HEALTH wise

NOV. 2011

SPECIAL EVENT!

Back by popular demand!

2nd Annual Cookie Bakeoff!
December 6, 2011
Noon-1:00 p.m.
Hansen Center Court

That's right, the Wellness program is sponsoring another cookie event this holiday season because being "well" includes having fun and indulging occasionally! Yeah!

This year there will be three main categories, **"Ultimate Chocolate"** including any cookie with chocolate as a main ingredient, such as chocolate chips, cocoa, chocolate candy, etc. **"Holiday Cookies"** including any cookie unique to the holiday season, and **"Anything Goes"** which requires only that the entry is a cookie of some sort. Each participant can enter one batch of cookies, so make it your absolute best! All are welcome to enter and encouraged to taste! Milk will be provided, as will prizes for each category!

For those of you who would like a special challenge, we are looking for some bakers who bake great gluten free *(sub category of Anything Goes)* cookies! Add that to the mix!

To enter the Cookie Bakeoff, please contact Wellness no later than December 1. Let us know what category you would like to enter and the name of your cookie recipe. We ask that you submit a recipe or list of ingredients (if recipe is a secret) so that it may be displayed with your cookies in case of food allergies or sensitivities. Contact Wellness at x3334 or wellness@iwu.edu.

www.iwu.edu/~wellness

THE SAFER PATH

Ideas for Avoiding Genetically Modified Foods

The FDA says that the health and environmental risks of Genetically Modified Organisms (GMOs) are still up for debate, but many people prefer to avoid them whenever possible. Many plants have been genetically engineered to have specific traits, such as frost resistance, a higher yield, or even to produce pesticide. This final trait is perhaps the most upsetting, because this means that the plant essentially produces its own toxins. One study published in Environmental Sciences Europe found that animals fed GM corn and soybeans were significantly more likely to experience organ malfunctions.

In Europe, GMOs either require labeling and in some places are banned, but here in the United States no such label is required. In fact, it's quite a challenge to find processed foods that don't contain GMOs. The FDA may even be near to approving the genetically modified salmon, which will be the first GM animal to be marketed for human consumption.

Here are four simple shopping tips to help you avoid GMOs.

1. **Buy Organic**
Not only are products with a USDA Organic label free from synthetic fertilizers, sewage sludge and most pesticides, they also cannot contain GMO ingredients by law.

2. **Look for "Non-GMO"**
Your safest bet is with products that carry the "Non-GMO Project Verified" logo. In order to receive this seal, foods must be tested by the Non-GMO Project, a non-profit organization group dedicated to helping consumers find GMO-free foods. However, some companies voluntarily label their products as "Non-GMO," but consumers should be wary of claims that are unverified by third-party groups.

3. **Avoid "At Risk" Ingredients**
If you're looking at a processed food that's not organic and contains corn, soybeans, canola or cottonseed, the likelihood that it contains GMOs is very high. Most Hawaiian papaya and some zucchini and yellow squash are also genetically modified. Instead of canola oil or a blended oil, buy pure olive oil.

Also, beware of sugar that's derived from sugar beets. On most non-organic products, "sugar" will be derived from GM sugar beets, unless it is specifically described as pure cane sugar. Lastly, look for dairy products that have no rBGH, rBST or artificial hormones, which means that the cows have not been injected with a growth hormone.

4. **Use a Shopping Guide**
These guides may not have every single product, but they have most major brands of non-GMO products. Try nongmoshoppingguide.com or nongmoproject.org.

Source: http://www.care2.com/greenliving/4-ways-to-avoid-genetically-engineered-foods.html

Illinois Wesleyan UNIVERSITY
WELLNESS

HEALTH SCREENING

On-Site Digital Mammography—Wed., Dec. 7

For more information, or to make an appointment, please call Wellness at 556-3334.

NUTRITION BITES

From 5th Century B.C. to present, the potato makes its way to America

Some History…

In the ancient ruins of Peru and Chile, archaeologists have found potato remains that date back to 500 B.C. The Incas grew and ate them and also worshipped them. They even buried potatoes with their dead, they stashed potatoes in concealed bins for use in case of war or famine, they dried them, and carried them on long journeys to eat on the way (dried or soaked in stew). Ancient Inca potatoes had dark purplish skins and yellow flesh. The Incas called the potato "papas," as they do today.

Forging ahead and skipping a lot of history… potatoes had been introduced to the United States several times throughout the 1600s. They were not widely grown for almost a century until 1719, when they were planted in Londonderry, New Hampshire, by Scotch-Irish immigrants, and from there spread across the nation.

In the1850s, most Americans considered the potato as food for animals rather than for humans. As late as the middle of the 19th Century, the *Farmer's Manual* recommended that potatoes "be grown near the hog pens as a convenience towards feeding the hogs."

Today, the potato is so common and plentiful in the Western diet that it is taken for granted. We seem to forget that the potato has only been with us for a few hundred years.

Source: http://whatscookingamerica.net/History/PotatoHistory.htm

Recipe of the Month

Parmesan-Coated Potato Wedges

Can't decide whether to serve sweet potatoes or white this Thanksgiving? Why not serve both with a crispy cheese coating. Crunchy on the outside, creamy within, these wedges are like amped-up oven fries with the added appeal of Parmesan cheese.

1.5 ounces all purpose flour (about ⅓ cup)
¾ teaspoon kosher salt
3 large egg whites
1 tablespoon water
¾ cup (3 ounces) grated fresh Parmigiano-Reggiano cheese
½ cup panko (Japanese breadcrumbs), finely crushed
2 (8-ounce) baking potatoes, each cut lengthwise into 8 wedges
2 (8-ounce) sweet potatoes, each cut lengthwise into 8 wedges

1. Preheat oven to 425°
2. Combine flour and salt in a shallow dish. Combine egg whites and water in a shallow dish, stirring with a whisk. Combine cheese and panko in another dish.
3. Dredge potato wedges in flour mixture. Dip in egg white mixture; dredge in cheese mixture. Divide potato wedges between 2 baking sheets lined with parchment paper. Bake at 425° for 30 minutes or until golden rotating pans after 20 minutes.

Serves: 8 (serving size: 4 wedges)

Source: *Cooking Light*, November 2011

TALKING TURKEY

More than 250 million turkeys are slaughtered in the industrial system each year in the United States, and about 46 million of those are for Thanksgiving.

Thanksgiving is a wonderful, warm holiday, full of family time, great traditions and good food. Unfortunately, there are many not-so-good things about the Thanksgiving turkeys most grocery stores offer to their customers.

The status quo for raising turkeys and other meat birds is the industrial, factory farming system. The conditions in which factory farmed turkeys are raised is horrendous. It's cramped, with each bird given about 3 feet of space to live its life. These turkeys, raised in gigantic warehouses, are denied their natural instincts and can't eat their natural diet of seeds, vegetation and insects. They're also bred to grow so rapidly that it puts an incredible strain on their bodies. Some researchers estimate that factory farmed turkeys spend at least a third of their lives in chronic pain.

The good news is that there are plenty of farmers out there raising turkeys naturally on pasture—and with respect. To find a healthy, delicious turkey that was ethically and sustainably raised for your Thanksgiving table, check out this resource:

Search Eat Wild's state directory of farmers (http://www.eatwild.com/products/index.html). Simply click on your state on the yellow map and read about farmers selling turkeys, other meats, eggs and dairy products from pastured animals in your area.

Interersted in getting your Thanksgiving fixings locally… Don't miss the Indoor **THANKSGIVING MARKET** at the U.S. Cellular Coliseum, 101 South Madison Street, on the last Saturday, Nov. 19 from 10:00 a.m.-2:00 p.m.

SPECIAL EVENT!

America Recycles Day: Mega Recycling Event
November 19, 8:00 a.m.-1:00 p.m.
Hansen Center Parking lot, across from Shirk

IWU Wellness and the Ecology Action Center want to help make recycling easier for you on America Recycles Day. While most families recycle the usual — plastic food containers, glass bottles, newspapers, and such, what about other items?

Well, for one day only, you can recycle 'the other' recyclables ***all in one place, all at the same time.***

Bring us your:

- Electronics
- Compact fluorescent Bulbs (CFLs)
- Household Batteries (alkaline, watch batteries, rechargeable batteries)
- Clothes and textiles (usable or not)
- Shoes (usable or not)
- Plastic Garden Pots

Licensed recyclers will properly recycle all these items. Please DO NOT bring any household hazardous waste items — chemicals, paints, automotive fluids, car batteries, tires, pesticides, fertilizers, etc. These items cannot be accepted at this event but must wait for a future household hazardous waste collection event. If you have any questions about acceptable items or household hazardous waste, please contact the Ecology Action Center at (309) 454-3169.

Is Pollution a Cause of Diabetes?

By Laurine Brown

"Most people have not thought of diabetes as a disease related to environmental exposure. These studies show that it is."

Professor David Carpenter, director of the Institute for Health and the Environment at the University of Albany, New York.

Eat right, exercise, and keep your weight in check. This is the conventional advice given to curb the risk of developing diabetes. But research is suggesting that, while very important, adjusting these lifestyle factors might not be enough, especially with a backdrop of environmental pollution. Health officials warn us that the incidence of diabetes (especially type 2, but also type 1) is increasing at an alarming rate, so understanding the causes are critical. Are environmental toxins contributing? What do we know?

What is Diabetes?

Diabetes includes a cluster of diseases resulting in a person having high blood sugar levels. Complications can be serious, including nerve, kidney and eye damage, greater risks of heart disease, stroke, and premature death. Most people with diabetes (~90-95%) have type 2, which is associated with obesity and increased insulin resistance. It was previously called "adult onset" diabetes, but, disturbingly, now even children as young as 8 years old are being diagnosed with it. Type 1 is an autoimmune disease which was previously called "juvenile diabetes, since it often appears during childhood. Though less common, incidence of type 1 is increasing globally also, especially in children under age 5. Gestational diabetes, a third type, appears during pregnancy, often resolving after childbirth, but it can increase the mother's risk of type 1 or 2 later in life. Nearly 26 million people in the U.S. have diabetes (with one quarter undiagnosed), ranging from an average of 8.3% of the population to a high of 50% on several Arizona Native American reservations. The American Diabetes Association puts the current cost of dealing with diabetes at an astounding $174 billion and this is expected to rise as the epidemic continues.

Clues to Environmental Risks — A Disturbing Pattern Emerging

Risk factors like dietary excess, inactivity, and obesity do not completely explain the epidemic levels of diabetes (specifically type 2). The list of other suspect causes, though preliminary, is growing to include everyday environmental pollutants like *arsenic and cadmium, some pesticides, bisphenol A (BPA) and phthalates, air pollutants, some persistent organic pollutants (POPs; including dioxin and PCBs), flame retardants, and more*. Below are **three lines of evidence** that offer clues (especially for type 2; see www.diabetesandenvironment.org for type 1).

1) Evidence from animal and human studies shows that everyday chemicals can alter body mechanisms involved in blood sugar control. Mechanisms are not clearly understood, but can include *destruction and exhaustion of the insulin-producing pancreatic beta cells, increased insulin resistance, endocrine and metabolic disruption*. Examples from lab, animal and some human studies:

• Low doses of BPA affect glucose tolerance and beta cells and promote insulin resistance. Used in plastic bottles, metal can linings, dental sealants, cash receipts and more, it may cause "epigenetic" changes, meaning it alters the way genes switch on and off, and genetics that can be passed on to the next generation.

• Though specific mechanisms are unknown, most POPs (dioxins, PCBs, etc.) induce a great number and variety of genes, including several that alter insulin action. Studies with dioxin (which concentrates in our food supply, especially meat and dairy) also show it can over-stimulate or impair insulin secretion from beta cells.

• Chemicals thought to mimic estrogen or other hormones (including BPA, PCBs, dioxin, and arsenic) can cause an excess of insulin signaling and secretion, over stimulating beta cells. This may provoke insulin resistance and beta cell exhaustion

2) **Evidence confirms widespread pollution in people of many substances suspected of disrupting blood sugar control.** For over a decade the U.S. CDC has been monitoring the blood and urine of Americans every two years to measure environmental chemical exposure. Though only several hundred of the 80,000 chemicals currently in use are monitored, the results still confirm our nearly universal exposure to common industrial chemicals (see http://www.cdc.gov/exposurereport/). Few of these chemicals are ever tested for health effects. Some disturbing findings: a stunning 93% of Americans had detectable levels of BPA in their urine, though not surprising, since we make 8 million pounds of it annually; also, of critical concern is the ability of chemicals to cross the placenta and influence fetal development — alarmingly, 99-100% of the pregnant women had measurable levels of certain PCBs, organochlorine pesticides, phthalates, polycyclic aromatic hydrocarbons (PAHs) and more in their bodies.

3) **A growing body of research links chemical exposures in people to diabetes (and to risk factors driving diabetes, like obesity, insulin resistance, metabolic syndrome).** Despite bio-monitoring studies documenting widespread "pollution in people" and evidence that chemicals in everyday products may pose potential risks in the development of diabetes, until very recently, surprisingly little research was done investigating these connections. But scientific evidence is now mounting. A few examples:

• A groundbreaking 2006 study found "striking" associations between various "persistent organic pollutants" and diabetes (mostly type 2, but also type 1). *People with high levels of exposure were 38 times more likely to develop diabetes than those with lower exposures*. That's a lot.

• Among studies of occupational exposures, U.S. Air Force personnel in Vietnam who sprayed Agent Orange contaminated with dioxin had elevated rates of diabetes, leading to U.S. government compensation for diabetes in these veterans

• And a study from a contaminated area in Taiwan found that people with the highest levels of exposure to both mercury and other POPS had 11 times the risk of insulin resistance than those with the lowest exposures. A U.S. study (in 2003-4) found that higher urinary concentrations of BPA were associated with diabetes in adults.

• A growing body of research is linking chemical exposures to

— CONTINUED ON BACK PAGE

HEALTH STUFF AND MORE

Learn to love your hot flashes. Turns out they may actually be a good sign. According to a long-running government study women who experience hot flashes, especially early in menopause, have a lower risk for cardiovascular disease and stroke than those who experience them later or not at all.

The research involved more than 60,000 women followed for an average of almost 10 years. It's the first study to examine timing of menopausal symptoms and subsequent risks for heart problems and deaths, said co-author Dr. JoAnn Manson, chief of preventive medicine at Harvard's Brigham and Women's Hospital.

Source: http://journals.lww.com/menopausejournal

Pecans pack a vitamin E punch. Even the most health-conscious among us can't resist a piece of pie at Thanksgiving. Good news, if it's pecan pie that you like, the vitamin E and other antioxidants in this tasty nut can help lower your levels of LDL (bad cholesterol) and reduce your risk of blood vessel blockage. Seems like these pecans can help strike up a healthy balance in this sweet pie equation.

Source: http://www.sciencedaily.com/releases/2006/09/060929093646.htm

Recent research indicates that multivitamin/mineral pills do not help prevent heart disease or prolong lives, according to an 11-year study of nearly 182, 000 residents of California and Hawaii. Research on multivitamins over the years has produced mixed results, but most well-designed studies have not found a benefit. Multivitamins vary greatly, so even if there are benefits (or harms), it would be very hard to know which components are responsible or at what doses.

Source: *University of California, Berkeley Wellness Letter*, November, 2011

IS POLLUTION A CAUSE OF DIABETES? —

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obesity, which is associated as a key risk factor for diabetes. However, a 2009 study reviewed the evidence that a variety of endocrine disrupting contaminants can influence fat formation and obesity. And the groundbreaking 2006 study on POPs and diabetes found, remarkably, that obesity did ***not*** increase the risk of diabetes if those people had very low levels of POPS pollution in their bodies. In an editorial in *The Lancet*, Dr. Miquel Porta writes, *"This finding would imply that virtually* ***all the risk of diabetes conferred by obesity is attributable to persistent organic pollutants****, and that obesity is only a vehicle for such chemicals. This possibility is shocking."*

- An extensive 2011 review by the U.S. National Toxicology Program found "good, qualitative evidence" linking diabetes (and obesity) with POPS, arsenic and maternal smoking, in addition to concerns for other pollutants (like BPA, phthalates, pesticides and more).

Concluding Thoughts

Diabetes is a costly, dangerous, and debilitating disease, which is creating a serious health threat to a growing number of people. Currently lifestyle factors, thought important, don't adequately explain the rising incidence. While evidence is not conclusive, studies on environmental factors suggest many pollutants may be yet another important clue to the rise of this disease and deserve attention. Fortunately, if environmental pollutants are contributing to the rise in diabetes, we can clean them up with hopes of turning the tide on this epidemic.

References available at www.iwu.edu/~wellness, click on Environmental Health, Safer Path