Jefferson Cardiology Association Happenings

**Restoring Prediabetes to Normal**

Diabetes remains one of the most dreaded conditions and is responsible for heart disease, stroke, kidney failure and amputations in large numbers of people. Overt diabetes may be preceded by a state called prediabetes. Even in prediabetes early blood vessel changes may be seen that are not seen in persons with normal blood glucose. Is there anything that can be done to return those with prediabetes back to normal glucose levels and prevent diabetes? This concept is very important to the 79 million Americans with prediabetes and may provide protection against the cardiovascular complications of diabetes.

Pertinent to this discussion was a recent edition of *The Lancet*, a British medical journal, which was devoted to diabetes. In this issue, the DIABETES PREVENTION PROGRAM OUTCOMES study was published. This is a study from multiple United States medical centers. This study evaluated the risk reduction in those persons with prediabetes who had interventions resulting in reduction of glucose to normal. For the purposes of this study, prediabetes was defined as a fasting glucose between 100.8 and 124.2 and those with a glucose value 140-198 two hours after eating a glucose load.

The individuals were then randomized into 3 groups. One group was assigned to lifestyle intervention. A second group was randomized to receiving the diabetic drug, metformin. The third group was a control group randomized to a placebo, fake pill. The three groups were then followed for over 5 years.

The results revealed that there was a 56% reduction in development of diabetes in those who developed normal blood glucose. Most important was lifestyle intervention which was twice as effective as metformin for prevention of diabetes and was the only intervention associated with regression to normal glucose levels. Thus, those persons with prediabetes may prevent diabetes by lifestyle modifications including proper diet, exercise and weight loss.

**Dental Work and Heart Infections**

For many years, persons with heart valve and other cardiac abnormalities were given antibiotics before dental work to prevent heart valve and other structural cardiac infections. This practice was formally endorsed by the American Heart Association in 1955 based on evidence of bacterial bloodstream invasion during dental work. However in 2007, new guidelines were published recommending prophylactic antibiotics prior to dental work for only four groups of patients. The majority of patients previously given antibiotics were told this practice was no longer necessary. Was this revised policy appropriate?

A recent study in *Circulation*, published by the American Heart Association, evaluated this question. A group from the Mayo Clinic evaluated outcomes of patients in Olmstead County, Minnesota including the Rochester area. The number of new cases of endocarditis, or heart valve infection, was studied. When compared to the prior era of more liberal use of antibiotic prophylaxis, there was no change in the incidence of endocarditis. This reinforces the 2007
recommendations that much of previously administered antibiotic prophylaxis was unnecessary.

In an accompanying editorial, there was comment that current science offers evidence that poor dental hygiene is more important in cause bacterial entry into bloodstream than dental procedures. Further research demonstrated that tooth brushing resulted in bacteria liberated into the bloodstream 32% of the time. It was suggested that better oral hygiene and better gum care could reduce bacterial entry into the bloodstream and reduce heart valve infections.

Happy Birthday to All

We would like to wish a very Happy Birthday to all of our staff members celebrating this month. They include our nurse practitioner, Jennifer Wicks, business manager, Susan Myers, medical assistants, Tonya Fohr and Tina Mankin. Best wishes to all of you!!

Grilled Chicken with Watermelon Salsa

4 Tyson Grilled & Ready fully cooked frozen chicken breast fillets, thawed
4 tablespoons hoisin sauce
2 cup watermelon, chopped
½ chopped red onion, finely chopped
3 tablespoons fresh mint, chopped
¼ cup reduced-fat feta cheese, crumbled
1 tablespoon seasoned rice vinegar
1 teaspoon olive oil

1. Coat each chicken breast with hoisin sauce, and place in microwave-safe dish. Follow microwave directions on Grilled and Ready product packaging to heat.

2. In a small bowl, mix together watermelon, red onion, mint, feta cheese, seasoned rice vinegar, and olive oil. Place salsa on top of chicken breast and serve. Serves 4.

Nutritional Facts: Calories 210; Total Fat 4g; Protein 27g; Carbs 17g; Cholesterol 65mg; Sodium 610mg