

High-Carb Chinese Diet May Hike Diabetes Risk

BY MARY ANN MOON
Contributing Writer

A high intake of staples in the typical Chinese diet, particularly rice, moderately increased the risk for type 2 diabetes in a population-based study of Chinese women.

"Given that a large part of the world's population consumes rice and carbohydrates as the mainstay of their diets [this finding] may have substantial implications for public health," study investigators wrote in *Archives of Internal Medicine*.

Little is known about diabetes risk in populations that traditionally subsist on diets high in carbohydrates. "In our [study]

population, the amount of carbohydrates consumed by participants is much higher than in previous studies of primarily white participants," Dr. Raquel Villegas of Vanderbilt University Medical Center, Nashville, Tenn., and her associates noted.

The researchers analyzed data from the Shanghai Women's Health Study, a prospective cohort study of nearly 75,000 women who were aged 40-70 years at baseline in 1996-2000. The women were followed every 2 years for an average of 5

years. A total of 1,608 women developed new cases of type 2 diabetes.

A high intake of carbohydrates in the form of rice, noodles, steamed bread, and bread moderately raised the risk of developing diabetes. Compared with those in the lowest quintile of carbohydrate consumption (263 g/day), those in the highest quintile (338 g/day) were at greater risk of developing diabetes. This association persisted across all categories of body mass index and waist-to-height ratio. It was some-

what stronger in overweight women (*Arch. Intern. Med.* 2007;167:2310-6).

The median intake of raw rice was 250 g/day. After adjustment for factors such as age and body mass index, those who ate at least 300 g/day of rice had a 78% increase in risk for diabetes, compared with those who ate less than 200 g/day.

In addition, women whose diets included a high percentage of energy contributed by carbohydrates also were at higher risk of developing diabetes. ■

Diabetes in Mom Ups Risk of Atrial Septal Defect

ORLANDO — Women with either gestational or established diabetes were much more likely to deliver an infant with an atrial septal defect than were those with normal glucose control, based on the results of a retrospective, case-control study that included almost 5,000 women.

Women with established diabetes before they became pregnant were nearly 11-fold more likely to give birth to a child with an atrial septal defect (ASD), compared with women without diabetes, Dr. Creighton W. Don and his associates reported in a poster at the annual scientific sessions of the American Heart Association. Maternal diabetes was previously linked to other types of congenital defects in newborns, but the relationship of ASD with maternal diabetes had not been previously well studied, said Dr. Don, a cardiologist at the University of Washington, Seattle, and his coinvestigators.

They used linked birth certificate and hospital discharge data from all nonfederal hospitals in the Comprehensive Hospital Abstract Reporting System in Washington state during January 1987–December 2005. Cases were live-born singleton infants diagnosed with ASD. Controls were infants born without ASD in the same year.

The incidence of ASD reports in hospitals from eastern Washington seemed unusually high, so those hospitals were excluded and the analysis was limited to hospitals in western Washington. The analysis also excluded infants born at less than 32 weeks' gestation or less than 2,500 g. This left about 800 cases and 4,000 control infants who were included in a logistic regression analysis. The analysis controlled for several variables, including gestational age, birth weight, maternal age, maternal body mass index, race, and hospital location. Results showed that women with established diabetes were 10.6-fold more likely to give birth to an infant with an ASD than were mothers without diabetes, and that mothers who developed gestational diabetes were threefold more likely to have a child with ASD.

—Mitchel L. Zoler



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