

The Communicator

February 2012

Interim Director

- 1 Greetings
- 1 Call for Proposals
- 1 Home Economics: It's Cool Again
- 2 The Miracle of Spandex

Food Safety

- 3 *Healthy Baby, Healthy Me*, a New Safe Food Handling Curriculum for Pregnant Women
- 4 Annual Cost of Foodborne Illness Revised

Family Development

- 5 Religious and Civic Engagement in America

Nutrition Education

Do You Eat like MyPlate? Probably Not
Color and Variety Influence Food Preferences
Mental Decline May Start Earlier
A High Calorie, Low-Protein Diet Causes Weight Gain and Loss in Lean Body Mass

Greetings

We are pretty well thawed out from our huge storm of ten days ago. We are grateful for the heated side-walks and we find it interesting that along Nez Perce Drive, it is the sororities that shoveled their sidewalks, but only a few of the fraternities shoveled theirs. Hmmm. Still the days are getting longer and the sun has been a frequent visitor.

Call for Proposals

It is that time of year again! Consider submitting a proposal for the **Mildred Haberly** and **Marion Hepworth** Extension Endowment Awards. The Haberly Endowment may be used to cover expenses incurred to take or attend a seminar, conference, workshop, short course, or to purchase educational, illustrative or audiovisual materials. Awards may be up to \$3,000.

The \$500 Hepworth Scholar Endowment may be used to cover expenses incurred (e.g. registration, fees, tuition, books, travel) toward taking an academic course, intensive training, certification training, or obtaining a qualifying certificate.

Both application packets are available on the FCS website under Faculty Resources:

<http://www.uidaho.edu/cals/fcs/resources>. Proposals are **due March 1** and notifications will be sent around April 1 (which is a Sunday).

Please note: We have returned to only one call per year, and this is it. Funds become available July 1, though travel authorizations can be submitted and travel plans made prior to July 1. Funds must be used within the fiscal year. Eligibility for the upcoming year hinges on the completion of a follow-up report if funding was awarded the previous year.

I like printing your reports in *The Communicator* so others gain inspiration from your work.



Interim Director



Sandra Evenson
Family and Consumer Sciences
University of Idaho
PO Box 443183
Moscow, ID 83844-3183
sevenson@uidaho.edu

Home Economics: It's Cool Again

From February 27 to 28, 2012, the University of Georgia Center for Continuing Education is hosting a conference titled *Home Economics: Classroom, Corporate, and Cultural Interpretation Revisited*.

A multi-disciplinary **state-of-the-art** conference, ***Home Economics: Classroom, Corporate, and Cultural Interpretations Revisited***, explores the origins of the field, its cultural context and changes throughout the 20th century, and its re-emergence as a field prepared to address the crises facing today's families. Scholars from history, women's studies, and family and consumer sciences will address gender and racial issues, academic programs, career paths, and how the core concepts in the history of home economics provide imperatives for the future.

There are many well-known speakers in the fields, including **Sharon Nickols**, **Jan Scholl**, and **Megan Elias** (author of *Sir It Up: Home Economics in American Culture*, which I profiled in an earlier edition of *The Communicator*).

Here is the link to find out more:

<http://www.georgiacenter.uga.edu/cch/register/home-economics-classroom-corporate-and-cultural-interpretations-revisited>

You might recall that our very own **Linda Fox** is now Dean of the College of Family and Consumer Sciences at the University of Georgia.

The Miracle of Spandex

When was the last time you wore a pair of jeans without at least some spandex in the fiber content? It has probably been awhile, since it seems as if life itself would now be impossible without spandex.

What is spandex? Spandex was introduced in 1958 as the first manufactured elastic. Prior to this, rubber was the main type of elastic, which didn't dye well and lost elasticity over time. The diameter of the fiber can be extremely fine, for use in hosiery, to quite coarse, for swimwear and foundation garments, and everything in between.



Today, the real magic of spandex is its use in woven garments, particularly shirts and blouses, dress suits, and jeans. In woven garments spandex serves two purposes. First, it adds a bit of "give" so that structured professional dress is more comfortable and doesn't stretch out at elbows and knees. Second, spandex adds wrinkle-resistance. Just 1-2 percent spandex in the fiber content is enough to improve the overall comfort and aesthetic durability of a garment.

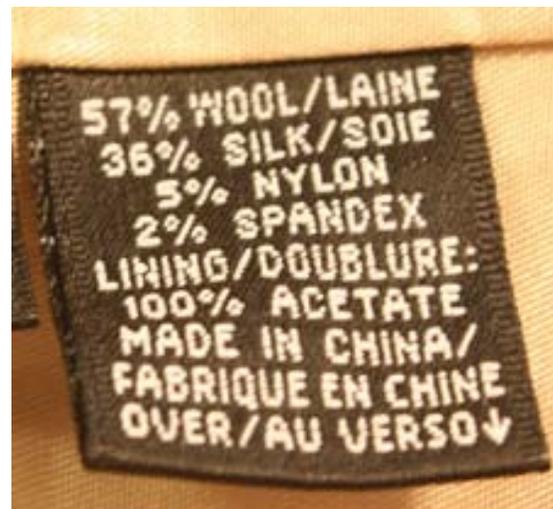
Of course, spandex can also be the source of a glamour-don't: Sometimes people don't know that the garment size label is an arbitrary number and

that the dimensions associated with that size vary from brand to brand. They think that wearing a smaller size really tight will make them look smaller. In fact, the abuse of spandex only emphasizes the curves we might not be so happy with.

By contrast, there are *Not Your Daughter's Jeans*® and Spanx® body shapers, which improve fit in all the right places and enhance the human form. The source of the success of these products is a trade secret, but a lot has to do with the judicious engineering of spandex, as well as cuts designed for the mid-life body. Likewise, Speedos and performance athletic gear.

The term spandex has also become synonymous with form-fitting athletic shorts, most commonly seen on the volleyball court. Teen girls use them in place of slips and under other garments to add opacity, coverage, and ease of donning and doffing.

In any case, spandex is durable, resilient, and easy to care for. Check out the fiber content labels in your clothes. For both men and women, spandex is the miracle fiber.



Healthy Baby, Healthy Me, a New Safe Food Handling Curriculum for Pregnant Women

Researchers and educators at The Ohio State University and at Colorado State University have recently published *Healthy Baby, Healthy Me*, a free, downloadable (<http://foodsafety.osu.edu/curriculum/hbhm>) curriculum, in English and Spanish, that includes four lesson plans, slides that can be projected or used as flip charts, handouts, a teacher's guide, and evaluation forms, and marketing materials.

The project leaders noted that "most pregnant women don't think of themselves as being at greater risk for foodborne illness during pregnancy. But, because they are naturally immune-suppressed, they are more at risk for foodborne illnesses than other adults." In their research, they found that most pregnant women never made the connection between food safety and the health of the baby.

The four lessons focus on four pathogens of special concern for pregnant women: *Listeria monocytogenes*, *Toxoplasma gondii*, *Salmonella*, and *Campylobacter*. These pathogens can infect not only the women, but can affect the unborn child, causing possible abortion, miscarriage, stillbirth, or physical or mental health issues at birth. The lessons include information on the pathogens of concern, foods most associated with these pathogens, and what the women can do to reduce their risk and protect the health of their babies.

The researchers tested the efficacy of the curriculum with pregnant women attending classes offered by Extension in Ohio and in Colorado, collecting pre- and post-program data from 546 pregnant women.

The curriculum is designed to be taught in a classroom or clinic setting, but because the lessons and handouts available for free download on the website, the information is also directly available to pregnant women.

Curriculum components:

- **Teacher's Guide** provides extensive background information about all four lessons.



Food Safety

Sandra M. McCurdy
Food Safety Specialist
Family and Consumer Sciences
University of Idaho
PO Box 443183
Moscow, ID 83844-3183
smccurdy@uidaho.edu



- **Program Survey** for the educators to see how well participants are understanding the content.
- **Certificate of Completion**
- **Lesson 1: *Listeria monocytogenes*.** (Each lesson has a Lesson Plan, PowerPoint slides, handouts, and two have YouTube videos.) This lesson helps pregnant women understand why they are at increased risk for foodborne illness. It teaches pregnant women to identify which foods are most likely contaminated with *Listeria monocytogenes* and how to avoid these foods.
- **Lesson 2: *Toxoplasma gondii*.** Provides information about *Toxoplasma gondii* and how to prevent an infection by this parasite, with particular emphasis on cleaning and sanitizing.
- **Lesson 3: *Salmonella*.** Participants interact with the educator to identify which fruits and vegetables could be contaminated with *Salmonella* and discuss how to avoid making hazardous selections.
- **Lesson 4: *Campylobacter*.** This lesson deals extensively with using thermometers (a topic dear to me ☺) to take the temperatures of cooked foods to prevent *Campylobacter* infection. The only issue I have with this curriculum is that for the Recommended Safe Minimum Internal Temperatures shown on slide #33 (copied below), the hold time information is not in line with FSIS recommendations. The slide should be corrected to indicate that the hold time for steak and roasts is 3 minutes and there

are no hold times for other items,
http://www.fsis.usda.gov/Factsheets/Keep_Food_Safe_Food_Safety_Basics/index.asp#5.

RECOMMENDED SAFE MINIMUM INTERNAL TEMPERATURES

Food items should be cooked to the recommended internal temperatures listed and held for the number of seconds or minutes listed

	Temperature	Hold
Beef, Veal and Lamb Steaks & Roasts	145 °F (63 °C)	4 min.
Fish	145 °F (63 °C)	15 sec.
Eggs	145 °F (63 °C)	15 sec.
Pork	160 °F (71 °C)	15 sec.
Ground Meat	160 °F (71 °C)	15 sec.
Egg Dishes	160 °F (71 °C)	15 sec.
Chicken or Turkey (whole, parts, ground)	165 °F (74 °C)	15 sec.

Source: <http://www.news.colostate.edu/Release/6002>; <http://foodsafety.osu.edu/curriculum/hbhm>.

Keywords: food safety, pregnancy, bacteria.

Annual Cost of Foodborne Illness Revised

Last year's revision of the estimated amount of foodborne illness in the U.S. (see "New Estimate of Foodborne Illness Incidence Released by CDC," *The Communicator*, January 2011) has led to an update in the estimated cost of foodborne illness.

In the January 2012 issue of the *Journal of Food Protection*, Dr. Robert Scharff, a consumer science professor at Ohio State University, provided the new estimate. The often-cited, but now outdated, \$152 billion figure for annual cost of foodborne illness was based on the 1999 Mead *et al.* estimates of foodborne illness (76 million illnesses, 325,000 hospitalizations, 5,000 deaths). The 2011 Scallan *et al.* estimate of foodborne illness (48 million illnesses, 128,000 hospitalizations, and 3,000 deaths) was used to calculate new annual costs of foodborne illness.

Two models were used to estimate total health-related costs of foodborne illness. The **basic** cost-of-illness model includes estimates for medical costs, productivity losses, and illness-related death. Using the basic model, the total annual cost is estimated at \$51 billion. The **enhanced** model "replaces the productivity loss estimates with a more inclusive pain, suffering, and functional disability measure based on monetized quality-adjusted life year estimates." Using the enhanced model, the total annual cost is estimated at \$77.7 billion. Not included in the estimates are costs to the food industry, including reduced consumer confidence, recall losses, or litigation, nor do they included the cost to public health agencies, that respond to foodborne illness outbreaks.

The totals were arrived at by computing per illness cost for the foodborne pathogens in the Scallan *et al.* (2011) estimate and multiplying by the total number of illnesses. Cost of illness data for selected pathogens is shown in the table below.

Pathogen	Cost per case, using the enhanced model (U.S. dollars)	Total annual cost of illnesses (millions of U.S. dollars)
<i>Campylobacter</i>	8,141	6,879
<i>Clostridium botulinum</i>	1,681,000	93
<i>Clostridium perfringens</i>	482	466
<i>E. coli</i> O157:H7	10,000	635
<i>Listeria monocytogenes</i>	1,282,000	2,040
<i>Salmonella</i>	11,000	11,391
<i>Staphylococcus aureus</i>	695	168
<i>Toxoplasma gondii</i>	39,869	3,456
Hepatitis A	37,000	58
Norovirus	673	3,677

Source: Scharff, R.L. 2011. "Economic burden from health losses due to foodborne illness in the United States." *J. Food Protection* 75(1):123-131; Bottemiller, H. "Annual foodborne illnesses cost \$77 billion, study finds," http://www.foodsafetynews.com/2012/01/foodbornillness-costs-77-billion-annually-study-finds/?utm_source=newsletter&utm_medium=email&utm_campaign=120103, January 3, 2012.

Keywords: food safety, foodborne illness.



Family Development

Harriet Shaklee
Family Development Specialist
University of Idaho, Boise
322 E Front St., Suite 180
Boise, ID 83702-7364
hshaklee@uidaho.edu



Religious and Civic Engagement in America

By almost any measure, people in the United States are very religious. In terms of the three “B’s” of religiosity—belonging, behaving, and believing—Americans show a strong commitment to their faith. Eighty-three percent of Americans report belonging to a religion, and 40 percent say they attend services nearly every week (or more). Eighty percent of Americans believe there is a God, while 59 percent pray at least weekly.

Religious engagement in the U.S. is also high compared to other industrialized democratic nations. For example, while 38 percent of Americans report being an active member of a church or religious organization, only 16 percent of Australians, 9 percent of Italians, and 4 percent of the French are active in a faith community. Nearly half of Americans say that religion is very important in their lives, compared to just 17 percent of the Swiss, 12 percent of the Dutch, and 9 percent of Swedes. A minority of Americans are not religious at all—15 percent never attend religious services, and 17 percent don’t identify with a religion.

Long interested in “belongingness” and civic engagement, Robert Putnam and colleague David Campbell launched an extensive survey of religion and its importance to Americans. In their Faith Matters project, Putnam and Campbell surveyed a nationally representative sample of participants in

2006, with a follow up survey in 2007. The survey was designed to explore the links between religious belief, practice, and many aspects of community life. This analysis will focus on the role of religion in “good neighborliness,” that is, the civic engagement that is so critical for community success.

Americans are generous with their time, with more than $\frac{1}{4}$ contributing an average of 2.5 volunteer hours a week. Those engaged in religious causes are also more likely to volunteer for secular organizations. Holding demographic factors constant, 45 percent of weekly church-goers volunteered for nonreligious activities, compared to only 26 percent of nonchurch-goers. This religious gap is greatest for service to the poor, the elderly, and youth.

Americans are also generous with their money, with 80 percent of those surveyed giving an average of \$1,800 in the previous year. Here again, religion makes a difference. Of the least religious fifth of the sample, 32 percent made no donations over the year, while only 6 percent of religious people were non-donors. The most secular quintile donated an average of \$1,000, compared to \$3,000 for the most religious quintile. As with volunteering, religious donors were also more generous than the nonreligious even when the cause was secular. The biggest religious edge in giving is for educational, youth, and international causes.

Religious people show other strengths in civic engagement. For example, religious Americans are more likely than their nonreligious neighbors to:

- *Belong to community organizations:* the most religious quintile belongs to 34 percent more organizations than the least religious.
- *Assume leadership positions:* 29 percent of the most religious quintile served as an officer or committee member of an organization, compared to 14 percent for the most secular fifth.
- *Participate in local civic and political life:* Compared to the least religious quintile, the most religious attended more public meetings (6 vs. 2 in the past year), and are more likely to have voted in local elections (56% vs. 46%).
- *Work for local social or political reform:* 20 percent of religious Americans are members of organizations that took local action for reform, compared to 11 percent of secular Americans. Religious Americans are also more likely to participate in protest marches or demonstrations.

These activities are not limited to the conservative Christian causes that have become politicized in recent years. In fact, the religious advantage in activism is even greater for political liberals than for conservatives.

The Faith Matters survey shows clear trends, with religiously engaged people more generous with time and money than the more secular. Religious individuals are also significantly more involved in the civic concerns of their communities than their less religious neighbors. However, finding the sources of these differences is more challenging.



Several potential explanations were not supported by the data. Religious people are members of more organizations, which might elicit neighborliness. However, the gap between secular and religious people remains even when organizational memberships are comparable. Religious people also score higher on altruism and empathy than their nonreligious peers, which could account for their greater generosity to those in need. However, regular church attenders are more generous and civically engaged, even when controlling for these traits. Religious people also ascribe to shared values and beliefs that could promote neighborliness (e.g. the Golden Rule), but religious beliefs failed to predict generosity/civic engagement in the study.

A final possibility is that churches function as networks of engaged individuals who draw each other into causes of interest, a hypothesis supported by the study. Faith Matters measures of involvement in church-based social networks substantially predict individual's charitable giving, volunteer activity, and civic engagement. That is, devout people who sit alone at church and don't interact with others are no more neighborly than nonreligious individuals, while those who develop church-based friendships get drawn into social and civic causes.

Religious friendships are not only linked to religious good works—they predict secular activities just as well. This finding holds even controlling for demographic and ideological factors, as well as for church attendance and general sociability. Putnam and Campbell conclude, "Religiously rooted social networks in America have a powerful effect in encouraging neighborliness and civic engagement."

Considering the level of religious engagement in the United States, Putnam and Campbell's findings suggest that faith communities form centers of caring and activism felt well beyond their own memberships. In fact, religious organizations in the United States build social capital for the broader community through the increased civic engagement of their members.

Source: *American Grace: How Religion Divides and Unites Us*, by Robert Putnam and David Campbell, NY: Simon and Schuster, 2010.

Keywords: volunteering, community support.



Do You Eat like MyPlate? Probably Not

In June 2011, the MyPyramid food icon was replaced with MyPlate. It was hoped that this visual tool would act as a reminder to encourage Americans to consume more fruits, vegetables, whole grains, lean protein, and low-fat dairy products. Unfortunately, NPD, a marketing research firm, found that this has not occurred. They recently had a nationally representative sample of 5,000 U.S. households record their daily food intake for two weeks.

Since most Americans do not eat vegetables at breakfast, NPD calculated what percentage of meals subjects consumed met 70 percent of the MyPlate recommendations for the five food groups. NPD food and beverage analyst Darren Seifer found that subjects met these recommendations only 2 percent of the days or about seven days a year. Seifer was not surprised with these results, based on the typical American dinner, which contained a protein, starch, and vegetable.

Approximately 65 percent of the participants in this sample were either overweight or obese, based on their Body Mass Index. Seifer found that consumers who met the MyPlate recommendations incorporated healthy snacks of fruits, vegetables, and yogurt into their diet and weighed less. He stated that there was a correlation between eating healthy snacks and weighing less, but not a causation. Since MyPlate was released less than a year ago, he theorized that only time will tell if the MyPlate icon will help Americans change their dietary patterns.

Source: https://www.npd.com/wps/portal/npd/us/news/pressreleases/pr_111213b.

Keyword: MyPlate.



Nutrition Education

Martha Raidl
Nutrition Education Specialist
University of Idaho, Boise
322 E Front St., Suite 180
Boise, ID 83702-7364
mraidl@uidaho.edu



Color and Variety Influence Food Preferences

How a food looks, tastes, and smells plays a major role in whether or not individuals prefer that food. Now it appears that food placement on the plate also makes a difference. Researchers at Cornell University found that the number and color of food items on a plate, placement of the entrée, and how the food is organized on a plate determines if adults or youth find the meal appealing.

Brian Wansink, professor of Marketing, and colleagues worked with 23 preteen children and 46 adults. They showed them full-size photos of 48 different combinations of food on plates.

Overall, they found that youth prefer more color and a greater number of items on their plate. Youth preferred food plates with six different colors and seven different items while adults preferred food plates with three colors and three items. Youth also preferred having their entrees placed in the front of the plate. Wansink stated, "our study shows how to make the changes so the broccoli and fish look tastier than they otherwise would to little Casey or little Audrey." The next step is to see if placement of food on a plate results in consumption of these food items.

Source: *Acta Paediatrica*, January 2012
<http://onlinelibrary.wiley.com/doi/10.1111/j.1651-2227.2011.02409.x/abstract>.

Keyword: food.

Mental Decline May Start Earlier

A recent study conducted in the United Kingdom found that mental decline may start at age 45. Previous studies have theorized mental decline begins at around 60 years-old.

There were 5,198 men and 2,192 women in this study who ranged in age from 45 to 70. Researchers monitored changes in mental processes that included memory, reasoning, vocabulary, and comprehension three times over a 10 year period. They compared mental decline as a function of age and gender and categorized subjects into five year age groups: 45-49, 50-54, 55-59, 60-64, and 65-70.

The results showed subjects declined in three areas—memory, reasoning, and comprehension—in all ages, between 45 to 70 years-old. Vocabulary did not decline. As people aged, the decline was greater. Over the 10 years, men ages 45 to 49 had a mental decline of 3.6 percent and those 65-70 had a 9.6 percent decline. The corresponding declines in women were 3.6 percent for those 45 to 49 and 7.4 percent for those 65 to 70.

The authors of this research article speculate that if these declines are occurring sooner, than it is even more important to maintain a healthy lifestyle. Other studies have linked diabetes and cardiovascular disease with a higher risk of dementia and Alzheimer's disease.

Source: *British Medical Journal*, January 5, 2012
www.bmj.com/content/344/bmj.d7622.

Keyword: brain.

A High Calorie, Low-Protein Diet Causes Weight Gain and Loss in Lean Body Mass

Many weight loss programs recommend that individuals either increase their protein intake or lower their fat intake as a way to lose weight. Now a research study conducted at Pennington Biomedical Research Center in Baton Rouge, LA found that consuming excess calories from carbohydrate, protein, or fat results in weight gain.

In this study, 25 subjects (16 men and 9 women) lived in a metabolic unit for 10-12 weeks where calorie intake was controlled. For 2-4 weeks, they consumed a diet that maintained their current weight. Then, for eight weeks, they consumed 1,000 additional calories per day and were randomly assigned to a low-protein (5% of calories), normal protein (15% of calories) or high-protein (25% of calories) diet. Carbohydrate was kept constant at approximately 42 percent and fat content varied based on protein level of the diet. Changes in body composition (fat and lean body mass) were measured using a dual-energy x-ray absorptiometry and changes in body weight, using a scale, were collected.

The results showed that all participants gained 7.7 pounds of body fat, but when they stepped on the scale, those in the low-protein group gained about 7 pounds compared with 13 pounds for those on a normal protein diet and 14 pounds for those on a high-protein diet. The reason that the low-protein group weighed less was that they lost approximately 1½ pounds of lean body mass, while the normal protein and high protein groups gained 6 and 7 pounds, respectively, of lean body mass. Lead author George Bray stated, "You may gain less weight by overeating on a low-protein diet, but it's because you lose lean body mass, not because you store less fat." Protein content of the diet changes lean body mass, and the "bathroom scale doesn't tell you what the composition of your body is."

The Institute of Medicine recommends that between 15-25 percent of a person's diet come from protein. This can be achieved by following the Choose MyPlate recommendations.

Source: *Journal of the American Medical Association* January 4, 2012, <http://jama.ama-assn.org/content/307/1/47.abstract>.

Keywords: diet, protein.