



Sweet Nothings

December 2009

Spotlight on Durham County

Submitted by: **Jennifer Bellizzi, MPH, RD, LDN & Michele Easterling, MPH, RD, LDN**

The Durham County Health Department is participating in Cohort III of the North Carolina Diabetes Self Management Training (DSMT) program. Our first series of DSMT classes is a result of a unique collaboration between the Health Department Nutrition Division, Durham County Government Human Resources, and the County's Employee Wellness Center. Durham County Government has a long history of supporting health and wellness for its employees including operating a County Wellness Center and offering annual health risk appraisals. These health risk appraisals have found that up to one third of Durham County's 1900 employees have impaired glucose levels or are diabetic. The Wellness Center employs a part-time Registered Dietitian but formal diabetes self management training was not part of its services. With the Health's Department's participation in Cohort III, the opportunity to offer DSMT to County employees became a possibility.

When we envisioned providing DSMT to our employees, we knew our first task would be to enlist the County's Human Resources department in the effort. Through a series of meetings with Diane Pearson, Human Resource Benefits Manager for the County, the process of offering the program took shape. Upon learning that participants in DSMT often lower their HgbA1C by an average of two or more percentage points, Diane and her colleagues were eager to endorse the program. In order to encourage participation among employees, Human Resources even agreed that employees could attend classes on work time. Collaborations with the Wellness Center Nurse Practitioner, Stephanie Turner, resulted in protocols for referrals for DSMT; obtaining pre and post HgbA1C; and instructions on glucose meter use. Additionally, Diane encouraged us to invite employees that did not utilize the Wellness Center to participate in the program. She willingly sent out an email to all county employees detailing the program and its benefits for those diagnosed with diabetes. The response from a simple email message was fantastic. Within two days, we had received calls of inquiry from at least 15 employees. Within three weeks after meeting with Diane and Stephanie, we were seeing our first clients for initial assessment. With the collaborative efforts of Stephanie and Diane we had enough referrals to necessitate a wait list for a second series of classes!

We used the "On the Road to Better Managing Your Diabetes", U.S. Diabetes Conversation Map in our first session. Our participants were enthusiastic about using the maps and we were thrilled to see how much interaction between participants took place as a result. We feel that the rapport generated during that first meeting set the tone for subsequent classes and continues to encourage client participation. We know our efforts are paying off when we receive positive feedback from the program participants. Comments like, "I love the classes; you just don't know how much it means to me" and "I'm learning a lot of new information even though I've taken other diabetes classes," serve to encourage us as we work to offer a great program.

We appreciate the training and continued support from the staff of the NC Diabetes Education Recognition Program and helping us make DSMT at the Durham County Health Department a reality. Our plans for the future include providing on-going DSMT classes to County employees and other Durham County residents. Additionally, we plan to expand our services offsite and offer DSMT at a local health disparities clinic that serves uninsured residents.

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Remember



Data reports and PDSAs are due the 5th of each month.

Data Update

November, 2009

Total Number of Patients Seen: 927

New Patients: 94

Pre A1c: 8.0%

Post A1c: 7.1%

Foot Exams: 61%



News You Can Use

RECALL NOTICE:

Qualitest Pharmaceuticals and the FDA have notified healthcare professionals of a nationwide recall of Accusure Insulin Syringes. All syringes, regardless of lot number, are subject to this recall. The syringes may have needles which detach from the syringe. Consumers who have any Accusure insulin syringes should stop using them and contact Qualitest at 1-800-444-4011 for reimbursement.

www.fda.gov

EXPANDED INDICATION FOR BYETTA

The FDA has approved an expanded indication for BYETTA® (exenatide) injection. BYETTA is now approved for use as a stand-alone medication (monotherapy) along with diet and exercise to improve glycemic control in adults with Type 2 diabetes. Previously, it was approved for use only in patients who were also taking other common diabetes medications and had not achieved adequate glycemic control.

www.fda.gov

LOSING WEIGHT: SOONER IS BETTER

Losing weight soon after being diagnosed with type 2 diabetes produces lasting benefits. The weight loss leads to improved blood pressure and blood glucose control that should decrease the occurrence of the cardiovascular complications associated with diabetes. Researchers found that people who lost an average of 9.8 percent of their body weight within a year and a half after diagnosis were better able to achieve their blood glucose and blood pressure goals. What's more, the study also found that future weight gain doesn't negate the benefits of the early weight loss.

Source: *Diabetes Care*, October 2008

4 KEYS TO REDUCING DIABETES RISK

Healthy habits can keep chronic illness at bay, according to a study of more than 23,000 Germans. Researchers looked at the lifestyles and health records of adults ages 35 to 65. After about eight years of follow-up, they found that those who had maintained a healthy weight, exercised for at least 3½ hours a week, never smoked, and eaten plenty of fruit, vegetables, and whole grains were 78 percent less likely to develop [cardiovascular disease](#), diabetes, or cancer than those who didn't practice prevention. Participants with all four positive habits had a 93 percent reduction in the risk of developing diabetes.

Source: *Archives of Internal Medicine*, Aug. 10/24, 2009



Christmas Treat for Diabetic Sweets Christmas Trail Mix

Submitted by Joanne Rinker, MS, RD, CDE

Ingredients:

- 1 cup Pistachios
- 1 cup Chopped Dried Cherries
- 1 cup Toasted almonds
- 1 cup 70% dark chocolate chips
- 1 cup Raisins
- 1 cup Sunflower seeds
- 1 cup grated coconut
- 6 cup plain air popped popcorn

Directions:

Mix all ingredients. Divide into ¼ cup snack bags. Makes 40 bags. You can buy the Christmas snack bags and give as part of gifts or put in large canisters as main gift!

Nutrition Facts: (per ¼ cup or handful)

100 calories, 2g protein, 2g fat, 12g carbs, 1.5g fiber



Poor Math Skills May Worsen Diabetes Control

Submitted by Laura Edwards, RN, MPA



A new study suggests that diabetic adults' ability to work with numbers may affect their management of the disease -- and that, in turn, may help explain racial differences in diabetes control. A number of studies have found that compared with their white counterparts, African Americans with diabetes tend to have poorer blood sugar control -- as well as higher rates of diabetes complications, like heart disease and kidney failure.

Numbers come into play everyday for people with diabetes -- in counting carbohydrates, adjusting insulin doses and keeping track of blood sugar readings, for instance. In the new study, published in the journal *Diabetes Care*, researchers looked at whether patients' diabetes-related "numeracy" was related to their long-term blood sugar control.

The study included 383 adults with type 2 diabetes who took a test that gauged their ability to conquer a range of number-related tasks -- such as interpreting nutrition labels on packaged foods, calculating calories and carbohydrates in a meal, and keeping track of medication doses.

Overall, the researchers found, patients with the strongest test scores generally had better results on A1C tests, which estimate a person's average blood sugar level over the previous few months. What's more, number skills seemed to partly explain why African American patients generally had poorer A1C scores than white patients did.

The current findings suggest that such number skills may be an unrecognized factor, write Dr. Chandra Y. Osborn and colleagues at Vanderbilt University in Nashville, Tennessee. The authors suggest that the poorer skills could be due in part to less opportunity to take relevant courses, and lower socioeconomic status.

The implication, they say, is that helping diabetes patients with their numeracy might also help them with their blood sugar control. And that, in turn, might reduce racial disparities in diabetes complications. Future studies, the researchers conclude, should look at the effects of numeracy education on patients' diabetes control.

SOURCE: *Diabetes Care*, September 2009.

Achieving Long-Term Weight Loss

These 10 tips are time-tested and work for most people:

1. Plan meals and snacks. Haphazard eating often leads to the consumption of high-calorie foods.
2. Eat breakfast every day.
3. Pay attention to portion sizes. Get out the measuring cups, spoons, and kitchen scale to see just how much you are eating.
4. Limit your intake of refined carbohydrates, like sweets, crackers, and chips. Eat whole-grain carbohydrates.
5. Eat lots of fruits and vegetables. Try to have five to eight servings per day.
6. Choose moderate portions (3 to 4 ounces) of lean proteins, and try to eat some protein with each meal. You will feel satisfied longer.
7. Keep a food diary.
8. Set up your home and work environments for success. Don't bring in problem foods, and make sure healthful foods are available.
9. Eat slowly and pay attention to the taste of food. Quit eating when you are full.
10. Exercise at least 30 minutes five times per week.

Source: *Diabetes Forecast*, September 2009

Carb Counting Quiz

While Joanne was on the road doing site visits the past few months, she packed a trail mix of $\frac{1}{4}$ cup pecans, $\frac{1}{4}$ cup raisins, $\frac{1}{4}$ cup m&ms and $\frac{1}{4}$ cup popcorn. Use your carb counting books or websites to determine the # of servings of carbohydrates she was eating:



A: 1.5

C: 3.5

B: 2.5

D: 4.5



DID YOU KNOW?

Diabetes Most Prevalent in Southern United States

Diabetes prevalence is highest in the Southern and Appalachian states and lowest in the Midwest and the Northeast of America. Diabetes mellitus is the sixth leading cause of death in the United States, accounting for approximately 70,000 annual deaths. This is the first study to estimate what the true level of diabetes disease is in every state and how the different states perform in terms of diagnosed versus undiagnosed diabetes. Age-standardized diabetes prevalence was highest in Mississippi, West Virginia, Louisiana, Texas, South Carolina, Alabama and Georgia, ranging from 15.8% to 16.6% for men and 12.4% to 14.8% for women. The lowest prevalences were found in Vermont, Minnesota, Montana, and Colorado, just 7% for women in the Northeast and some Western states. According to the study, states like Minnesota and Alabama with the highest estimated diabetes prevalence also have the highest levels of blood pressure and cardiovascular disease risk. Diabetes prevalence and diagnosis in US states: analysis of health surveys.

Source: Population Health Metrics, 2009

Hypertension and Sodium Intake

Thirty percent of US public have hypertension, much of which is due to excessive sodium intake. One of the first studies to estimate the economic benefits of lowering sodium consumption among the US public has found that \$18 billion in health-care costs for hypertension could be saved every year if salt intake were reduced to the amount recommended by health officials. In addition, quality of life would be improved for millions of people, with a further potential saving of \$32 billion annually. This study provides an important first step toward quantifying the benefits of reducing the intake of sodium by the American public. "These findings make a strong case that there's value in pursuing a population-based approach to reducing sodium intake among Americans."

Source: September/October 2009 issue of the American Journal of Health Promotion.

Prevalence of Diabetes and Prediabetes in the US

According to the American Diabetes Association, 8% of the US population has diabetes. Approximately 2% are still undiagnosed and unaware of their condition, and another 16% have pre-diabetes, also largely undiagnosed.

Source: www.diabetes.org

America Losing Battle of the Bulge

As the economy slumped, waistlines surged, according to the latest national obesity report card, which found that adult obesity rates increased in 23 states over the past year. At the same time, not a single state posted a decrease in obesity, and three out of every ten children living in 30 states are overweight or obese. Overall, two-thirds of Americans are either overweight or obese, the report found. Sixteen states experienced an increase in obesity rates for the second year in a row, and 11 states experienced an increase for the third straight year. Mississippi was once again the fattest state with 32.5% of its adult residents obese. But Mississippi was not an anomaly in the region -- eight of the top ten fattest states are in the South.

Source: Robert Wood Johnson Foundation.

Diabetic Retinopathy on the Rise

Diabetic Retinopathy on the Rise: After two decades on the rise, retinopathy now affects more than a third of all diabetes patients, according to the latest nationally representative estimate.

Source: American Diabetes Association: Saaddine JB, et al "Prevalence of diabetic retinopathy in the United States: National Health and Nutrition Examination Survey 2005-2006" ADA 2009; Abstract OR 382.



Type 2 Diabetes Medications

Submitted by Laura Edwards, RN, MPA

Many people with type 2 diabetes take medications other than or in addition to [insulin](#) to manage their diabetes. Here is a run-down of medication options.



- **Alpha-glucosidase inhibitors** slow the breakdown of starches in the intestine, blunting the excessive rise in blood glucose that occurs after eating. Taken with the first bite of a meal. Possible side effects: digestive problems, including gas and diarrhea. Medications available: acarbose (Precose) and miglitol (Glyset).
- **Exenatide** (Byetta) stimulates insulin production. Injected twice daily within an hour before morning and evening meals. Possible side effects: nausea (which may get better or go away with time), weight loss, and, in rare cases, acute pancreatitis, a dangerous inflammation of the pancreas. (A definite cause-and-effect relationship with pancreatitis has not been established.)
- **Meglitinides** also increase insulin production by the pancreas. Taken before all three meals. Possible side effects: hypoglycemia (but may pose less risk of hypoglycemia compared with sulfonylureas). Medications available: nateglinide (Starlix) and repaglinide (Prandin).
- **Metformin** decreases the liver's glucose output and increases the muscles' glucose uptake. Taken one to three times a day; extended-release (XR) formulations can be taken once daily. Possible side effects: nausea, upset stomach, diarrhea (can sometimes be avoided by taking with food or by using the extended-release formulations). Should not be taken by persons with decreased kidney function or certain other medical conditions. Medications available: metformin (Fortamet, Glucophage, Glucophage XR, Glumetza, Riomet).
- **Pramlintide Acetate** (Symlin) is an injected medication that can reduce a person's insulin requirement. Like lab-produced insulin, Symlin is an analogue of a naturally occurring hormone that is released by the beta cells of the pancreas and helps with blood glucose control. It is also approved for people with type 1 diabetes. Possible side effects: nausea, most commonly, which may get better with time.
- **Sitagliptin** (Januvia) stimulates insulin production by the pancreas. Taken once a day with or without food. Possible side effects: allergic reactions, including skin rash (rare).
- **Sulfonylureas** stimulate insulin production by the pancreas. Generally taken once or twice daily before meals. Possible side effects: hypoglycemia. May react with alcohol. Medications available: glimepiride (Amaryl), glipizide (Glucotrol, Glucotrol XL), glyburide (DiaBeta, Glynase PresTab, Micronase).
- **Thiazolidinediones**, often called TZDs, enhance the action of the body's own insulin in muscle and fat, plus reduce glucose production by the liver. Taken with or without a meal. Possible side effects: water retention, weight gain, congestive heart failure, and (rarely) bone fractures. One type, rosiglitazone (Avandia), may increase heart attack risk. Medications available: pioglitazone (Actos) and rosiglitazone (Avandia).

**Type 2 diabetes medications may be taken individually or in combination pills, such as those that combine glipizide with metformin (Metaglip), glyburide with metformin (Gluco-vance), sitagliptin with metformin (Janumet), repaglinide with metformin (Prandimet), and rosiglitazone with metformin (Avandamet). Combination pills offer convenience but can have the drawback of making it more difficult to determine which medication is causing a negative side effect.

Source: Diabetes Forecast

<http://forecast.diabetes.org/diabetes-101/type-2-diabetes-medications>

Answer to Carb Counting Quiz on Page 3

Answer is C: 32 grams for raisins, 16g for M&Ms and 2 for the popcorn: 50grams



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*"I've been so busy managing my diabetes,
I didn't have time to put up a lot of lights.
So, I only put up one giant one."*

www.diabeteshealth.com

RESOURCES

CDC LEAN Works! (Leading Employees to Activity and Nutrition)– Visit this website designed to help businesses address obesity with science-based interventions that work to prevent and control obesity and help employees maintain a healthy weight. <http://www.cdc.gov/leanworks>

Office of Continuing Education, UNC School of Public Health
www.sph.unc.edu/oce

On the Phone

The American Diabetes Association National Call Center offers phone and online support for people with diabetes. The call center distributes a broad range of documents about diabetes, including information on emotional well-being and dealing with a diabetes diagnosis. Call center representatives can listen and offer advice, too. Remember that they are not medical professionals, though, so you will need to see a doctor for any medical questions. To reach the ADA National Call Center, call 1-800-DIABETES (1-800-342-2383) or e-mail AskADA@diabetes.org.

CONTINUING EDUCATION

Janet Reaves Memorial Conference on Quality & Chronic Disease

February 18-19, 2010
Durham, NC
www.ncchca.org

Diabetes In Control www.diabetesincontrol.com

Patient Centered Motivational Counseling

This session is on patient centered motivational counseling and how to foster change in your patients. It will review the stages of change and how to encourage and motivate your patients through each stage, as well as how to determine what goals are appropriate for each patient.

• **Estimated time to complete this activity:** 45 minutes • **CE Credits:** 1

Patient Education: You Can Do It!

This lecture fills the knowledge gap by teaching health care providers and diabetes educators how and what to teach patients, how to motivate patients, and how to train other health care professionals to teach patients.

• **Estimated time to complete this activity:** 40 minutes • **CE Credits:** 1

Keeping it Real Patient Empowerment and Self-Management

A very informative lecture on patient empowerment and self management of diabetes, describing how to help patients make their own decisions about their diabetic care and how to empower patients to take control of their diabetes.

• **Estimated time to complete this activity:** 50 minutes • **CE Credits:** 1