High OGGT in Pregnancy Ups Later Diabetes Risk

BY MICHELE G. SULLIVAN
Mid-Atlantic Bureau

Women who have an abnormal glucose tolerance test result during pregnancy but do not develop gestational diabetes still face an increased risk of developing type 2 diabetes later on.

The retrospective study showed that even moderately elevated glucose levels double the risk of diabetes within the next 9 years. "The risk of subsequent diabetes...likely occurs since...they have an intermediate form of glucose intolerance," said David E. Cumming, M.B., B.Chir., F.R.C.P., of the University of Minnesota, Minneapolis, and colleagues (Circulation 2008;117:754-61).

In this retrospective cohort study, the researchers analyzed diabetes risk over a mean 9-year follow-up period in 31,000 women without gestational diabetes who had an oral glucose tolerance test (OGTT) or oral glucose challenge test (OGCT) during their pregnancy. The mean age was 31 years, and the median follow-up was 9 years.

They found that the risk of later development of type 2 diabetes was significantly higher for those with abnormal OGTT values than for those with normal OGTT values.

In an editorial comment, Dr. David E. Cumming, M.B., B.Chir., F.R.C.P., of the University of Minnesota, Minneapolis, and colleagues (Circulation 2008;117:754-61), noted that the study "will lead providers to reconsider the lifestyle recommendations proven to reduce the risk of developing diabetes is unknown."

Diet Soda Strongly Associated With the Metabolic Syndrome

BY TIMOTHY F. KIRN
San Francisco Bureau

Diet soda, meat, and fried foods are associated with the development of metabolic syndrome, researchers from the Atherosclerotic Risk in Communities Study reported. The study, which gathered dietary information on 9,514 individuals, followed them for 9 years, found that the single food item with the strongest association to development of the metabolic syndrome was diet soda, with those who consumed an average of one serving a day having a 34% greater risk of developing metabolic syndrome than those who drank none.

The next strongest association was with meat consumption, with a 25% greater risk, according to the study.

Dairy intake had a beneficial effect, with a hazard ratio of 0.87, or a reduction in risk of 13%, reported Pamela L. Lutsey of the division of epidemiology and community health at the University of Minnesota, Minneapolis, and colleagues (Circulation 2008;117:754-61).

Previous studies of the contribution of diet and specific foods to metabolic syndrome have tended to focus on a single food group and to be cross-sectional survey studies. So a particular strength of this study was its prospective design, "which overcomes a variety of limitations common to cross-sectional data," Ms. Lutsey noted.

Twenty percent of the subjects who had metabolic syndrome at the start of the study, when they were given the first of two diet surveys. At the end of 9 years, another 40% had developed the syndrome. That 60% rate of metabolic syndrome "foreshadows a worrisome trend for the burden of metabolic syndrome in the United States," Ms. Lutsey wrote.

The patients followed in the study were all middle aged, with a mean age of 54 years, and 56% were female. The data showed that a Western style diet—high intakes of refined grains, processed meat, fried foods, and red meat—was associated with greater risk of metabolic syndrome.

Those in the group who had the highest Western-diet consumption pattern had an 18% greater risk than did those with the lowest pattern.

Fried foods were associated with a 25% greater risk.

The investigators expected to find, but did not, that a prudent diet—heavy in whole grains, fruits, vegetables, and fish—was protective. They found no association between metabolic syndrome and this pattern of eating, though previous studies have found an association, and, in particular, a benefit. The hazard ratio was 1.07, and was not statistically significant. Likewise, consumption of sweetened beverages and of coffee was not found to be associated with metabolic syndrome.

The finding of the association between diet soda and metabolic syndrome has been made before. The Framingham Heart Study reported a 56% increase in risk in those who consumed one or more servings per day. Another investigation found that persons with diabetes who drank diet soda had poorer glucose control than did those who consumed none.

"Additional research on the relationship between diet soda and incident metabolic syndrome is clearly warranted," Ms. Lutsey wrote.