



Leaving a Legacy of Health

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The Jackson Heart Study (JHS) is a landmark federally funded partnership among Jackson State University, Tougaloo College and the University of Mississippi Medical Center to study cardiovascular disease in African-Americans. Participation in the study will assist researchers in finding out why African Americans, particularly those who live in Mississippi have a higher rate of death from cardiovascular disease than any other group.

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Beating the Odds to get a Jump on Good Health

By Clifton Addison, Ph.D

The rise of obesity and diabetes in young children is a warning that, as a community, we need to take drastic steps to ensure that our youths are spared the burdens, discomforts and costs associated with prolonged disease affliction and medical care. The adverse effects of overweight and obesity include increased risks of cardiovascular disease and diabetes. The diets of Mississippi and the US, as well as inadequate physical activity, are believed to be major contributors to the problems, and this should be a major concern for the community and the education system, since health and well-being do not appear to be a priority and have been separated from all aspects of school life.

The most striking observation you will make today when walking into a physical education class is the level of inactivity that is taking place. It is therefore not surprising that the percentage of overweight young people has more than doubled over the past 30 years. During the same time, it has also been noted that daily participation in physical education has dropped considerably and most children are not physically fit. Almost half of all young people between the ages of 12 and 21 do not get adequate physical exercise on a regular basis and are guilty of engaging in poor dietary practices.

Schools should no longer view health promotion as a job for others, but as a major part of the education curriculum of young people. The rest of the community should accept the challenge to demand that young students be afforded adequate

instruction and training in curricula that will ultimately determine the quality of their life. In order to emphasize a wellness theme to help reverse the trends, physical education and health education classes should be restructured to put more emphasis on acquiring lifelong fitness practices and behaviors, and they should endeavor to meet the needs of every child. The emphasis should be on participation and fitness, not competition. Students should be encouraged to design their own personal exercise program as they learn to make lifetime fitness a personal goal. A further incentive for supporting physical education is the fact that there is a strong connection between physical fitness, wellness and academic success which is the primary focus of the schools.

Adolescence by itself is sometimes considered a risk factor since youths begin to form their own identity and sometimes adopt negative practices, especially regarding inactivity and dietary habits. So, this is a critical time for developing lifestyle behaviors that can be maintained into adulthood. Students must be taught about the benefits of behavior change for disease prevention. They must understand that the development of physically active lifestyle behaviors can lower the risk of chronic diseases and affect their personal health, financial status, and the health costs of the nation. Physical activity can be an investment in their future, and in the government's annual health care costs. We all pay as a result of increased illness and premature death. Individuals pay



Ahhh...Ahhh...Ahh-Chuuuuwww...Gesundheit!

By: Jared K. Taylor, JHS Scholar,
UTC at Tougaloo College and
Darrell Jordan, MPH

Gesundheit? It is the German phrase used to wish good health to a person who has just sneezed meaning...Thank You.

The fall season brings many health concerns to mind. The changing of seasons brings a dramatic change in the weather. At this time, allergies become more noticeable, especially asthma. To have an allergy is to have a high sensitivity to certain substances, such as pollen, foods, or microorganisms. Asthma is a chronic respiratory disease, often arising from allergies, that is characterized by sudden recurring attacks of difficult breathing, chest congestion, and coughing.

... beating the odds

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with the pain and suffering that accompany these illnesses, as well as the financial burden of medical care, hospitalization and medications. Society also pays a price through loss of money and diminished productivity.

Community groups must mobilize to influence the decision makers to reduce environmental barriers to physical activity and increase interactions that will influence sound dietary practices and health habit change. All factions in the community should accept responsibility for guiding the lives of the young by generating support for a review of the health and physical education standards of schools and advocating improved strategies so that children can be exposed to the most beneficial education that would enable them to become fit, while they continue their academic pursuits. This should become an important priority of parents, local government, churches, health organizations, businesses, and, most importantly, the schools that educate our children.

Classic seasonal allergy symptoms include runny nose, sneezing, congestion, watery eyes and itchy throat. In some cities, the pollination of certain plants, changing weather, and other environmental factors can cause more problems for allergy sufferers during the fall than spring, according to the WebMD Health Center of Webmd.com.

Seasonal changes may also bring about more occurrences of asthma attacks. Nearly 17 million people in the U.S. have been diagnosed with asthma (Methodisthealth.com). Asthma affects African Americans twice as much as Caucasians. According to the Office of Community Health at the Mississippi State Department of Health, Asthma is 26% more prevalent in African American children than in Caucasian children. Asthma cases and asthma deaths are on the rise. From 1979 to 1996, deaths due

to asthma have risen 120% from 2,598 to 5,667. From 1999-2003, the MSDH conducted a tri-county (Hinds, Madison, and Rankin) pilot survey of the number of hospital visits due to asthma. They found that of all the visits made to area hospitals, African Americans made up 72% of these visits. Respective of age groups, 41% of all hospital visits were by patients under the age of 15.

But fear not allergy and asthma sufferers, there are many helpful tips to avoid attacks. Allergy sufferers should spend more time inside when pollen and mold counts are high. Also, keep windows closed and use an air filter that is cleaned frequently. Asthmatics are encouraged to avoid secondhand smoke, dust, pet dander, pet waste, insects, and molds. Practicing these safety tips can lead to healthier living this fall.

So, keep practicing good health!

Submitted by Clara Fortner

TEN VITAL HEALTH DIFFERENCES BETWEEN WOMEN AND MEN YOU SHOULD KNOW

1. Heart disease is the leading cause of death for American women. More women die from heart disease each year than from breast, ovarian and uterine cancers combined. Women may not recognize the symptoms of a heart attack and cardiovascular disease because the warning signs are often very different than the popularly recognized symptoms that predominantly affect men.
2. Women are two to three times more likely than men to suffer from depression, in part because a woman's brain makes less of the hormone serotonin.
3. Women comprise 80 percent of osteoporosis sufferers, which is attributable to the higher rate of lost bone mass that occurs in women, especially after menopause.
4. Lung cancer is the leading cancer killer among women. While mortality from lung cancer is declining significantly for men, death rates for women are increasing. Women smokers are up to 70 percent more likely to develop lung cancer than male smokers.
5. Women are twice as likely as men to contract a sexually transmitted disease and 10 times more likely to contract HIV during unprotected sex with an infected partner.
6. Women tend to wake up from anesthesia more quickly than men an average of 7 minutes for women and 11 minutes for men.
7. Drug reactions and side effects from popular medications, including antihistamines and antibiotics, can be very different in women and men. Recently, four drugs widely prescribed to both women and men were removed from the market because they posed significantly increased risks to women.
8. Three out of four Americans suffering from autoimmune diseases, including rheumatoid arthritis, multiple sclerosis, and lupus, are women. At least 21 autoimmune diseases exist and almost all disproportionately affect women.
9. After consuming the same amount of alcohol, women have higher blood alcohol content than men—even allowing for weight differences—because women produce less of the gastric enzyme that breaks down alcohol in the stomach.
10. Some pain medications, known as kappa-opiates, are far more effective in relieving post-operative pain in women than in men. In contrast, ibuprofen, the popular analgesic, is less effective in women than in men.

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Stress and Fighting Fat After Forty

Part Two

By: Brenda Campbell, MPH

Thirty to 40 percent of how we react to stress is genetically defined with genes from both parents determining the way we react to stress. The rest of our stress response is learned through life experiences, including life in our mother's uterus. When the brain first registers a stressful event, it releases a chemical known as corticotrophin releasing hormone (CRH) which is commonly called the Alarm Hormone. There is always a baseline amount of this hormone in the body and it can be elevated by anything that stimulates your attention, whether it's fear, excitement, passion, panic, anxiety, happiness, or joy; the Alarm Hormone is a neuro chemical spark that directs your attention to an event once the alarm goes off. It triggers a cascade of neuro chemicals designed to prepare the body for "fight or flight". The Alarm Hormone then activates the adrenals, two glands located in the abdomen, tells them to secrete two substances: the "chemical adrenaline and the stress hormone cortisol, which is also known in the scientific literature as a "glucocorticoid," because of its ability to increase glucose in our blood and because it is secreted by the outer part of the adrenal gland called the cortex. Together, adrenaline and cortisol activate the body to deal with the stressful event. Every time the stress response is activated, the Alarm Hormone, stimulates the adrenals and the nervous system and activates the reward and pain relief areas of the brain. Most physiological functions in the human body, however, involve a certain amount of stress on the systems in a healthy way. Digesting, metabolizing, and storing food are in fact stressful to the systems in the body.

Stress fat is different from fat found in other parts of the human

body. When there is too much of it, it becomes toxic, overwhelming the liver and impairing its daily functions. When this occurs, a variety of metabolic disturbances result, including; high blood sugar, high cholesterol, high blood pressure and high blood coagulation which leads to the formation of blood clots. These abnormalities lead to serious illnesses, including heart disease and diabetes. The combination of toxic weight, heart disease, and diabetes is referred to by medical practitioners as the Metabolic Syndrome, or Syndrome X. Therefore, being apple shaped or carrying the majority of your fat in or around your abdomen is associated with serious illnesses.

Medical scientists have formulated a predictive risk measure called the Waist to Hip Ratio (WHR) which measures the waistline at the smallest point between the upper part of your hip bone and the lowest part of your rib cage. This is usually measured on the side of your body, using a tape measure. If your waist is 35 inches, you are at risk for Metabolic Syndrome. You calculate your WHR by dividing your waist measurement by your hip measurement.

One of the biggest reasons women over forty gain weight is that their metabolism slows down. We simply don't burn calories as efficiently as we did in our 30's. When women hit forty, we experience one of the greatest drops of muscle mass. We become more sedentary. When women pass through menopause, the energy requirement is about 15 percent less than it was when we were in our twenties. In the pre-menopausal stage, estrogen activates fat storage in the hips, thighs, and buttocks for the purpose of breastfeeding. However, this changes during the peri-menopause stage. Estrogen levels become more erratic, going up and down, and the storage

site of fat shifts to the abdomen.

During peri-menopause, the ovaries secrete testosterone which becomes more predominant as levels of the other sex hormones decline. Testosterone deposits intra-abdominal fat which results in the potential for a buildup of excess stress fat, also known as Toxic Weight. So while hormones, lifestyles choices, and aging all play a part, Toxic Stress can trigger additional Toxic Weight gain in a woman over forty. And that fat heads straight to the waist - which is why developing a more Stress Resilient personality is important for everyone, but is absolutely critical for women over the age of forty.

Healthy eating and physical activity are important to combat weight gain. We must eat healthy. One place to start is with portions. The difference between serving and portion is determined by the USDA to calculate a food nutritional value in accordance with the USDA food pyramid. A portion is the amount of food you eat at a single sitting. A portion may be one or multiple servings. For example, a USDA serving of a bagel equals one half-bagel. If you eat an entire bagel, you will have consumed two servings. It is almost impossible to keep track of your calories. Read your food label and know what you're eating. Since the majority of Americans diets fall considerably short of the basic requirements for sustaining good health, one should consider supplements, such as, multivitamins and minerals, Vitamin E, Vitamin B Complex, Calcium, Omega Oil and Flaxseed Oil.

Eating the right kinds of food, drinking enough water, and adopting other health habits such as exercise will help reduce the number of women affected by Toxic Weight gain and resulting chronic illnesses.



JHS Scholar Public Health Adventure

**By: Leslie Whiting,
UTC at Tougaloo College**

As a Jackson Heart Study Scholar, I attended the Public Health Adventure in which I learned the vast array of opportunities available to me through pursuing a career in public health. Public health is concerned with improving and maintaining the health of the general community. Biostatistics and epidemiology are the primary sciences of public health, and I will already be introduced to them as a Jackson Heart Study Scholar.

Our first stop on the trip was at the University of Alabama at Birmingham School of Public Health. Our speaker gave an overview of the field of public health. Those who go into public health have the advantage of helping whole

communities at one time versus a traditional doctor that can only treat one person at a time.

After leaving Birmingham, we traveled to Atlanta, Georgia, we visited Emory University's Rollins School of Public Health. Then, we watched a documentary on the Tuskegee syphilis study at the Morehouse Public Health Science Institute. The Tuskegee study intentionally denied treatment to men affected with syphilis. Upon the completion of the video, we discussed how the documentary was related to public health. Although the doctors denied the men treatment so that they could learn more about syphilis, they did not inform the men of their risks. In a good public health study, the doctor has an obligation to

inform the patient of potential risks.

After this public health adventure, I am considering obtaining a M.P.H./M.D. dual degree rather than just a medical degree. I want my degree to have a health administration and policy concentration. This curriculum will give me a background in health economics, public health administration and planning, and health policy which will be beneficial when I open my own rural health care center.

During the Public Health Adventure, I realized that with a degree in public health I will be able to address the needs of whole communities by designing interventions, implementing, managing, and evaluating programs.

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