Atrial fibrillation (AF) is the most common heart rhythm disorder and increases the risk for heart disease and stroke, both leading causes of death in the United States. An estimated 2.2 million adults in the United States have been diagnosed with AF. The prevalence of AF increases markedly with age in older adults, from less than 1 percent for those younger than age 60 to roughly 1 in every 10 persons aged 80 years or older.

What goes wrong? The electrical signal to contract starts at the top of the heart and normally moves evenly across the atrium (upper pumping chambers), triggering them to contract all at once. This signal continues to travel to the ventricles of the heart, which are responsible for pumping blood to the rest of the body. Atrial fibrillation (AF) occurs when this electrical impulse no longer travels in the normal manner and instead gets "side-tracked" such that the atrium are no longer triggered evenly and in synchrony, but are triggered one small region at a time. The electrical signals to the ventricles are therefore irregular and hence the heartbeat is irregular.

Individuals are typically treated with... (Continued on page 2)
Straight to the Heart

The UW Health-University Hospital Preventive Cardiology Program is dedicated to assisting people with cardiovascular disease achieve optimal physiological and psychological function leading to an improved quality of life, and preventing the disease process in healthy people. Straight To The Heart is published quarterly to provide current and former participants information about heart disease and current events at the Center. Please call or write us if you have comments, questions or suggestions for articles. We welcome your ideas.

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medicine to control their AF. If multiple trials of different drugs have not cured their irregular heart rhythm, a MAZE surgical procedure can be performed.

What does the name “MAZE” stand for? The name of this procedure is based on the concept of a puzzle. The MAZE procedure, first developed around 1987, is a surgical intervention that cures atrial fibrillation (AF) by interrupting the disordered electrical patterns that are responsible for this irregular heart rhythm. Strategic placement of incisions in the atrium of the heart stops the irregular electrical conduction and channels the normal electrical impulses in one direction—from the top of the heart to the bottom. In essence, the procedure looks schematically like a maze, with only one path to follow from START to FINISH. Scar tissue generated by the incisions permanently blocks the travel routes of the electrical impulses that cause atrial fibrillation, thus eradicating the irregular heart beat.

The MAZE procedure traditionally required the surgeon to open the sternum and place the patient on cardiopulmonary bypass, so it was usually performed in conjunction with another procedure, such as coronary artery bypass surgery (CABG) or valve replacement. As with all major surgery, this procedure carries an increased risk of stroke, kidney failure, other organ failure and death. The risk of this procedure is felt to be low in general, but is dependant upon a person’s specific health conditions (heart function, lung function, kidney function, etc.). Once completed, in-hospital recovery from a traditional MAZE procedure is 4-7 days. Additionally, patients must also wait for their sternal incisions to heal over the next 6 to 8 weeks.

By contrast, a video-assisted thoracoscopic surgery (VATS/MAZE) is performed through six small incisions (less than 1 centimeter each, or about a quarter inch) on the side of the chest. A flexible microwave probe placed on the surface of the beating heart heats the desired locations, creating lesions in the atrial wall without cutting into the heart muscle. Scar tissue forms around these lesions in the months following the procedure. While VATS is not painless, it hurts less than a large traditional surgery. The benefit of using VATS is that, in many cases, surgery takes less than an hour and the patient can leave the hospital 24 hours after the surgery. The technique also can be used on patients of all ages and body size.

2005 American Heart Walk

I t’s time to grab those tennis shoes, your family and friends and join us for the AHA Heart Walk on Saturday, October 8th at Warner Park. This will be our 10th year of having a Preventive Cardiology Team participating in the Walk and we’ve gained a powerful reputation as having the most Team walkers (~200) and raising the most money ($13,000) every year!

Please join us around 8:45 AM that morning for a light breakfast and a Team photo. You can then walk either the 1.5 or 3 mile course. Our staff will be there to cheer you along.

We hope you’ll also raise money on behalf of this great cause; all money goes to the AHA. Donation forms can be picked up here in our Clinic around mid-September or the day of the walk. Heart disease survivors will receive a red cap and commemorative pin, and each of our Team walkers will receive a complimentary red long sleeve t-shirt.

You’ll be getting a separate flyer in early September with more details, but get your calendars marked now for October 8th! Please call Vonda with any questions, 608.265.8391.
the exercise physiologists, nurses, dieticians, and doctors. They read these studies and can put the results in the context of all the scientific research that has been done previously. That is the key—making decisions based not on just one study, but understanding the conclusions from all the known evidence. So, back to overweight and obesity. Can it be good for you? Hardly. Being overweight causes high blood pressure, abnormal cholesterol levels, high blood sugar and diabetes, arthritis, back problems, circulation problems in the legs, gall bladder problems, increased risk for many types of cancers, dementia, and much more. Overweight people are more fatigued, have reduced exercise stamina and have a lower self-reported quality of life. Early mortality is increased for those who are obese (defined as being greater than 130% of your ideal body weight or having a body mass index of 30 or greater). If your waist measurement at your upper hip bone is greater than 35 inches as a female or 40 inches as a male, go see your doctor for tests to check for other heart and vascular risk factors.

The good news is that modest amounts of weight loss make a big difference. Even a 10 pound weight loss can drop blood pressure, lower blood glucose significantly, and make a big difference in cholesterol levels. Seemingly small changes in diet and physical activity can help reduce weight. You can safely get good control many of the above risk factors by simply reducing how much food you eat, losing no more than 1 pound a week. Think about this: one less gum drop a day over a year equals one pound lost! Check with a dietician to evaluate your current nutrition.

As for exercise, be physically active as many days as you can, for at least 30 minutes per day. It doesn’t have to be intense, continuous or involve counting your pulse; modest or moderate walking is very beneficial for most people. Ask an exercise physiologist for guidance on how to start and maintain an activity program. Eventually, you will get there!

Does overweight and obesity weigh on your health? Of course it does, but it’s never too late to take your weight seriously and improve your health and vitality.

Positive personality traits help heart

By Lisa Tennant, M.S.

We discussed in the last STTH newsletter how negative emotional states can increase our cardiac risk. Negative factors include anxiety, depression and hostility. Researchers have begun to ask whether positive emotional traits can provide a protective effect to the heart. Can we reduce stressors in our lives by demonstrating flexibility with our emotions?

Three psychological components may be central to developing “emotional and coping flexibility”:

**Vitality:** The presence of energy and enthusiasm and a sense of aliveness, a strong sense of purpose and self worth. Vitality is made up of at least two positive emotions, such as joy and interest. When a person displays vitality they have energy and enthusiasm.

**Positive response mechanisms (PRM):** PRMs can be described as patience, discipline and maintenance of friendships. The ability to control emotions in a variety of situations is a PRM.

**Emotional competence:** Emotional competence is the ability to suppress or enhance emotions depending on the situation. When one is emotionally competent, one has emotional flexibility.

Possessing all or some of these traits may help us cope with chronic stressors in life. For example, if you have a low-paying job but you have the energy and enthusiasm (vitality) to strive for a more fulfilling job you can deal more effectively with the current stress. The physical, emotional and mental stress of caring for a loved one can be better managed if you possess vitality, develop strong friendships and are able to suppress or enhance emotions.

Can you identify any of these positive traits in your personality? Bring out your best traits and reduce your cardiac risk all at the same time!
Summer is grilling time. Try this wonderful Southern-style, sweet yet spicy barbecue sauce on chicken. Serve it with fresh sweet corn and fruit salad. Mmmm, now we’re cookin’!

Barbecued Chicken—Spicy Southern Style

5 Tbsp (3 oz) tomato paste
1 tsp ketchup
2 tsp honey
1 tsp molasses
1 tsp Worcestershire sauce
4 tsp white vinegar
3/4 tsp cayenne pepper
1/8 tsp black pepper
1/4 tsp onion powder
2 cloves garlic, minced
1/8 tsp ginger, grated
1 1/2 lb chicken (breasts, drumsticks), skinless

1. Combine all ingredients except chicken in saucepan.
2. Simmer for 15 minutes. Let cool.
3. Wash chicken, remove chicken skin and pat dry. Place it on large platter and brush with half of sauce mixture.
4. Cover with plastic wrap and marinate in refrigerator for 1 hour.
5. Place chicken on grill and cook until done, liberally brushing the chicken pieces with the other half of the sauce mixture.

Yields 6 servings. One serving size equals 1/2 breast or 2 small drumsticks.

Each serving provides:
Calories: 176
Total fat: 4 g
Saturated fat: less than 1 g
Cholesterol: 81 mg
Sodium: 199 mg
Protein: 27 g

Recipe adapted from NHLBI Keep the Beat: Heart Healthy Recipes.