

# Vienna Chiropractic Associates, P.C.

## News



September–December 2010

### Brain Fitness Tips: Avoiding Pesticides In Your Food

We have previously noted the potential impact of spinal misalignments or restrictions (subluxations) on the ability of children to concentrate and learn. (See “Mind of a Child” on page 4 of our May newsletter: [www.neurologicalfitness.com/newsletr/Summer10.pdf](http://www.neurologicalfitness.com/newsletr/Summer10.pdf)).

These problems can be aggravated by certain factors in the environment.

Earlier this year, a paper in the biomedical journal *Pediatrics* reported a study on the effects of pesticide residue on brain function in children.<sup>1</sup> Unlike previous studies, which involved high levels of

pesticide exposure (by children playing in or near fields that were being sprayed, for example), this recent study involved low levels of pesticide found on produce for sale in groceries and supermarkets.

The 1,139 children (aged eight to fifteen years) in this study were chosen in such a way to be representative of the general U.S. population. Urinalysis measured each

child’s level of exposure to a certain class of pesticides (organophosphates). The parents were given a standardized interview designed to ascertain the presence of attention-deficit hyperactivity disorder (ADHD). **At levels of organophosphate residues commonly experienced by U.S. children, the odds of ADHD were found to increase by 55-75% compared to unexposed children.**

While the child’s nervous system is particularly vulnerable to pesticide damage, there is some evidence of danger

*Continued on page 2*

#### Inside This Issue

Brain Fitness Tips: Avoiding Pesticides in Your Food .....	1
<i>Call for Research Volunteers:</i>	
Innovation Block.....	2
Smart Resource Allocation.....	3
Take Our “Get to Know Your Doctors” Quiz! .....	3
Here’s Another Question Having Nothing to Do with the Doctors’ Education .....	3
Thanks, Tigris and Blue Iguana! ....	4
Chiropractic Independence Days....	4
Referrals .....	4
Students .....	4
Multipacks.....	4
Veterans Back from Iraq and Afghanistan.....	4
Reaction Time and Our Arcade.....	4

#### Office Hours

Monday .....	10:30–1:00 3:00–7:30	Friday .....	8:30–1:00 3:00–6:30
Tuesday .....	10:30–1:00	Saturday .....	9:00–1:00 (selected Saturdays)
Wednesday ....	10:30–1:00 3:00–7:30	Sunday.....	Office closed, barring emergencies
Thursday .....	Office closed		

**Note:** We make every attempt to provide you with an accurate calendar. That being said, this schedule is made up several months in advance and unforeseen circumstances may periodically require minor scheduling changes.

#### Office Calendar

<b>September</b>	<b>December</b>
11..... Saturday open	4, 18..... Saturdays open
20..... Independence Day	20.... Independence Day
25-26 ..... Seminar, office closed PM	Closed from 1 PM on 12/24/2010 to 1/3/2011 for Holiday Break (office will be open Thursday, 12/30/2010)
<b>October</b>	<b>January</b>
2, 16..... Saturdays open	3..... Office opens for New Year, 2011
18..... Independence Day	8, 22..... Saturdays open
<b>November</b>	17..... Independence Day
6, 20, 27... Saturdays open	
15..... Independence Day	
27-26 ..... Thanksgiving, office is closed	

For appointments, please call 703-938-6441. If we are closed or away from the desk, you will get a tape. Please leave a message and your call will be returned as soon as practicable. Parts of Vienna are, for some reason, somewhat grudging toward cell phone transmission. If your attempt to reach us by cell is unsuccessful, please try again. Thanks!

to adults as well. Recent evidence suggests adults exposed to pesticides are at greater risk of brain tumors, peripheral neuropathies (including muscle cramping, numbness, weakness, reduced reflex responses and other problems), and loss of coordination and reaction time.<sup>2-4</sup>

The following tips for reducing pesticide exposure from your food are useful for everyone, but especially important of children and pregnant women:

1. **Wash:** The U.S. Environmental Protection Agency (EPA) recommends that you wash and (when possible) scrub fruits and vegetables thoroughly under running water.<sup>5</sup>
2. **Peel and Trim:** The EPA also suggests peeling fruits and vegetables when possible, and discarding the outer leaves of leafy vegetables. Some pesticides accumulate in animal fat, so trimming fat from meat and skin from fish and poultry is recommended as well.
3. **Be a "Moving Target":** The EPA recommends eating a variety of foods from a variety of sources. Not only does this reduce your likelihood of exposure to any one pesticide, it also gives you a better mix of nutrients.
4. **The "Dirty Dozen":** The Environmental Working Group of the University of Washington (Seattle) has developed a ranking of produce from highest to lowest pesticide load, based on data from the U.S. Department of Agriculture and the Food and Drug Administration.<sup>6</sup> The 12 items with the highest load are those for which washing, peeling and trimming are particularly important: peaches, apples, sweet bell peppers, celery, nectarines, strawberries, cherries, pears, imported grapes, spinach, lettuce, and potatoes. When organically grown, the pesticide load of this produce is much reduced.<sup>7</sup>
5. **Be Well-Adjusted:** Chiropractic care won't keep the pesticides away, but with your nervous system subject to a variety of toxins in our increasingly complex environment, the less additional irritation your nervous system has to deal with, the better! 🍀

## References

1. Bouchard, M.F., D.C. Bellinger, R.O. Wright and M.G. Weisskopf. Attention-Deficit/Hyperactivity Disorder and Urinary Metabolites of Organophosphate Pesticides. *Pediatrics*, 2010: e1270-1277. (Available at: www.pediatrics.org).
2. Provost, D., et al. Brain Tumors and Exposure to Pesticides: A Case-Control Study in Southwestern France. *Occupational and Environmental Medicine*, 2007; 64: 509-514.
3. Lotti, M. and A. Moretto. Organophosphate-Induced Delayed Polyneuropathy. *Toxicology Review*, 2005; 24(1): 37-49.
4. Rothlein, J., et al. Organophosphate Pesticide Exposure and Neurobehavioral Performance in Agricultural and Nonagricultural Hispanic Workers. *Environmental Health Perspectives*, 2006; 114: 691-696.
5. Environmental Protection Agency. *Pesticides: Health and Safety*, 2006. www.epa.gov/pesticides/food/tips.htm.
6. Toepel, K. Organic Diets Significantly Reduce Children's Exposure to Organophosphorus Pesticides. *Northwest Bulletin: Family and Child Health*, 2006; 21(1): 9-10. (Available at: //depts.washington.edu/nwbfch)
7. Curl, C.L., R.A. Fenske and K. Elgethun. Organophosphorus Pesticide Exposure of Urban and Suburban Preschool Children with Organic and Conventional Diets. *Environmental Health Perspectives*, 2003; 111: 377-382.

## Call for Research Volunteers: Innovation Block

### What Are We Doing?

We have been studying the effects of chiropractic adjustments on creativity and innovation. As we mention elsewhere in this newsletter, our first paper on this topic has recently been published, and is available for your perusal. In the next phase of this project, we will prepare case reports of people with various forms of creative block. While this includes such traditional concerns as writer's block and artist's block, we are particularly interested in blocks to innovation in the business arena.

### What Does This Research Have to Do with Business?

In the challenging environment of today's slow economic recovery, the ability to solve problems in an innovative way is more important than ever. This includes such major innovative challenges as designing a new product, developing a new service, or coming up with a new marketing approach. It also includes the little noticed but extremely important improvisations needed to get the job done properly even when resources are scarce. All of these innovations require creativity. In this sense, creativity = prosperity.

### How Do You Qualify for the Project?

We are calling for volunteers who have had no chiropractic care during the past twelve months, and who are feeling "stuck" or "blocked" in relation to an innovative task.

### What Will the Research Consist Of?

Participants will complete brief pen-and-paper exercises drawn from previous research. Following this will be a one-hour case history (including the nature of your innovation block), chiropractic examination, and adjustment. You will be examined and adjusted in the same manner as any other patient. There will be three follow-up visits for additional chiropractic adjustments, lasting approximately fifteen minutes each. At the fifth and final visit, a progress examination will be conducted, including another round of the pen-and-paper exercises, and we will interview you regarding any changes in your approach to your innovative task. This is not grant-funded research, so we cannot offer cash payment. All services received as part of your participation in this research will be free of charge.

**If you are interested in volunteering, contact us by phone only: 703-938-6441. Feel free to spread the word by sharing the link to this newsletter, or by printing and posting this page. Thank you!** 🍀

## Chiropractic and Creativity

For those of you who don't ordinarily read the *Chiropractic Journal of Australia* (can't imagine that you wouldn't!), Drs. Todres and Masarsky are pleased to announce the publication of their paper *Effect of a Single Chiropractic Adjustment on Divergent Thinking and Creative Output: A Pilot Study, Part 1* in the CJA's June issue. The curious can find the abstract at: [chiropractors.asn.au/Content/NavigationMenu/CJA/CurrentIssues2010/Volume40/Vol40Issue2/default.htm](http://chiropractors.asn.au/Content/NavigationMenu/CJA/CurrentIssues2010/Volume40/Vol40Issue2/default.htm).

The paper is based on the project in which many of you participated about a year ago. It examines the potential relationship of chiropractic to increased creative output and a spike in divergent thinking. In divergent thinking, the mind is encouraged to broaden its perception of the uses/possibilities of various objects and situations, a form of brainstorming, though usually with oneself. This paper is the first in a series of three drawn from this project.

Once again, we'd like to thank those of you who gave your time to participate in this study. ☺

## Smart Resource Allocation...

...makes the nervous system, therefore the body, just like everything else, work better!

Whether managing a household, the environment or a business, everything works better and has a better chance of healing and reaching its potential if available resources are used carefully and appropriately. The living body needs to have access to as much appropriate nerve transmission as it can get. Even an individual with a chronic or serious illness or condition can do better than she/he is doing if, as much as possible, every body system gets as close as possible to

its fair share of nervous system output. Chiropractic can be an important part of this resource allocation.

Each bit of negative input in terms of mechanical insult (falls, overuse, lack of proper body mechanics), chemical insult (allergens, pollutants, food sensitivities) and emotional insult (road rage, economic worries, problems being dealt with by you or a loved one) basically distracts your nervous system from running the show that is you. Your nervous system is then forced to expend its energies trying to put out the fire. Since there is only so much output available at any given moment in terms of neurotransmitters (biochemicals that allow the brain and nerves to send and receive messages) and muscle balance, something's got to give. Your system will do its best to manage its energetic/neurologic resources, but the distraction will claim a necessary but disproportionate share. (See: [www.neurologicalfitness.com/newsletr/news0503EXC.htm](http://www.neurologicalfitness.com/newsletr/news0503EXC.htm)) for a description of ergotropic function). At this point, muscle groups tighten, ligaments loosen, blood pressure and other crucial physiological activities are altered and the body is forced to work less effectively as a whole, while it tends to the draining influence. This can present as many kinds of dysfunction, including pain and spasm. In case you've forgotten, our number is: 703-938-6441! We can't banish ragweed, prevent bad driving on the part of others or make your emotional stressors disappear completely, though we may have some tips for managing your reaction to them. We can help you "reset" your system so more of your resources are available to you when you need them. ☺

## Take Our "Get to Know Your Doctors" Quiz!

1. Dr. Marion Todres received her BA and MA from:

A. Massachusetts Institute of Technology

B. University of Massachusetts at Boston  
C. Vulcan Academy of Sciences  
D. Romulan War College

2. Dr. Charles Masarsky received his undergraduate education from:

A. Cornell University  
B. Oxford University  
C. Hogwarts Academy of Wizardry  
D. The Institute for Advanced Studies at Princeton

3. The following doctors have taught undergraduate college biology:

A. Dr. Masarsky, at Northern Virginia Community College  
B. Dr. Todres, at Montgomery College  
C. All of the above  
D. None of the above

4. Drs. Todres and Masarsky have published original research papers in peer-reviewed, indexed clinical journals dealing with the relationship of the chiropractic adjustment to:

A. Breathing  
B. Hot Flashes  
C. Creativity  
D. All of the above

(Answer Key: 1-B, 2-A, 3-C, 4-D)

## Here's Another Question Having Nothing to Do with the Doctors' Education

Which drugs may actually cause you to develop osteoporosis? (thinned bones)

A. Prednisone, Depo Provera, Coumadin  
B. Tegretol, Dilantin, Phenobarbital  
C. All the above  
D. None of the above

(Answer: C. All of the above)

There are times when you must take certain medications. If you are on any of these, please take them as prescribed and be monitored regularly for their levels in your blood. Discuss them with the individual who prescribed them and follow

*Continued on page 4*

*Continued from page 3*

any nutritional recommendations made. If you are on any of these, please let us know so we can be aware of and respect their workings in your system. 🌱

## Chiropractic Independence Days

In an effort to make chiropractic care available to everyone, we have set aside selected Mondays as Chiropractic Independence Days. On these days, there are no set fees. Your decision to seek care is based solely on your need for same, independent of insurance, lack of it or your financial situation. Payment, unless you opt to write a check or pay by credit card, goes anonymously into a box at the front desk. You determine the amount, based on what you thought the care was worth and your ability to pay. Medicare is the one exception, as those fees are federally mandated. We do accept new patients on Independence Days, as long as the schedule permits and it's a great way to introduce a friend or family member to chiropractic. It makes sense to book early as the choice time slots go quickly. We do ask that you respect your fellow patient community members and let us know as early as possible if you cannot keep your appointment so that someone who needs it can get in. Thanks!

## Referrals

Thank you so much for thinking of us when people you know need care!

## Students

Yes, we have seen the increase in tuition costs. Would a 20% discount help? Let the person at the front desk know you are a student when you make your appointment, and bring a copy of your student ID the first time.

## Multipacks

If you are interested in having your spine checked regularly on an early intervention basis, you may be interested in our six- or twelve- packs for individuals or our eighteen-visit family pack. You'll save money while safeguarding your spinal health and mobility.

## Veterans Back from Iraq and Afghanistan

We've got a gift for you, a year of free care. It's just our way of saying "Thanks!" If you've been deployed to either of those locations within the last five years, don't be shy, tell us!

## Thanks, Tigris and Blue Iguana!

The above restaurants and their ownership/management generously donated gift certificates for our fundraiser for OXFAM AMERICA. Once again, our staff and patients will be helping to feed those in crisis here and around the world, with the help of the folks mentioned above.

These two restaurants are among our favorites in a land of many restaurants. We urge you to visit their websites and then visit them to make your mouth and belly purr!

**Tigris Grill**  
[www.tigrisgrill.com](http://www.tigrisgrill.com) (Oakton)

**Blue Iguana**  
[www.theblueiguana.com](http://www.theblueiguana.com) (Fairfax)

## News

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*Address Correction Requested*

