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### Sheri Zidenberg-Cherr, PhD

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Spicing up your daily diet with some red pepper can curb appetite, especially for those who don’t normally eat the popular spice, according to research from Purdue University (1).

“We found that consuming red pepper can help manage appetite and burn more calories after a meal, especially for individuals who do not consume the spice regularly,” said Richard Mattes, distinguished professor of foods and nutrition who collaborated with doctoral student Mary-Jon Ludy. “This finding should be considered a piece of the puzzle because the idea that one small change will reverse the obesity epidemic is simply not true. However, if a number of small changes are added together, they may be meaningful in terms of weight management. Dietary changes that don’t require great effort to implement, like sprinkling red pepper on your meal, may be sustainable and beneficial in the long run, especially when paired with exercise and healthy eating.”

Other studies have found that capsaicin, the component that gives chili peppers their heat, can reduce hunger and increase energy expenditure - burning calories. The amounts tested, however, were not realistic for most people in the U. S. population, Mattes said.

The current study measured the spice's effects using quantities of red pepper - 1 gram or half a teaspoon - that are acceptable for many consumers. Other studies also have looked at consumption via a capsule, but Ludy and Mattes’ study demonstrated that tasting the red pepper may optimize its effects. The findings are published in Physiology & Behavior.

The current study used ordinary dried, ground cayenne red pepper. Cayenne is a chili pepper, which is among the most commonly consumed spices in the world. Most, but not all, chili peppers contain capsaicin.

Twenty-five non-overweight people - 13 who liked spicy food and 12 who did not - participated in the six-week study. The preferred level of pepper for each group was determined in advance, and those who did not like red pepper preferred 0.3 grams compared to regular spice users who preferred 1.8 grams. In general, red pepper consumption did increase core body temperature and burn more calories through natural energy expenditure.

This study found that those who did not consume red pepper regularly experienced a decrease of hunger, especially for fatty, salty and sweet foods. “The appetite responses were different between those who liked red pepper and those who did not, suggesting that when the stimulus is unfamiliar it has a greater effect. Once it becomes familiar to people, it loses its efficacy. The finding that there is a difference between users and non-users is novel and requires further study to determine how long it will be effective and how to adjust the diet to improve continuous effectiveness.”

The failure to account for individual differences in liking the burn of chili peppers may explain why some previous studies varied on capsaicin's impact on appetite suppression and thermogenic response, which is an increase in body heat produced when digesting food.

Mattes said the findings also show that red pepper should be consumed in non-capsule form because the taste - the sensory experience - maximizes the digestive process.

"That burn in your mouth is responsible for that effect," he said.
Red Pepper (Continued from page 2)

“It turns out you get a more robust effect if you include the sensory part because the burn contributes to a rise in body temperature, energy expenditure and appetite control.”

Mattes, who specializes in taste and directs Purdue’s Ingestive Behavior Research Center, studies the role taste plays in feeding and digestion.

“Taste works on two very different levels,” he said. “First, it determines the palatability of foods, and that influences food choice. Second, it influences physiology, so it alters how you digest foods and the efficiency with which you absorb the nutrients from them and use them throughout the body.”

Reference:


A Dose of Safflower Oil Each Day Might Help Keep Heart Disease at Bay

A daily dose of safflower oil, a common cooking oil, for 16 weeks can improve such health measures as good cholesterol, blood sugar, insulin sensitivity and inflammation in obese post-menopausal women who have Type 2 diabetes, according to new research (1).

This finding comes about 18 months after the same researchers discovered that safflower oil reduced abdominal fat and increased muscle tissue in this group of women after 16 weeks of daily supplementation (2).

This combination of health measures that are improved by the safflower oil is associated with metabolic syndrome, a cluster of symptoms that can increase risk for cardiovascular disease and diabetes.

These new findings have led the chief researcher to suggest that a daily dose of safflower oil in the diet – about 1 2/3 teaspoons – is a safe way to help reduce cardiovascular disease risk.

“The women in the study didn’t replace what was in their diet with safflower oil. They added it to what they were already doing. And that says to me that certain people need a little more of this type of good fat – particularly when they’re obese women who already have diabetes,” said Martha Belury, professor of human nutrition at Ohio State University and lead author of the study.

“I believe these findings suggest that people consciously make sure they get a serving of healthy oil in their diets each day– maybe an oil and vinegar dressing on a salad, or some oil for cooking. And this recommendation can be extended to everyone.”

Safflower oil contains linoleic acid, which is a PUFA -- a polyunsaturated fatty acid. Research dating back to the 1960s has suggested that these dietary oils from plant sources can help prevent heart disease, said Belury, who holds the Carol S. Kennedy professorship in nutrition. But attention to these fats has declined as omega-3 fish oils have gained popularity among consumers, she said.

“The health benefits of omega-3 PUFAs seem convincing, but I think there’s also a place for omega-6 PUFAs. 

(Continued on page 4)
We’ve known for a long time that polyunsaturated oils are very beneficial for cardiovascular disease prevention, and these data we are adding now show that these oils can also help with other aspects of metabolic syndrome, including even glycemic control,” Belury said. “We suspect it could be through a mechanism that is not yet identified.”

In the first study, published in September 2009, Belury and colleagues had compared the effects of safflower oil and conjugated linoleic acid (CLA), a compound naturally found in some meat and dairy products, on obese postmenopausal women with Type 2 diabetes (2). CLA had a reputation from previous studies for contributing to weight loss. Safflower oil’s association with reduced abdominal fat took the researchers by surprise.

For this current research, the scientists performed a secondary analysis of data collected from that clinical trial, applying a powerful statistical analysis to the results and also checking to see how long it took for any effects of the oils to appear in the women’s health profiles. The scientists had taken blood samples every four weeks during the study to obtain these measures.

In almost all cases in this analysis, safflower oil supplementation improved metabolic measures while CLA did not show any effects for glycemic or lipid control. Sixteen weeks of CLA supplementation did reduce total body fat and lowered the women’s body mass index (BMI), a common health measure of weight relative to height.

Several of the beneficial effects of safflower oil were evident after 16 weeks of supplementation. On average among all of the women tested, these included:

• An increase in insulin sensitivity of about 2.7 percent as measured by a formula known as the quantitative insulin-sensitivity check index. Higher insulin sensitivity is important for the transfer of sugar, or glucose, from the blood into the tissues, where it is used for energy. Insulin resistance, or lowered insulin sensitivity, is the hallmark of Type 2 diabetes.

• A small, but significant, .64 percent decrease in a blood protein called HbA1C, which is a marker of long-term presence of excess glucose in the blood.

• A roughly 17.5 percent decrease in C-reactive protein, a protein in the blood that rises in the presence of inflammation. A growing body of research suggests that high levels of this protein increase the risk for a heart attack.

• The researchers had documented in the previous study that safflower oil also lowered fasting blood sugar levels by between 11 and 19 points on average. Blood sugar is considered normal if it falls below 110 milligrams per deciliter; the women’s average blood sugar levels ranged from 129 to 148 after 16 weeks of safflower oil supplementation.

Within 12 weeks, the safflower oil led to a 14 percent increase in HDL, or “good,” cholesterol, as well as an increase in adiponectin, a hormone that regulates levels of blood sugar and fats and which influences insulin levels. Higher levels of adiponectin could be expected to increase the efficiency of dietary fat burning, Belury said.

People with metabolic syndrome generally have three or more of the following conditions: excess fat in the abdominal area, borderline or high blood pressure, cholesterol problems that foster plaque buildup in arteries, insulin resistance or glucose intolerance and a high level of triglycerides, a form of fat in the blood.

(Continued on page 5)
At the start of the study, the women were obese and had Type 2 diabetes, low HDL cholesterol and high levels of C-reactive protein and the HbA1c protein. Though in many cases their health measures were still high or low enough at the end of the study to leave them at increased risk for heart disease, Belury said the safflower oil could function as a complementary intervention in combination with medications used to control their disorders.

“We don’t know the long-term effects of safflower oil from this study alone, but I certainly think it’s possible that the risk for cardiovascular problems could be significantly decreased in this high-risk group if supplementation were continued,” Belury said.

She noted that the total dose of dietary oils the women took between their normal diets and the safflower oil supplementation amounted to 9.8 percent of their daily calories – a level that falls within federal guidelines for vegetable oil consumption. The women had been instructed not to change their diets during the study, and self-reports of their food intake showed that their eating habits did not change while they were taking the supplements.

“A small change in eating behavior to alter the fatty acid content of the diet might improve metabolic measures in people already consuming what is considered to be an adequate amount of dietary linoleic acid,” Belury said. “What is needed in our diet is PUFAs to help with cardiovascular disease, the No. 1 killer of men and women in this country.”

Reference:


**Gardening Linked to Increased Vegetable Consumption in Older Adults**

New research from Texas A&M University and Texas State University found that older adults who participate in gardening may be more likely to eat their veggies (1). The report, published in *HortTechnology*, presents the results of an online survey of adults aged 50+ and includes recommendations for promoting gardening “intervention” programs to older adults.

According to researchers Aime Sommerfeld, Amy McFarland, Tina Waliczek, and Jayne Zajicek, studies have shown that poor nutrition is one of several factors responsible for mortality and morbidity in the elderly and is comparable to deaths caused from cigarette smoking. “Although older adults tend to report a higher intake of fruit and vegetables than other age groups, over half of the U.S. older population does not meet the recommendation of five daily servings of fruit and vegetables.”

(Continued on page 6)
They added that several previous research studies confirmed that gardening is one way to increase individuals' fruit and vegetable intake.

The objectives of the study were to examine and compare fruit and vegetable consumption of gardeners and nongardeners, and to investigate differences in fruit and vegetable consumption of long-term gardeners compared with newer gardeners. To collect the information, an online survey was posted on a website for one month; 261 questionnaires were completed by adults aged 50 years and older.

“Our results support previous studies that indicated gardeners were more likely to consume vegetables when compared with nongardeners. Interestingly, these results were not found with regard to fruit consumption”, stated Waliczek, corresponding author of the study. The responses also showed that the length of time an individual reported having participated in gardening activities seemed to have no relationship to the number of vegetables and fruits they reportedly consumed. “This suggests that gardening intervention programs late in life would be an effective method of boosting vegetable and fruit consumption in older adults.”

The number of hours per week individuals spent gardening did not appear to be a factor in vegetable and fruit consumption; the researchers observed that this indicates that even older adults with limited time or abilities—those who spend less time gardening—may consume greater quantities of vegetables and fruits than their nongardening counterparts. Finally, the survey results showed that a person's reason for gardening had no relationship with the quantity of vegetables and fruit consumed, implying that programs designed to encourage older adults to participate in gardening need not exclusively promote the health benefits derived from gardening, but may appeal to a range of personal motives.

Reference:


**USDA Expands Access to Fresh Fruits and Vegetables for Schools Across the Nation**

Agriculture Secretary Tom Vilsack announced that, as authorized by the Food, Conservation and Energy Act of 2008 (2008 Farm Bill), USDA will expand assistance to state agencies for schools operating USDA’s Fresh Fruit and Vegetable Program (FFVP) in the 2011/2012 school year. The investment is part of the Obama administration’s efforts to improve the health of our children by providing access to nutritious meals in schools and also serves as a valuable resource to schools that continue working to improve the health and nutrition of the foods they serve. The assistance will provide free fresh fruit and vegetables to children throughout the school day.

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The new school meal requirements will increase the amount of fruit and vegetables served at breakfast and lunch.

"Improving the health and nutrition of our kids is a national imperative and by providing schools with fresh fruits and vegetables that expand their healthy options, we are helping our kids to have a brighter, healthier future," said Vilsack. "Every time our kids eat a piece of fruit or a vegetable, they are learning healthy eating habits that can last a lifetime."

The Fresh Fruit and Vegetable Program, authorized and funded under Section 19 of the Richard B. Russell National School Lunch Act and expanded in recent years as a result of the 2008 Farm Bill, operates in selected low-income elementary schools in the 50 States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands. This year, USDA plans to provide $158 million in assistance to state agencies. States then select schools to participate based on criteria in the law, including the requirement that each student receives between $50 and $75 worth of fresh produce over the school year.

"The program is highly successful in introducing schoolchildren to a variety of produce they otherwise might not have the opportunity to try," said Kevin Concannon, USDA Under Secretary for Food, Nutrition and Consumer Services. "I am pleasantly surprised when children tell me it was their first time trying a particular fruit or vegetable. Fortunately children are learning fruits and vegetables are healthy choices and tasty alternatives to snacks high in fat, sugar, or salt."

In January, USDA published a proposed rule to update the nutrition standards for meals served through the National School Lunch and School Breakfast programs as part of the Healthy, Hunger-Free Kids Act of 2010, signed into law by President Barack Obama. The proposed rule, based on the latest science, will make the first major improvement to the nutritional quality of school meals in 15 years, and is an important component of First Lady Michelle Obama’s Let’s Move! initiative to solve the challenge of childhood obesity within a generation. The standards will significantly increase fruit and vegetables provided at lunch and for the first time, both fruits and vegetables will be served daily.

Depending on enrollment and the allotment spent on each child, USDA estimates the expanded assistance could help schools serve additional 600,000 to 950,000 students in school year 2011-2012.

Improving child nutrition is the focal point of the Healthy, Hunger-Free Kids Act signed by President Obama in December 2010. The legislation authorizes USDA’s child nutrition programs, including the National School Lunch, School Breakfast, Summer Food Service Program, and the Special Supplemental Nutrition Program for Women, Infants and Children. The Act allows USDA, for the first time in over 30 years, the chance to make real reforms to the school lunch and breakfast programs by improving the critical nutrition and hunger safety net for millions of children, and help a new generation win the future by having healthier lives. The Healthy, Hunger-Free Kids Act is the legislative centerpiece of First Lady Michelle Obama’s Let’s Move! Initiative to end childhood obesity in a generation.

**Use of Interactive Digital Exercise Games by Children Can Result in High Level of Energy Expenditure**

Middle school-aged children who participated in interactive digital gaming activities that feature player movement (exergaming), such as dancing or boxing, increased their energy expenditure to a level of moderate or vigorous intensity, according to a report in the *Archives of Pediatrics & Adolescent Medicine* (1).

"The prevalence of overweight children and adolescents has increased drastically over the past several decades. This increase is troubling given the potential for numerous adverse health implications," according to background information in the article. The positive and prevailing relationship between obesity and sedentary behavior among children has been well documented, with a common sedentary behavior being screen time, which includes activities such as watching television or videos, using a computer, surfing the Internet, and playing video games. There has recently been increased interest in activity-promoting video gaming or video games that require physical movement and feature player movement such as would occur in "real-life" exercise participation.

"Active video games have the potential to increase energy expenditure during otherwise sedentary video gaming and may provide a viable adjunct to more traditional exercise," the authors write. "The potential of these games to promote fitness and extended periods of moderate to vigorous activity in normal and overweight youth has not been evaluated."

Bruce W. Bailey, Ph.D., of Brigham Young University, Provo, Utah, and Kyle McInnis, Sc.D., of the University of Massachusetts, Boston, conducted a study to evaluate the potential effect of 6 forms of exergaming (3 commercial products and 3 consumer products) on energy expenditure in children of various body mass indexes (BMIs). The study included 39 boys and girls (average age, 11.5 years). In addition to treadmill walking at 3 miles per hour, energy expenditure of the following exergames were assessed for 10 minutes: Dance Dance Revolution, LightSpace (Bug Invasion), Nintendo Wii (Boxing), Cybex Trazer (Goalie Wars), Sportwall, and Xavix (J-Mat). Participants were given 5 minutes of seated rest between each activity.

The researchers found that all forms of interactive gaming evaluated in the study significantly increased energy expenditure above rest, with no between-group differences among normal (BMI less than 85th percentile) and "at-risk" or overweight (BMI 85th percentile or greater) children. Walking at 3 miles per hour resulted in an average metabolic equivalent task value (determined by dividing relative energy expenditure for each activity by a certain figure) of 4.9, whereas the intensity of exergaming resulted in an average metabolic equivalent task values of 4.2 for Wii, 5.4 for Dance Dance Revolution, 6.4 for LightSpace, 7.0 for Xavix, 5.9 for Cybex Trazer, and 7.1 for Sportwall. The researchers note that this level of intensity is consistent with current physical activity recommendations for children.

Enjoyment of the games was generally high, but overall, children at risk of becoming overweight or who were overweight enjoyed the exergames to a greater extent than did children with a BMI below the 85th percentile.

"Although exergaming is most likely not the solution to the epidemic of reduced physical activity in children, it appears to be a potentially innovative strategy that can be used to reduce sedentary time, increase adherence to exercise programs, and promote enjoyment of physical activity."
Media Character Use on Food Packaging Appears to Influence Children’s Taste Assessment

The use of media characters on cereal packaging may influence children’s opinions about taste, according to a report in the March issue of Archives of Pediatrics & Adolescent Medicine (1).

“The use of trade (e.g. Ronald McDonald) and licensed (e.g. Shrek) spokescharacters is a popular marketing practice in child-directed products because the presence of these figures helps children identify and remember the associated product,” the authors write as background information in the article.

Because children remember nonverbal representations more easily than verbal descriptions, a visual cue such as a character or logo, may help them remember information presented in an advertisement.

Matthew A. Lapierre, M.A., and colleagues at the University of Pennsylvania, Philadelphia, evaluated 80 children between the ages of 4 and 6 years (average age 5.6 years), to determine if using a licensed spokescharacter on food packaging affected children’s taste assessment of the cereal. Children were shown boxes of cereal labeled either Healthy Bits or Sugar Bits, with some boxes featuring media characters and some without. Having seen only the box, participants were asked to rate the taste of the cereal on a scale of one to five.

Almost all the children reported liking the cereal, however those who saw a popular media character on the box reported liking the cereal more than those who viewed a box without a character on it. Additionally, those who sampled the cereal named Healthy Bits reported enjoying the cereal more than children who were given the same cereal under the name Sugar Bits. Children receiving the cereal with the name Sugar Bits in a box with no characters on it reported being significantly less satisfied with the taste than those in the other three groups. No significant differences were found among children in the Healthy Bits group based on the presence or absence of characters on the box.

“The results of this experiment provide evidence that the use of popular characters on food products affects children’s assessment of taste,” the authors conclude. "Messages encouraging healthy eating may resonate with young children, but the presence of licensed characters on packaging potentially overrides children’s assessments of nutritional merit."
Quality of Parent-Toddler Relationships Could Affect Risk for Childhood Obesity

Toddlers who do not have a secure emotional relationship with their parents, and particularly their mothers, could be at increased risk for obesity by age 4½, according to new research.

The study suggests that children at age 24 months who show insecure attachment patterns have at least 30 percent higher odds for obesity by age 4½.

The association persisted even after researchers accounted for other family-related factors that could provide alternative explanations for the children’s obesity.

Psychologists describe securely attached children as those who rely on their parents as a “safe haven,” which allows them to explore their environments freely, adapt easily to new people and be comforted in stressful situations. Toddlers who are insecurely attached tend to have experienced negative or unpredictable parenting, and may respond to stress with extreme anger, fear or anxiety, or avoid or refuse interactions with others.

“A novel approach to preventing obesity is to help children develop healthy ways to regulate their emotions and behaviors when they encounter psychological stress,” Anderson said.

The findings suggest that overlapping regulatory areas of the brain that govern emotional and stress responses, as well as control appetite and energy balance, could provide a stronger influence than previously thought on the likelihood that a young child will be obese.

“I hope this work can help to broaden our thinking about the causes of childhood obesity,” said Sarah Anderson, assistant professor of epidemiology at Ohio State University and lead author of the study.

“Our hypothesis is that secure attachment could reduce the risk for childhood obesity by preventing frequent or exaggerated stress responses from disrupting the normal functioning and development of the systems that affect energy balance and body weight. Children’s stress responses and emotion regulation are formed in early childhood in the context of parent-child interactions, and one indicator that the child has developed healthy emotion regulation and stress response is secure attachment.”

Anderson co-authored the paper with Robert Whitaker, professor of public health and pediatrics at Temple University.

The research is published in a recent issue of the journal *Archives of Pediatrics & Adolescent Medicine*.

Anderson and Whitaker analyzed data collected on children who were born in the United States in 2001. Thousands of children were assessed at age 24 months and evaluated again at 4 ½ years for the Early Childhood Longitudinal Study, Birth Cohort, a study conducted by the National Center for Education Statistics to provide information about learning environments, health and development of young U.S. children. A total of 6,650 children were included in the analytical sample for this work.

(Continued on page 11)
 Toddler (Continued from page 10)

During the assessment when the children were 24 months old, trained research staff spent about two hours observing and evaluating the child and mother in their home. They rated how closely 45 specific behaviors applied to the child. Among the behaviors they documented: whether the children sought and enjoyed being hugged by their mothers, and whether crying children could be comforted by contact with their mothers.

From these evaluations, the observers gave each child an attachment security score. For the study, Anderson and Whitaker classified children in the lowest quartile of scores as insecurely attached.

Anderson and Whitaker also calculated the body mass index (BMI) of the children at age 4 ½ using the measured heights and weights of the children. BMI measurements were converted into percentiles for age and sex based on growth charts developed by the Centers for Disease Control and Prevention. For this study, children were considered obese if their BMI scores were at or above the 95th percentile on those charts.

The researchers examined other issues from the same national data set that might also explain the increased risk for obesity, including how responsive the mothers were to their children and how engaged the children were with their mothers. Also explored were a variety of parenting practices related to eating habits and household routines, various measures associated with the mothers’ health, and several sociodemographic characteristics.

The addition of each factor had a slight effect on the relationship between attachment security and later obesity. But when all of the factors were included together, there remained a clear association between the security score and later obesity: a 30 percent increased risk for obesity in children who were insecurely attached at age 24 months.

“We adjusted for other variables because they could offer alternative explanations for an association between insecure attachment and obesity, but it is also possible that some of these variables could be part of the causal pathway between attachment security at 24 months and the child’s weight status at age 4 ½,” Anderson said. “Even after adjusting for all of those things, there remained a statistically significant 30 percent increased odds for obesity among the children who were less securely attached.”

Looking at only those two variables – the attachment security score and obesity – the researchers found that insecurely attached toddlers had 48 percent higher odds of being obese at age 4 ½. The prevalence of obesity was 23.1 percent in children with insecure attachment and 16.6 percent in children with secure attachment, according to the analysis.

Anderson is studying additional ways in which early development might be connected to childhood obesity, and believes the complicated relationship likely has origins in the brain, and particularly areas of the brain that control responses to stress. Those same areas, contained in the limbic system, also control the sleep/wake cycle, hunger and thirst, and a variety of metabolic processes, mostly through the regulation of hormones.

Obesity may be one manifestation of dysregulation in the functioning of the stress response system, Anderson said, adding that that likelihood, coupled with these latest findings, suggests that there is more to preventing childhood obesity than focusing on food intake and exercise.

(Continued with references on page 12)
International Study Finds New Link Between Mother’s Pregnancy Diet and Offspring’s Chances of Obesity

Scientists have discovered that a mother’s nutrition during pregnancy can strongly influence her child’s risk of obesity many years later (1).

An international study, led by University of Southampton researchers and including teams from New Zealand and Singapore, has shown for the first time that during pregnancy, a mother’s diet can alter the function of her child’s DNA. The process, called epigenetic change, can lead to her child tending to lay down more fat. Importantly, the study shows that this effect acts independently of how fat or thin the mother is and of child’s weight at birth.

Keith Godfrey, Professor of Epidemiology and Human Development at the University of Southampton, who led the study, says: “We have shown for the first time that susceptibility to obesity cannot simply be attributed to the combination of our genes and our lifestyle, but can be triggered by influences on a baby’s development in the womb.”

Researchers measured epigenetic changes in nearly 300 children at birth and showed that these strongly predicted the degree of obesity at six or nine years of age. What was surprising to the researchers was the size of the effect – children vary in how fat they are, but measurement of the epigenetic change at birth allowed the researchers to predict 25 per cent of this variation.

The epigenetic changes, which alter the function of our DNA without changing the actual DNA sequence inherited from the mother and father, can also influence how a person responds to lifestyle factors such as diet or exercise for many years to come.

“This study indicates that measures to prevent childhood obesity should be targeted on improving a mother’s nutrition and her baby’s development in the womb. These powerful new epigenetic measurements might prove useful in monitoring the health of the child,” adds Professor Godfrey.

Mark Hanson, British Heart Foundation Professor and Director of the University of Southampton’s Human Development and Health Unit and one of the research team explains: “This study provides compelling evidence that epigenetic changes, at least in part, explain the link between a poor start to life and later disease risk. It strengthens the case for all women of reproductive age having greater access to nutritional, education and lifestyle support to improve the health of the next generation, and to reduce the risk of the conditions such as diabetes and heart disease which often follow obesity.”

(Continued on page 13)
A mother’s diet during pregnancy may impact her child’s risk of becoming overweight or obese many years later.

Research team member Sir Peter Gluckman FRS of the Liggins Institute at the University of Auckland and the Singapore Institute of Clinical Sciences comments: “This study provides the most compelling evidence yet that just focusing on interventions in adult life will not reverse the epidemic of chronic diseases, not only in developed societies but in low socio-economic populations too.”

The study team are part of an international consortium involving the Universities of Southampton and Singapore, the Singapore Institute for Clinical Sciences, the Liggins Institute of the University of Auckland, AgResearch New Zealand and the Medical Research Council Lifecourse Epidemiology Unit, University of Southampton.

Professor Cyrus Cooper, who directs the MRC Lifecourse Epidemiology Unit, says: “MRC population-based studies have shown that early life factors influence risk of disease many years later. Now we can begin to see the mechanisms by which this happens, opening up new avenues for medical research and interventions.”

Reference:


**Treating High Blood Pressure, Cholesterol, Diabetes May Lower Risk of Alzheimer’s Disease**

Treating high blood pressure, high cholesterol, diabetes and other vascular risk factors may help lower the risk of Alzheimer’s disease in people who already show signs of declining thinking skills or memory problems (1).

Researchers followed 837 people with mild cognitive impairment, the stage of memory loss that often leads to Alzheimer’s disease. Of the group, 414 had at least one vascular risk factor. Participants were given blood tests and a medical history questionnaire and also underwent other tests that measured blood pressure, body mass, memory and thinking skills.

Participants who had vascular risk factors were placed into three groups: those with no risk factors treated, those with some risk factors treated and those with all risk factors treated. Treatment of risk factors included using high blood pressure medicines, insulin, cholesterol-lowering drugs and diet control. Smoking and drinking were considered treated if the person stopped smoking or drinking at the start of the study.

After five years, 298 people developed Alzheimer’s disease. The others still had mild cognitive impairment. People with risk factors such as high blood pressure, diabetes, cerebrovascular disease and high cholesterol were two times more likely to develop Alzheimer’s disease than those without vascular risk factors. A total of 52 percent of those with risk factors developed Alzheimer’s disease, compared to 36 percent of those with no risk factors.

Of those with vascular risk factors, people who were receiving full treatment were 39 percent less likely to develop Alzheimer’s disease than those receiving no treatment.

"Of those with vascular risk factors, people who were receiving full treatment were 39 percent less likely to develop Alzheimer’s disease than those receiving no treatment.”

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Alzheimer Disease (Continued from page 13)

Those receiving some treatments were 26 percent less likely to develop the disease compared to people who did not receive any treatment.

“Although this was not a controlled trial, patients who were treated for their high blood pressure, high cholesterol, heart disease and diabetes had less progression of their memory or thinking impairment and were less likely to develop dementia,” said study author Yan-Jiang Wang, MD, PhD, with the Third Military Medical University in Chongqing, China.

Reference:


FDA Issues Proposed Rules Nutrition Labeling in Restaurants and Calorie Labeling of Food in Vending Machines

The U. S. Food and Drug Administration (FDA) published two proposed rules that address implementation of the menu labeling provisions of the Patient Protection and Affordable Care Act of 2010. The proposed rules are entitled "Food labeling: Nutrition labeling of standard menu items in restaurants and similar retail food establishments," and "Food labeling: Calorie labeling of articles of food in vending machines."

Section 4205 of the Affordable Care Act, which was signed into law on March 23, 2010, amends the Federal Food, Drug and Cosmetic Act to, among other things, require restaurants and similar retail food establishments that are part of a chain with 20 or more locations doing business under the same name and offering for sale substantially the same menu items to provide calorie information for the articles of food sold from them. Under the Affordable Care Act, FDA is required to promulgate proposed regulations within a year of the date of the law’s enactment.

Full text of the proposed rules can be found at:

For more information on Menu and Vending Machines Labeling, visit http://www.fda.gov/MenuLabeling.

[Online Source]: FDA News and Events. May 1, 2010; http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm210448.htm
Resource:

**FDA Launches Consumer-friendly Web Search for Consumers During Recalls**

Consumers can search for food and other product recalls easier and quicker on FDA’s website than previously. The FDA Food Safety Modernization Act (FSMA) signed into law in January by President Obama called for a more consumer-friendly recall search engine.

To provide greater ease of use for consumers, the search results provide data from news releases and other recall announcements in the form of a table. That table organizes information from news releases on recalls since 2009 by date, product brand name, product description, reason for the recall and the recalling firm.

The table also provides a link to the news release on each recall for more detailed information. The news releases were chosen as the source of information for the table because they provide the most up-to-date and user-friendly information about any recall.

The new display of the search results is markedly different from the previous display, which provided links in a scroll-down format.

Under FSMA, FDA was required to provide a consumer-friendly recall search engine within 90 days after the law went into effect. Further, for recalls conducted under FSMA, it requires FDA to indicate whether the recall is ongoing or completed. Prior to passage of FSMA, FDA did not have mandatory recall authority for food and feed products other than infant formula.

“Recalls, mandatory or otherwise, are serious and we must do everything possible to make it easier for people to know about these recalls so they can take all appropriate steps to protect themselves and their families,” said Mike Taylor, FDA Deputy Commissioner for Foods. “We encourage people to check out our new recalls search page for themselves, and use it whenever they have a question about a recall.”

Per the requirements of the FSMA, for certain recalls the search results will also provide status information on whether the recall is completed or on-going. The status information will be provided for those recalls for which FDA either ordered a mandatory recall or provided the opportunity for a voluntary recall under FDA’s FSMA authority.

“The new search page not only provides consumers with an easy-to-read table of information on products they are searching for, it also represents the delivery of one of the first major actions called for under the Food Safety Modernization Act,” said Mike Taylor. "That delivery is on time and right on target, and we appreciate the involvement of stakeholders."

Prior to launching the new Web search, the FDA consulted with stakeholder groups, including the Center for Science in the Public Interest, Consumers Union, Food Marketing Institute, Grocery Manufacturers Association, the Pew Health Group, and Safe Tables Our Priority to gain their insights on how to most effectively and easily communicate recall information to consumers.

“We welcome the suggestions of those with first-hand experience in communicating information to consumers about food recalls, said Taylor. "We intend to continue to reach out to stakeholders as we make additional improvements in sharing recall information.”

For more information, visit the FDA Recalls & Safety Alerts page (http://www.fda.gov/Safety/Recalls/default.htm)

Source: FDA Newsroom; Apr. 4, 2011; http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm249437.htm
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