



MARYLAND ACADEMY OF FAMILY PHYSICIANS

ABLE, RESPONSIVE FAMILY PHYSICIANS SERVING THEIR COMMUNITIES

**References for Articles Appearing in the Summer, 2014 Edition of
The Maryland Family Doctor
Theme: Developments in the Management of Diabetes**

The Sweeping Epidemic of Diabetes

Joseph W. Zebley, III, M.D.

- (1) Danaei G, Finucane MM, Lu Y, Singh GM, Cowan MJ, Paciorek CJ et al. National, regional, and global trends in fasting plasma glucose and diabetes prevalence since 1980: systematic analysis of health examination surveys and epidemiological studies with 370 country-years and 2.7 million participants. *Lancet*, 2011, 378(9785):31–40.
- (2) Global health risks. Mortality and burden of disease attributable to selected major risks. Geneva, World Health Organization, 2009.
- (3) Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med*, 2006, 3(11):e442.
- (4) Global status report on noncommunicable diseases 2010. Geneva, World Health Organization, 2011.
- (5) - <http://diabetes.niddk.nih.gov/dm/pubs/statistics>

Incidence of Gestational Diabetes

Asha Thomas, M.D., FACP, FACE

- 1 Proceedings of the 4th International Workshop-Conference on Gestational Diabetes Mellitus. Chicago, Illinois, USA. 14-16 March 1997. *Diabetes Care* 1998; 21 Suppl 2:B1.
- 2 International Association of Diabetes and Pregnancy Study Groups Consensus Panel, Metzger BE, Gabbe SG, et al. International association of diabetes and pregnancy study groups recommendations on the diagnosis and classification of hyperglycemia in pregnancy. *Diabetes Care* 2010; 33:676.
- 3 American Diabetes Association. Diagnosis and classification of diabetes mellitus. *Diabetes Care* 2014; 37 Suppl 1:S81.

- 4 Crowther CA, Hiller JE, Moss JR, et al. Effect of treatment of gestational diabetes mellitus on pregnancy outcomes. *N Engl J Med* 2005; 352:2477.
- 5 Landon MB, Spong CY, Thom E, et al. A multicenter, randomized trial of treatment for mild gestational diabetes. *N Engl J Med* 2009; 361:1339.
- 6 World Health Organization. Diagnostic Criteria and Classification of Hyperglycaemia First Detected in Pregnancy. August 2013.
http://www.who.int/diabetes/publications/Hyperglycaemia_In_Pregnancy/en/index.html (Accessed on August 26, 2013).
- 7 Hartling L, Dryden DM, Guthrie A, Muise M, Vandermeer B, Aktary WM, Pasichnyk D, Seida JC, Donovan L. Screening and Diagnosing Gestational Diabetes Mellitus. Evidence Report/Technology Assessment No. 210. (Prepared by the University of Alberta Evidence-based Practice Center under Contract No. 290-2007-10021-I.) AHRQ Publication No. 12(13)-E021-EF. Rockville, MD: Agency for Healthcare Research and Quality. October 2012. www.effectivehealthcare.ahrq.gov/reports/final.cfm. (Accessed on November 30, 2012).
- 8 Moyer VA, U.S. Preventive Services Task Force. Screening for gestational diabetes mellitus: U.S. Preventive services task force recommendation statement. *Ann Intern Med* 2014; 160.

New Classes of Diabetes Medications

Paul A. Sack, M.D.

Garber AJ et al. American Association of Clinical Endocrinologists' Comprehensive Diabetes Management Algorithm 2013 Consensus Statement. *Endocrine Practice* Volume 19 (Supplement 2) May/June 2013. Flow charts are found at www.aace.com/files/aace_algorithm.pdf

Dicker, D. DPP-4 Inhibitors: Impact on glycemic control and cardiovascular risk factors. *Diabetes Care* May 2011 vol. 34 no. Supplement 2 S276-S278.

Garber, A. Long Acting Glucagon-Like Peptide 1 Receptor Agonists. A review of their efficacy and tolerability. *Diabetes Care* May 2011 vol. 34 no. Supplement 2 S279-284.

Chao, EC. SGLT-2 Inhibitors: A New Mechanism for Glycemic Control. *Clinical Diabetes*. January 2014. Volume 32. No. 1; 4-11.

Doc, Are My Diabetes Drugs Going to Give Me Cancer?

Malek Cheikh, M.D.

1. Joslin EP, Lombard HL, Burrows RE, Manning MD. Diabetes and cancer. *N Engl J Med* 1959;260:486–488
2. Calle EE, Rodriguez C, Walker-Thurmond K, Thun MJ. Overweight, obesity, and mortality from cancer

- in a prospectively studied cohort of U.S. adults. *N Engl J Med.* 2003;348:1625-1638.
3. Renehan AG, Tyson M, Egger M, Heller RF, Zwahlen M. Body-mass index and incidence of cancer: a systematic review and meta-analysis of prospective observational studies. *Lancet.* 2008;371:569-578.
 4. Sjöström L, Gummesson A, Sjöström CD, et al. Effects of bariatric surgery on cancer incidence in obese patients in Sweden (Swedish Obese Subjects Study): a prospective, controlled intervention trial. *Lancet Oncol.* 2009;10: 653-662.
 5. Pisani P. Hyper-insulinaemia and cancer, meta-analyses of epidemiological studies. *Arch Physiol Biochem.* 2008; 114:63-70.
 6. Roberts DL, Dive C, Renehan AG. Biological mechanisms linking obesity and cancer risk: new perspectives. *Annu Rev Med.* 2010;61:301-316.
 7. Suh S, Kim KW. Diabetes and cancer: is diabetes causally related to cancer. *Diabetes Metab J* 2011;35:193-198
 8. Zakikhani M, Dowling R, Fantus IG, Sonenberg N, Pollak M. Metformin is an AMP kinase-dependent growth inhibitor for breast cancer cells. *Cancer Res* 2006;66:10269–10273
 9. Andrea DeCensi, Matteo. Metformin and cancer risk in diabetic patients: A systematic review and meta-analysis. *PuntoniCancer Prev Res* 2010;3:1451-1461.
 10. GIJS W.D. LANDMAN. Metformin Associated With Lower Cancer Mortality in Type 2 Diabetes. *Diabetes Care* 33:322–326, 2010
 11. Gise` le Nkontchou, Emmanuel Cosson Impact of Metformin on the Prognosis of Cirrhosis Induced by Viral Hepatitis C in Diabetic Patients. *J Clin Endocrinol Metab* 96: 2601–2608, 2011
 12. Monami M, Lamanna C, Marchionni N, Mannucci E. Rosiglitazone and risk of cancer: a meta-analysis of randomized clinical trials. *Diabetes Care* 2008;31: 1455–1460
 13. Dormandy J, Bhattacharya M, van Troostenburg de Bruyn AR, PROactive investigators. Safety and tolerability of pioglitazone in high-risk patients with type 2 diabetes: an overview of data from PROactive. *Drug Saf.* 2009; 32:187-202.
 14. Lewis JD, Ferrara A, Peng T, et al. Risk of bladder cancer among diabetic patients treated with pioglitazone: interim report of a longitudinal cohort study. *Diabetes Care.* 2011; 34:916-922.
 15. <http://www.fda.gov/Drugs/DrugSafety/ucm266555.htm>
 16. Bjerre Knudsen L, Madsen LW, Andersen S, et al. Glucagon-like peptide-1 receptor agonists activate rodent thyroid C-cells causing calcitonin release and C-cell proliferation. *Endocrinology.* 2010;151:1473-1486
 17. Costante G, Meringolo D, Durante C, et al. Predictive value of serum calcitonin levels for preoperative diagnosis of medullary thyroid carcinoma in a cohort of 5817 consecutive patients with thyroid nodules. *J Clin Endocrinol Metab* 2007;92:450-5.
 18. Michael Elashoff, Pancreatitis, Pancreatic, and Thyroid Cancer With Glucagon-Like Peptide-1–Based Therapies, *Gastroenterology* 2011;141:150–156
 19. Butler AE, Campbell-Thompson M, Gurlo T, Dawson DW, Atkinson M, Butler PC. Marked expansion of exocrine and endocrine pancreas with incretin therapy in humans with increased exocrine pancreas dysplasia and the potential for glucagon-producing neuroendocrine tumors. *Diabetes.* 2013;62:2595-2604.
 20. Amy G. Ega, Eberhard Blind. Pancreatic Safety of Incretin-Based Drugs — FDA and EMA Assessment, *Engl J Med* 2014; 370:794-797
 21. Kim Y, Babu AR. Clinical potential of sodium-glucose cotransporter 2 inhibitors in the management of type 2 diabetes. *Diabetes Metab Syndr Obes.* 2012;5:313-327
 22. J. Rosenstock & V. Fonseca Similar risk of malignancy with insulin glargine and neutral protamine Hagedorn (NPH) insulin in patients with type 2 diabetes: findings from a 5 year randomised, open-label study, *Diabetologia* (2009) 52:1971–1973
 23. ORIGIN Trial Investigators, Gerstein HC, Bosch J, et al. Basal insulin and cardiovascular and other outcomes in dysglycemia. *N Engl J Med.* 2012;367:319-328.

Diabetes and Nutrition: Diet, Lifestyle, and Genetics

Kasia Kines, MS, MA, CN, CNS, LDN

1 -Song Y, Manson JE, Buring JE, Liu S. A prospective study of red meat consumption and type 2 diabetes in middle-aged and elderly women: the women's health study. *Diabetes Care*. 2004 Sep; 27(9): 2108-15.)

2 - Kitagawa T. Increased incidence of non-insulin dependent diabetes mellitus among Japanese schoolchildren correlates with an increased intake of animal protein and fat. *Clin Pediatr (Phila)*. 1998 Feb; 37(2): 111-5.

3 -Dioxin, diabetes and obesity in Vietnam veterans. *Environ health Perspect* 2006; 2006 114:1677-83.

4- Influence of PCBs on T2DM Consuming fish from the great Lakes increases the body burden of chlorinated hydrocarbons (POPS) and the prevalence of diabetes. *Chemosphere* 2009; 74:674-79.

5 -JAMA< 2008: 300: 1353-54

6 -Lancet January 2008; 371:287-88.

7 -Barnard ND, Cohen J, Jenkins DJ, Turner-McGrievy G, Gloede L, Jaster B, Seidl K, Green AA, Talpers S

8 -Diabetes Care. 2006 Aug; 29(8):1777-83

9 van Dam RM, Hu FB, *Diabetes Care*