A New Name! A New Look! 
A Strong Focus!

No knowledge is more crucial than knowledge about health. Without it, no other life goal can be successfully achieved.

Ernest Boyer

In response to rising public health concerns and health care costs, the Family and Consumer Sciences Department has decided to focus its outreach on health and changed its name to the Family and Community Health Sciences (FCHS) Department of Rutgers Cooperative Extension. Also starting with this issue, Visions will have a new look and will focus on health and wellness.

Every county in our state is facing a chronic disease epidemic of unparalleled proportions. Research shows that many of our chronic diseases—obesity, heart disease, diabetes, some cancers, and many respiratory diseases—are linked to lifestyle choices and/or the environment. The health and well-being of individuals and families is at stake.

By focusing on health and wellness, we are able to consolidate and strengthen our resources. And more importantly, we are better able to help New Jersey families and individuals stay healthy, enjoy life, stay active, and reduce health care costs. The department will expand its innovative health promotion programs in:

- Nutrition, health, and fitness
- Food safety
- Environmental health

continued on page 8.

Twelve Health and Wealth Factors

Barbara O’Neill, Ph.D., CFP, Extension Specialist in Financial Resource Management

Most people would agree that two very important aspects of life are good health and financial security. According to Angie Hollerich, author of The Health and Wealth Factors, there are 12 parallels between factors that affect good health habits and financial success.

A financial advisor, Hollerich wrote her book after noticing similarities between her personal process of losing weight and the financial advice that she gave to clients. Below is a brief discussion of each of these 12 factors:

Environment—A healthy environment example is having a refrigerator and microwave available at work so that you can bring healthy

continued on page 2.
Twelve Health and Wealth Factors

Continued from front page

lunches to eat. A healthy financial environment example is having a 401(k) plan available to facilitate savings for retirement.

Motivation – In health, there are a number of things that motivate people including looking good, being able to wear favorite clothes, and needing to have more energy. Financial motivators include control, security, and a desire for financial independence.

Attitude – To be healthy, you have to decide that exercise is important and make time for it. No excuses. Financially, an example of changing one’s attitude is deciding to eliminate bad spending habits and put the money into savings.

Habits – Habits influence how people behave. Habit-observation activities (e.g., diet or spending diaries) are helpful to identify both health and financial behaviors that can be improved.

Family – Childhood influences and social supports affect both eating habits and financial practices. Family members can be a resource or an obstacle to achieving one’s goals.

Budget – Calories eaten and calories burned with various types of exercise are the “budgeting” process of weight management. Similarly, a financial budget balances income and expenses. Creating both types of budgets enhances feelings of control.

Education – Information about healthy lifestyle factors and the basics of personal finance takes time and effort. The result, however, is more informed decisions, such as better food choices and investment strategies based upon a person’s time frame.

Goals – Realistic health and financial goals provide a tangible vision of the future. Always write down your goals so that they become a benchmark for future progress.

Time – Time can set a deadline for both health and financial goals (e.g., the time it will take to lose 20 pounds or save $3,000). It also affects specific actions taken, such as the amount of time available to exercise or to research investment options.

Age – It is never too late to make improvements to one’s health or finances. While it may be more difficult to accumulate a retirement nest egg or lose weight when you’re older, it can be done. Taking some action at any age is better than doing nothing.

Needs vs. Wants – It is as necessary to control food intake to be healthy as it is to control spending to be successful financially. Determining whether certain foods or any other items that may be purchased are wants or needs can help budget both calories and dollars.

Risk – Risk exists for both health and financial decisions. Educate yourself about these risks (e.g., the risks of certain diet plans or investments) and weigh the pros and cons of choices.

Changing health and finance habits takes time. Frustration and anxiety along the way can be expected. Understanding the 12 factors discussed above can improve the odds of success.

According to one theory about changing behavior, change occurs when the amount of dissatisfaction with current conditions, coupled with clarity about future conditions and clarity about a plan for changing one’s behavior, exceeds the perceived cost of making a change (e.g., personal discomfort). In other words, it may be quite normal for people to evaluate the costs and benefits of changing their behavior and take action when they believe it is in their best interest to make a change.

Fast Fact:

- You need to lather your hands for 20 seconds to remove harmful bacteria and viruses. Frequent and thorough hand washing will protect your health.
A Berry Good Food for Health

Daryl Minch, M.Ed., CFCS, Family and Community Health Sciences Educator, Somerset County

Berries – ripe, sweet, and colorful – abound in spring and summer. Besides tasting great, these fruits offer many health benefits. Early Romans and Native Americans prized berries for their medicinal properties. Berries contain antioxidants, vitamins, and soluble fiber. In fact, berries are at the top of the list of the foods highest in antioxidants. Antioxidants are those components of food that serve to protect our cells from free radicals. Free radicals are produced during normal cell metabolism and can cause damage to cells that can lead to heart disease, cancer, macular degeneration, and other health conditions. The darker the berry’s color, the more healthful compounds that are present. USDA researchers found that strawberries, raspberries, and blueberries contain phytochemicals (plant chemicals) that protect cells grown in the lab against cervical and breast cancer. Other studies have shown berries help reduce blood pressure and enhance memory function.

The New Jersey Agricultural Experiment Station, part of Cook College and Rutgers – The State University, has on-going research to improve plant varieties and identify health components of berries. The research team at the Cranberry-Blueberry Research Center discovered how compounds called proanthocyanins, found in many berries, like blueberries and cranberries, protect against urinary tract infections. Thanks to NJAES and RCE work, NJ farmers produce many berries for local and out-of-state markets. New Jersey is second in the nation, behind Michigan, in blueberry production and the 2003 blueberry crop was worth $14.2 million. Look for Jersey Fresh berries at your local farmers’ markets and supermarkets.

Nutritional contribution:

**Strawberries:** 27 calories per half cup of sliced berries. Contain soluble fiber, potassium, vitamin C, folate, ellagic acid*, polyphenols*, lutein** and zeaxanthin**.

**Blueberries:** 42 calories per half cup. Contain soluble fiber, potassium, vitamin A, vitamin K, beta carotene, anthocyanins*, lutein** & zeaxanthin**.

**Raspberries:** 32 calories per half cup. Contain soluble fiber, potassium, vitamin C, folate, vitamin A, ellagic acid*, lutein** & zeaxanthin**.

Selection: The best fresh berries are bright in color, and free of blemishes and mold.

Refrigerator Storage: Strawberries and raspberries don’t keep long, generally only 1 to 3 days. Blueberries may last 10 days. inspect packages for moldy or damaged berries before storing. Store them unwashed in the refrigerator. Leave caps on strawberries during washing.

Freezing: Strawberries with caps removed and blueberries may be quick frozen, unwashed on a tray. When frozen solid, transfer to freezer bags or containers. Rinse them prior to use. Raspberries are best when washed, drained well, and frozen in leak-proof containers with or without sugar or syrup. Both commercially-frozen and home-frozen berries will keep 10 months to a year in the freezer.

Preparation: Rinse fresh berries gently under running water just prior to serving and drain well. Serve frozen berries slightly frozen for better texture. Berries also make great fruit spreads, jams and jellies.

* Antioxidants

** Carotenoids – These compounds give fruits and vegetables their yellow or orange color and have antioxidant properties. Beta carotene also can be used by the body to make Vitamin A.
Chithra Lakshmanan, B.S.,
Master of Science graduate student and

Donald W. Schaffner, Ph.D.,
Extension Specialist in Food Science

“Biofilms” are groups of microbes attached to solid surfaces like drains, countertops, or water pipes. These microbes make a sticky chemical out of sugars that hold them in place. These microbes want to stay in these locations because food and water are readily available. The microbes found in biofilms can be bacteria, molds, or yeast.

So, do you think you have ever encountered a biofilm in your daily life? It is a sure bet that you have. If you have ever played in a stream then you may have slipped on some slippery rocks. If this has happened to you, then you slipped on a bacterial biofilm! Another example of a bacterial biofilm can be found right in your mouth. The plaque that can form on teeth and contributes to tooth decay is a biofilm. Biofilms also can be found in drains, kitchen counters, sinks, tubs, and toilets. The slime that clogs drains is also a biofilm.

To prevent biofilms, it is important to regularly clean and sanitize any surface prone to biofilm development. Just like brushing is an important part of dental hygiene, scrubbing is an important part of keeping your kitchen and bathroom clean! Cleaning agents and sanitizers can help control biofilms, but good old fashioned scrubbing is also an important part of the equation.

Of course, biofilms aren’t all bad. Biofilms made of helpful bacteria help to protect the roots of trees from attack by certain kinds of dangerous molds that can damage or even kill some trees. As a way of saying “thanks,” the roots provide the bacteria with the food they need to live. Biofilms also play a beneficial role in waste water treatment by breaking down many contaminants found in untreated water.

A lot of research is being done on biofilms today. Scientists are trying to understand how the microbes in biofilms communicate with each other to form the biofilm. They also are trying to find ways to remove biofilms from places where we don’t want them. For example, authors of this article are studying how biofilms form and can be controlled in juice dispensing machines. The results of their work will help improve the safety and quality of foods.

Did You Know?

Biofilms play a role in diseases such as otitis media, the most common severe ear infection in children in the U.S. Other diseases in which biofilms play an important role are:

- bacterial endocarditis: an infection of the inner surface of the heart and its valves.
- Legionnaire’s disease: a severe lung infection caused by breathing in clumps of Legionella biofilms found on heating and cooling systems.
- Poor contact lens hygiene can cause a disease called Acanthamoeba keratitis.

Fast Facts:

- Both red and white cranberries contain the active phytochemical compounds that promote urinary tract health.
- Putting babies to sleep on their backs significantly reduces the risk of Sudden Infant Death Syndrome.

Biofilms also occur on contact lenses. A bacterium called Pseudomonas aeruginosa is often found on lenses that are kept in during the night.

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Brain Injuries Last a Lifetime... WEAR HELMETS

Daryl Minch, M.ED., CFCS, Family and Community Health Sciences Educator, Somerset County

The National SAFEKIDS Campaign reports that 63% of “tweens” (ages 8 to 12) do not think they could suffer a brain injury while riding on wheels. Yet, the reality is nearly half of children hospitalized for bike-related injuries suffer from a traumatic brain injury. “Brain injury is the leading killer and disabler of children,” says Dr. C. Everett Koop, former U. S. Surgeon General. “Damage to the brain from an external blow can affect one’s ability to walk, talk, and think. The consequences can be devastating and permanent, and change a child’s life – suddenly and forever.”

More than three-quarters of tweens surveyed said that a brain injury could occur as a result of a wheel-related crash and 65% knew that the effects of a brain injury could last a lifetime. But, less than half said they wear a helmet on every bike ride. Less than a third wore a helmet while riding scooters, skateboards, or inline skates. Only 9% said that it was likely they will suffer a brain injury while riding.

“Brain injuries are more common among older children because these kids are less likely to wear their helmets and take more chances,” adds Dr. Koop. Wearing a helmet on any wheel-related activity can reduce the risk of brain injury by as much as 88%.”

Why don’t tweens wear helmets?

• Nearly half of kids reported that they “only ride near home.”

• Other reasons children did not wear a helmet included: “Helmets are uncomfortable” (43%); “I don’t think I need to wear a helmet for all of these activities” (32%); “I am older now and in more control when I ride” (29%); “I don’t feel cool wearing a helmet” (28%); and “My parents don’t make me” (27%).

What would it take to get kids to wear helmets?

• The majority of tweens (54%) said that knowing someone who was badly hurt while not wearing a helmet would convince them to wear one on every ride.

• Many tweens admitted they would wear a helmet if it were a parental rule (53%) or if it were a law in their state (49%).

What’s a parent to do?

• Buy a helmet that fits properly. A helmet that does not fit, is not adjusted correctly, or is not buckled will not protect the head.

• Replace helmets after a crash to ensure effectiveness.

• Make a family rule to always wear a helmet when riding a bike or other wheeled sports equipment. Break the rule and lose riding privileges.

• Be a role model and always wear your helmet.

• Teach children bicycle safety rules and practice them. Do not let them ride alone until they demonstrate good skills and judgment.

• Remind children that cars and drivers may not see them. Collisions with cars account for nearly 90% of all bicycle-related deaths and 10% of all nonfatal bicycle-related injuries.

• Do not allow or limit riding at dawn, sunset, night, or rush hour, as these are high accident times when drivers can’t see well or may be distracted.

Helmet Fit: The “Eyes, Ears and Mouth” check (from SAFE KIDS):

1. EYES check: Position the helmet on your head. Look up and you should see the bottom rim of the helmet (it should be one to two fingers above the eyebrows).

2. EARS check: Make sure the straps of the helmet form a “V” under your ears when buckled. The strap should be snug but comfortable.

3. MOUTH check: Now open your mouth as wide as you can! Do you feel the helmet hug your head? If not, tighten those straps!

More information on bicycle and child safety can be found on the Internet at: www.safekids.org
Organic Foods: What Do We Mean?

Daniel Kluchinski, MS, County Agricultural Agent Rutgers Cooperative Extension

Increasingly, consumers seek a health-conscious, back-to-basics lifestyle, and food is one means to that end. One problem is that for many years, the meaning of the word organic was unclear. Fortunately, the United States Department of Agriculture (USDA) now has implemented consistent national standards that must be met before foods can be labeled “organic.”

Conventional agricultural production often uses synthetic (human-made) pesticides and synthetic fertilizers. Organic foods, however, are grown and processed without using synthetic pesticides or fertilizers. Organic does not mean pesticide-free. Organic agriculture may use naturally occurring pesticides and other agricultural practices to control insects, diseases, and weeds. Instead of synthetic fertilizers, organic farming uses composts, legumes, manure, and minerals to provide nutrients for crops and promote soil health. Organic meat, poultry, egg, and dairy products come from animals that are given no antibiotics or growth hormones. According to the USDA, a benefit of organic food production is that it uses renewable resources and the conserves soil and water to enhance environmental quality for future generations.

The Organic Food Protection Act requires that farmers and food processors must be certified to sell organic produce and products. All but the smallest organic farms and food processors (under $5000 in gross annual sales of organic products) must be certified. The certification process includes preparing a comprehensive plan showing how crops will be grown or livestock raised and an annual inspection and update. Only farmers who use allowed organic practices are certified as an organic farm. All labeled certified organic products sold by certified producers and processors must include the name of the certifier, and may include the USDA seal, the certifier’s seal, or both. Organic production methods must be used for at least 3 years before the farm can be advertised as organic or use the USDA Organic seal on produce and products. Farmers who are transitioning to organic production and are completing the 3-year qualifying period can market their products as “transitional.” Handling and processing companies that deliver products to markets and restaurants also must be certified.

Whether the foods are grown in the United States or imported from other countries, organic products must state the percentage of organic ingredients in the product. The following 4 labels may appear on organic products:

- “100 Percent Organic” indicates the product is made from 100% organic ingredients (excluding salt and water). These products can display this phrase on the front display label and may include the USDA organic seal. “Organic” on the label means that at least 95% of the ingredients are organic. All of the organic ingredients must be listed. Any additional ingredients must be permitted on the USDA National List of Allowed Synthetic and Prohibited Non-Synthetic Substances or be non-organically produced ingredients that were not available in an organic form. The front display label may include the USDA Organic seal.
- “Made with Organic Ingredients” indicates that the food contains at least 70% and up to 95% organic ingredients, excluding water and salt. The label must list up to 3 of the organic ingredients or food groups. For example, vegetarian stew made with at least 70% organic ingredients and only organic vegetables may be labeled “stew made with organic potatoes, beans, and carrots” or “stew made with organic vegetables.” The percentage of organic content and the certifying agency seal or mark may appear on the display label. However, the USDA Organic seal may not appear anywhere on the package and the word organic cannot be on the front display panel.
- Products containing less than 70% organic ingredients can list them individually on the label, but cannot use the USDA Organic seal or term organic anywhere on the front display panel.

All labels require that the certifying agent be listed on the label.

For information on the National Organic Program and labeling, check their web site at www.ams.usda.gov/nop. In New Jersey, the NJ Department of Agriculture is the state’s organic certification program. The program was formerly run by NOFA-NJ, the Northeast Organic Farming Association-New Jersey. The Department of Agriculture certifies organic producers and handlers, and inspects them to ensure compliance with new federal regulations.

Contact your county Family and Consumer Sciences Educator or Agricultural Agent, New Jersey Department of Agriculture (www.state.nj.us/agriculture/), or NOFA-NJ (www.nofanj.org) for additional information or to receive a list of certified producers in New Jersey.

The USDA Organic seal can only be used on produce and products that contain a minimum of 95% organic ingredients. Certified farmers may use the seal only if they have followed organic production practices for 36 months.
As we watch our children and population get heavier, we need to look at the many factors that contribute to overweight and obesity. America currently has the heaviest population of youth and adults in our history. Our nation is growing fatter all the time. The excess weight causes numerous health conditions including high blood pressure, cardiovascular problems, certain types of cancer, type II diabetes, gout and also complicates existing conditions such as asthma and sleep apnea. It seems that if we do not get this problem under control soon, obesity will become the number one killer in our country.

How do we begin to address this problem? What do we tell our children? Here are some suggestions:

- Eat regular, planned meals rather than haphazardly snacking throughout the day.
- Eat meals with a balance of protein, carbohydrate, and fat and follow the USDA Food Guide Pyramid for serving sizes. Keep portions of foods reasonable.
- Choose mostly lean protein, low-fat dairy products, a variety of fruit and vegetables, fiber-rich whole grains, beans, and legumes and stick to healthy foods that are prepared with small amounts of fat.
- Aim for heart-healthy fats such as canola oil, olive oil, nuts.
- Eat fish 2 to 3 times per week.
- Eat a wide variety of foods so that you get most of your vitamins, minerals, and major nutrients through food.
- Eat small portions of “treat” foods. Make foods high in fat, salt, or sugar “blue moon foods”. You only eat them once in awhile or “once in a blue moon”.
- Don’t eat large amounts of one food at one time.
- Stop eating when you are full.

To learn more about the obesity problem, visit the following websites:

**Fast Food Fattens Kids**
This large-scale study documents the trend in increasing reliance on fast food in the daily diet. [http://pediatrics.aap.org/cgi/content/abstract/113/1/112](http://pediatrics.aap.org/cgi/content/abstract/113/1/112).

**The Role of Media in Childhood Obesity**
The Kaiser Family Foundation released a report reviewing more than 40 studies on the role of media in the nation’s increasing rates of childhood obesity. The report concludes that children who spend the most time with media are more likely to be overweight. Access the report at [http://www.kff.org/entmedia/entmedia022404pkg.cfm](http://www.kff.org/entmedia/entmedia022404pkg.cfm).

**Parents and Teachers Agree on Solutions to Childhood Obesity**
Two national polls show that teachers and parents overwhelmingly agree that schools should provide daily physical education and access to healthy foods as part of the solution to our nation’s childhood obesity problem. The complete report can be accessed at [http://www.rwjf.org/news/release/healthyschools](http://www.rwjf.org/news/release/healthyschools).

**The Surgeon General’s Report**
The Surgeon General’s call to action to prevent and decrease overweight and obesity for everyone. The paper gives practical tips at the following website: [http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_whatchanyoudo.htm](http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_whatchanyoudo.htm)

Practical nutrition and exercise tips are included at: [http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_adolescents.htm](http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_adolescents.htm)
A New Name! A New Look! A Strong Focus!
Continued from front page.

The goal of our programs is to empower individuals, families, and communities to adopt behaviors and lifestyles that promote health and prevent disease across the life span. To achieve this goal, our programs will:

- be built on scientific knowledge and research.
- take a comprehensive approach to health issues by incorporating concepts related to human development across the life span, health literacy, and health economics.
- respond to the health information needs of New Jersey families and communities.

FCHS faculty and staff in the counties will continue to provide a variety of high-quality, health-focused educational programs and information.

Contact your local office for more information or visit the website at www.rce.rutgers.edu. We’re excited to be a leader in the health promotion field. Please plan to participate in our programs and enjoy this issue of Visions.

Carol Byrd-Bredbenner,
Chair, Dept. of Family and Community Health Sciences

Visit our Website!
www.rce.rutgers.edu