

Public Health Brief

November 2010

Diabetes Awareness Month

By Samantha Decker, RD.

November is Diabetes Awareness Month! This is a time to raise awareness about diabetes, learn about the risk factors and how to encourage prevention. For more information on Diabetes Awareness month, visit www.diabetes.org.

According to the American Diabetes Association (ADA), nearly 24 million adults and children have diabetes, 6 million people with diabetes do not even know they have the disease, and another 57 million are at risk of developing type 2 diabetes. In the near future we could see as many as 1 out of 3 Americans develop diabetes. The US currently spends nearly 174 billion dollars annually for the treatment and related costs of diabetes. Diabetes is the 7th leading cause of death listed on US death certificates and in Colorado, is one of the top 10 leading causes of death. For healthcare providers, November is the time to reach out to patients and encourage them to take control of their health and decrease their risk factors for developing type 2 diabetes.

Risk Factors for Type 2 diabetes:

- Age – being older than 45
- Increased weight – BMI higher than 25
- Family history of diabetes – mother, father, sister, brother
- Family background of African American, Hispanic/Latino, American Indian, Asian American or Pacific Islander
- History of gestational diabetes or giving birth to a baby larger than 9 pounds
- Elevated blood pressure – 140/90 or higher or diagnosed with hypertension
- Abnormal cholesterol values - low HDL level (less than 35) and a high triglyceride level (higher than 250)
- Inactive lifestyle – physically active less than 3 times per week

Screening and Diagnosis - Currently ADA recommends the following tests and for the diagnosis of type 2 diabetes:

- HgbA1C \geq 6.5%. The test should be performed in a laboratory using a method that is National Glycohemoglobin Standardization Program (NGSP) certified and standardized to the Diabetes Control
- Fasting Plasma Glucose \geq 126 mg/dl. Fasting is defined as no caloric intake for at least 8 hours
- 2-h plasma glucose \geq 200 mg/dl during an oral glucose tolerance test
- Random plasma glucose \geq 200 mg/dl may be used for diagnosis **if** a patient presents with classic symptoms of hyperglycemia or hyperglycemic crisis

Current ADA Screening Recommendations for Type 2 Diabetes:

- Screening in asymptomatic normal weight patients without risk factors should begin at age 45. If screening tests are normal, repeat testing at least every 3 years.
- Screening in patients with a BMI ≥ 25 and who have one or more additional risk factor should be tested at any age. If screening tests are normal, repeat testing at least every 3 years.
- If any patient has abnormal values indicating pre-diabetes, repeat testing should be done yearly

Prevention of Type 2 Diabetes:

- Patients with impaired glucose test (diagnosis with pre-diabetes) or a HbA1C of 5.7-6.4%, should be referred to an ongoing support system including medical nutrition therapy (MNT) offered by a Registered Dietitian
- Weight loss – even a 5-7% weight loss can delay or prevent the onset of type 2 diabetes
- Increase activity – at least 30 minutes of physical activity 5 times per week
- A Balanced Diet – (see sample meal plan below)
 - Encourage 5 or more servings of fruits and vegetables
 - Increase fiber intake, goal of 14 grams of fiber/1000 calories and foods containing whole grains
 - Lean meats, such as turkey chicken, and fish
 - Limit sugary drinks and sweets
 - Saturated fat should be $\leq 7\%$ of total calories
 - Stress foods patients *can* eat instead of the items they should avoid

Recommendations for patients with Type 2 Diabetes:

- Immunizations: Yearly influenza vaccine for all diabetic patients over 6 months of age. Administer pneumococcal polysaccharide vaccine to all diabetic patients over 2 years of age and a one time revaccination for patients over 64 years old. For other immunization information for diabetics visit www.cdc.gov/diabetes/pubs/tycd/vaccin.htm
- Blood Pressure – Check at every routine visit, with a goal blood pressure of $\leq 130/80$, if unable to decrease with lifestyle intervention medication should be started.
- Lipid Management – Check annually with a goal of LDL cholesterol ≤ 100 mg/dl, HDL cholesterol ≥ 50 mg/dl and triglycerides ≤ 150 mg/dl, if unable to decrease with lifestyle intervention medication should be started

- Smoking cessation – recommend all patients stop smoking, refer to resources as needed
- Nephropathy screening – annually test serum creatinine and urine albumin excretion in all type 2 diabetics, starting at diagnosis
- Retinopathy screening – type 2 diabetics should have annual comprehensive eye examinations by an ophthalmologist starting at diagnosis
- Neuropathy screening – annual screening for distal symmetric polyneuropathy starting at diagnosis
- Foot Care – all type 2 diabetics should have an annual comprehensive foot examination and education should be provided to assist patients ability to perform routine foot care at home

For more information on any of the above recommendations, please see the ADA’s “Standards of Medical Care for Diabetes–2010” at http://care.diabetesjournals.org/content/33/Supplement_1/S11.full.pdf+html

References and resources:

American Diabetes Association (ADA): www.diabetes.org

National Diabetes Education Program: www.ndep.nih.gov

Centers for Disease Control and Prevention (CDC):
www.cdc.gov/diabetes/news/docs/hcp_materials.htm#1

Colorado Department of Public Health and Environment (CDPHE) report on the Burden of Diabetes in Colorado
www.cdphe.state.co.us/pp/diabetes/reports/TheBurdenofDiabetesinCO.pdf

To find a Registered Dietitian at Colorado that offers MNT for diabetics visit the Colorado Dietetic Association at
www.eatrightcolorado.org/dietician.cfm

Sample Meal Plan for Diabetic patients:

This is an *example* of a daily menu for a type 2 diabetic. Calorie requirements vary among individuals; consult with a Registered Dietitian to determine individual needs and create personalized meal plans.

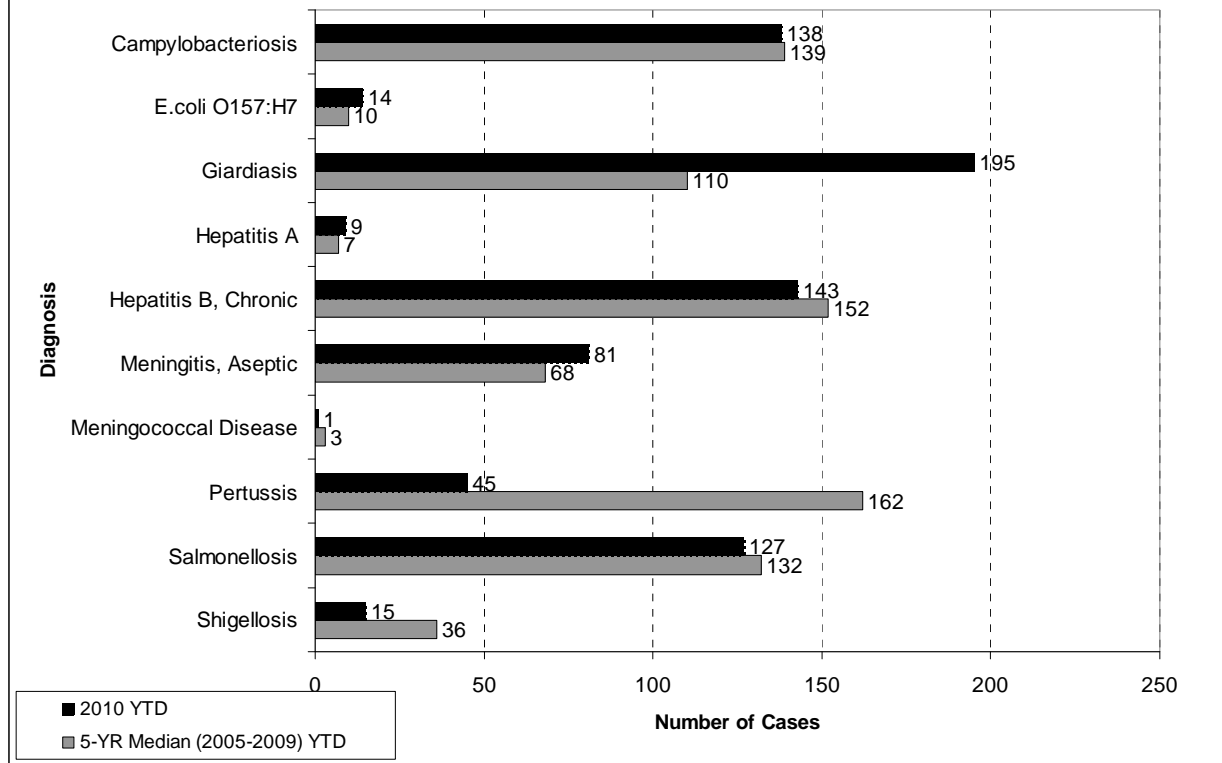
<u>Breakfast</u>	<u>Total Carbohydrate</u>
1 small orange or ½ banana	15 gm
2 slices whole grain bread <u>or</u> 1 whole wheat English muffin	<u>30 gm</u>
	45 gm Total
1 egg/egg substitute <u>or</u> 1-2 oz low fat cheese ham/turkey	
1 Tbsp tub margarine	
Coffee <u>or</u> tea <u>or</u> water	
 <u>Snack</u>	
8 oz nonfat <u>or</u> low fat milk <u>or</u> 1 small fruit <u>or</u> ½ sandwich	15 gm
 <u>Lunch</u>	
2 slices bread <u>or</u> 2 corn tortillas <u>or</u> 2/3 cup rice <u>or</u> 1 medium potato	30 gm
8 oz 1% low fat milk <u>or</u> 1 small fruit	<u>15 gm</u>
	45 gm Total
3-5 oz meat, chicken <u>or</u> fish (not fried or breaded)	
Vegetable and/or green salad (no limit)	
1 Tsp mayonnaise <u>or</u> vinaigrette dressing if desired	
Diet soda, coffee <u>or</u> tea <u>or</u> water	
 <u>Snack</u>	
1 cup light yogurt (w/ sugar substitute) <u>or</u> 8 oz low fat milk <u>or</u> 6 crackers <u>or</u> small fruit	15 gm
 <u>Dinner</u>	
1 cup pasta <u>or</u> 2/3 cup rice <u>or</u> 1 medium potato	30 gm
8 oz low fat milk <u>or</u> small fruit	<u>15 gm</u>
	45 gm Total
3-5 oz fish, meat <u>or</u> chicken (not fried or breaded)	
1-2 cups vegetables (carrots, broccoli, cauliflower, bok choy, pepper, spinach)	
Salad greens with low fat dressing (if desired)	
Diet soda, coffee <u>or</u> tea <u>or</u> water	
1 Tbsp reduced fat sour cream or Greek yogurt <u>or</u> light margarine	
 <u>Snack</u>	
1 small fruit with ½ cup cottage cheese <u>or</u> ½ sandwich <u>or</u> 8 oz low fat milk <u>or</u> 1 cup light yogurt (w/ sugar substitute)	15 gm

For uninsured or under-insured, low income women

Refer your uninsured/underinsured or low income patients to Tri-County Health Department's Peak Wellness Program. Qualifying women will receive free cancer screening (breast and cervical) along with cardiovascular and diabetes screening. Once enrolled in the Peak Wellness program participants will receive lifestyle counseling throughout the year to assist them in improving their nutrition and physical activity.

For more information on Peak Wellness, visit www.tchd.org/peakwellness.htm or call (303) 363-3018

Selected Diseases by Date of Report Adams, Arapahoe, and Douglas Counties 2010 Year-to-date Through October



For more information or questions, please contact:
 Colorado Department of Public Health and Environment:
 (303) 692-2700 / (303) 370-9395 (after hours)
 Fax: (303) 782-0338

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