. Light makes them contract and darkness makes them dilate.

Now for something you probably do not know: Pupil size is also controlled by thoughts, emotions, and mental effort. For example, pupils dilate when viewing an exciting image or while working on a difficult mental task—like a hard math problem.

Sounds can also affect the pupil. For example, pupils can dilate when a person listens to two people argue. Everyone knows that music can create strong emotional reactions in people, but pupil dilation in response to music had not been systematically studied until now. In a recent study, a joint research team from the University of Vienna and the University of Innsbruck, both in Austria, found that listening to a romantic opera dilated listener's pupils.

In participants who claimed music plays an important part in their lives, the research team observed the participants' pupils dilated to a greater degree during more arousing parts of the opera compared with calmer sections.

In other words, it seems the more importance you place on music, the more of an emotional impact it may have on your life. The team notes that future studies will involve other musical genres so that they can see how the results from this study extrapolate.

Lead researcher Dr. Bruno Gingras adds, "Our research clearly demonstrates that pupil size measurement is a promising tool to examine

emotional reactions to music. Moreover, because pupil responses cannot be voluntarily controlled, they provide a direct access to listeners' preconscious processes in response to music."

What About Sad Music?

In 2013, a team of Japanese researchers found that sad music might actually evoke positive emotions... which is why such songs are so popular. The researchers explain that sad music evokes contradictory emotions because the participants in their study tended to feel that sad music is more tragic, less romantic, and less blithe than they themselves felt while listening to it.

According to the researcher team from Tokyo University of the Arts and the RIKEN Brain Science Institute: "Music that is perceived as sad actually induces romantic emotion as well as sad emotion. And people, regardless of their musical training, experience this ambivalent emotion to listen to the sad music... Emotion experienced by music has no direct danger or harm unlike the emotion experienced in everyday life. Therefore, we can even enjoy unpleasant emotion such as sadness. If we suffer from unpleasant emotion evoked through daily life, sad music might be helpful to alleviate negative emotion."

It should be noted that other research has shown possible negative effects associated with listening to sad music in some people. According to researcher Dr. Suvi Saarikallio, "Analysis showed that anxiety and neuroticism were higher in participants who tended to listen to sad or aggressive music to express negative feelings, particularly in males. This style of listening results in the feeling of expression of negative feelings, not necessarily improving the negative mood."

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. Thank you also to all the health professionals who referred their patients to our practice. Your referral is the ultimate measure we have of how we are doing in helping you and in meeting your expectations. 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.

Inspirational Story Of The Month (Names And Details May Have Been Changed To Protect Privacy)

Man Saves 400 Pound Bear from Drowning and 14-Year-Old Saves 20,000 Pets' Lives!

These Stories of Two People Doing Extraordinary
Things Are Nothing Short of Amazing...

When you think of a hero, what type of a person do you think about? If you are like most, you picture someone with a gift who can do things most people cannot. They are special... NOT like you, right?

Well, what if that type of thinking and definition was DEAD WRONG? In other words, what if most heroes were average people JUST LIKE YOU? What if you have everything it takes to be a hero, but you just don't know it? You do. These two stories will prove it.

Several years ago, a nearly 400 lb (~181 kg) black bear somehow ended up in a residential neighborhood in Alligator Point, Florida.

Wildlife officers rushed to the scene, and their plan was to shoot the bear with a tranquilizer and relocate him. Good plan — but like many plans, it didn't go so smoothly.

After the bear was shot with the tranquilizer, he ran into the nearby ocean in an attempt to escape. As he swam into the water, the tranquilizer started to make him drowsy. He started to slow down... and would inevitably fall asleep and drown.

That's when Adam Warwick, a biologist with the Wildlife Commission, sprung into action. He leaped into the water and swam in front of the massive bear. He said it was a spur of the moment decision, and he had a lot of adrenaline pumping when he saw the bear in the water.

Warwick grabbed the huge bear by the scruff of the neck and started to pull him to shore. The bear actually tried to climb on top of Warwick, but he was too weakened by the tranquilizer to do so. Warwick suffered minor cuts and scrapes from the bear's claws but he was able to get him to shore and save his life. The bear was later transported to Osceola National Forest.

I know what you are thinking — you could never jump in the ocean and pull such a heavy animal to shore. I bet Warwick thought that too. Well, here is a story that ANYONE can do. How do I know? Because it was done by a fourteen-year-old....

Lou Wegner used to believe that shelters were safe places for animals to live in until they found a home. That opinion changed after he volunteered at one and found out that countless dogs and cats are put to sleep every day.

"It was heartbreaking. All these dogs crying in their cages. Knowing they would be put down broke my heart," he said. So Lou did something about it. He and some of his friends started Kids Against Animal Cruelty when he was only fourteen years old. Two years later, their Facebook page has over 15,000 likes and has become the fastest growing animal rescue in the country. Besides finding homes for as many animals as possible, his goal is to get more people to adopt from shelters, to spay and neuter their pets, and to educate them about pet responsibility.

Since Wegner started Kids Against Animal Cruelty, other teens have set up chapters of the group around the country. Wegner hopes to eventually have a chapter in every state in order to make a bigger difference. Thank you to those of you who did a facebook check-in last couple of months... we were able to donate money to the Santa Cruz SPCA to help them help more animals.

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?...

Some of the Ways that B Vitamins Benefit Your Body...

Though you may commonly see foods or drinks touting they contain one or more of the various B vitamins, you may wonder what they do for you. While they play a number of roles in keeping you healthy, here are some of their more important jobs:

- Thiamine (B1) plays an important role in the creation of new cells. Like all the other B vitamins, it also helps in the process of turning the food you eat into energy.
- Riboflavin (B2) helps to transport oxygen throughout the body and also assists in removing free radicals that may damage cells.
- Niacin (B3) supports over 200 chemical reactions in the body and is believed to improve cholesterol levels.
- Pantothenic Acid (B5) is critical for the production of the sex and stress-related hormones in the adrenal glands.
- Pyridoxine (B6) helps produce mood and sleep regulating hormones like serotonin, melatonin, and norepinephrine.
- Biotin (B7) is called the beauty hormone as it is associated with the production of healthy hair, skin, and nails.
- Folate (B9) helps reduce the risk of birth defects in developing fetuses and may also help adults lower their risk for depression and memory loss.
- Cobalamin's (B12) most important job may be its role in the production, repair, and maintenance of red blood cells.

Tip Of The Month

Can Coconut Oil Help Fight Yeast Infections?

Do you suffer from Candida albicans (commonly called a yeast infection) and not know it? Many people do. Often times, one may be struggling with fatigue and other symptoms and not know candida is the culprit. For example, statistics show that 75% of all women will suffer with at least one yeast infection during their lifetime. Nearly half of these women will experience at least one more episode of infection. A small percentage (5-8%) will suffer from at least four recurrent infection per year.

What is candida albicans? Candidiasis is a fungal infection caused by yeasts that belong to the genus Candida. There are over twenty species of Candida yeasts that can cause infection in humans, the most common of which is Candida albicans. Candida yeasts normally live on the skin and mucous membranes without causing infection; however, overgrowth of these organisms can cause symptoms to develop that can vary depending on the area of the body that is infected.

Symptoms can include a sore throat, a white coating on the tongue, blisters or sores in the cheeks, a burning tongue, bad breath, food allergies, gas, abdominal pain, gastritis, rectal itching, sugar cravings, ulcers, bladder infections, burning urination, kidney infection, bronchitis, chronic cough, clogged sinuses, excess mucous, nasal itching, sinus infections, wheezing, sneezing, pneumonia, chronic congestion, diaper rash, eczema, red rashes, itchy patches on the skin, sores, and blurred vision. When Candida is present in the gut, it can generate toxins that can affect the brain causing apathy, confusion, dizziness, foggy thinking, poor concentration, poor coordination, and spaced-out feelings.

Candida infections can be persistent and difficult to treat, but new research indicates there may be a natural solution to this problem. A recent study led by researchers at Tufts University found that coconut oil effectively controlled the overgrowth of Candida albicans in mice. The research, published in the journal *mSphere*, suggests that it might be possible to use dietary approaches as an alternative to antifungal drugs in order to decrease the risk of infections caused by Candida albicans. In the study, mice who ate a coconut oil-rich diet experienced a 90% reduction in the amount of Candida albicans in the gut when compared with mice in a control group. Dr. Alice H. Lichtenstein, director of the Cardiovascular Nutrition Laboratory at the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University writes, "Food can be a powerful ally in reducing the risk of disease... This study marks a first step in understanding how life-threatening yeast infections in susceptible individuals might be reduced through the short-term and targeted use of a specific type of fat."

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.