MEDICAL BRIEFS

Car seat safety checkup

The International Center for Injury Prevention, in conjunction with Ford Motor Co.'s Boost Americal program, will conduct a child car seat safety check 3-6 p.m. Thursday, March 15, 2001 at Pat Milliken Ford, 9600 Telegraph Road, Redford.

During the checkup event, a child's car seat will be checked by a certified technician for proper size and installation, recall, and to be sure the child is secured in the seat correctly. Previous checks have revealed that 95-98 percent of child restraints being used incorrectly.

Technicians also will check to make sure that children between 40 and 80 pounds are riding in a booster seat. Many parents think that once a child has reached 40 pounds, he or she can sit in an adult seat belt. Children can be critically injured or killed riding in an adult seat belt that is too large for their bodies. A booster seat must be used until the child is approximately 80 pounds.

It is best to have children present, so they can be evaluated in seat. Allow 15 minutes per child seat.

For more information on the Boost Americal program, please log on to www.boostamerica.org for details of past events, etc. Contact the International Center for Injury Prevention at (734) - 324-5981.

Get into the swing

Golf season is almost here. It's important to know how to prevent injuries as you get back into the swing of things. Botsford's Total Rehabilitation & Athletic Conditioning Center will offer a special pre-season training seminar, "Tee Off with TRACC," 9 a.m. to noon, Saturday, March 24.

TRACC's team of athletic trainers and exercise physiologists will measure your strength and flexibility; Bob Ackerman, PGA Master's golf pro and 1999 Chicago Open Champion, will give you a personal golf lesson; and Dr. Homer Linard, orthopedic surgeon and, sports medicine specialist, will show you how to ease the pain when you're injured.

In addition, Denise Kordie, certified Feldenkrais practitioner and occupational therapist, will teach you how to combine slow movements with mental imagery to achieve correct posture and balance.

The cost is $40 per person. Pre-payment is required. Deadline is March 18. For reservations, call (248) 473-5600. The TRACC training seminar will be held at Botsford Center for Health Improvement, 39750 Grand River Avenue between Haggerty and Meadowbrook in Novi.

Weight management

There's still time to join the 13-week HMR Weight Management Program offered through a partnership with St. Mary Mercy Hospital and Health Management Resources.

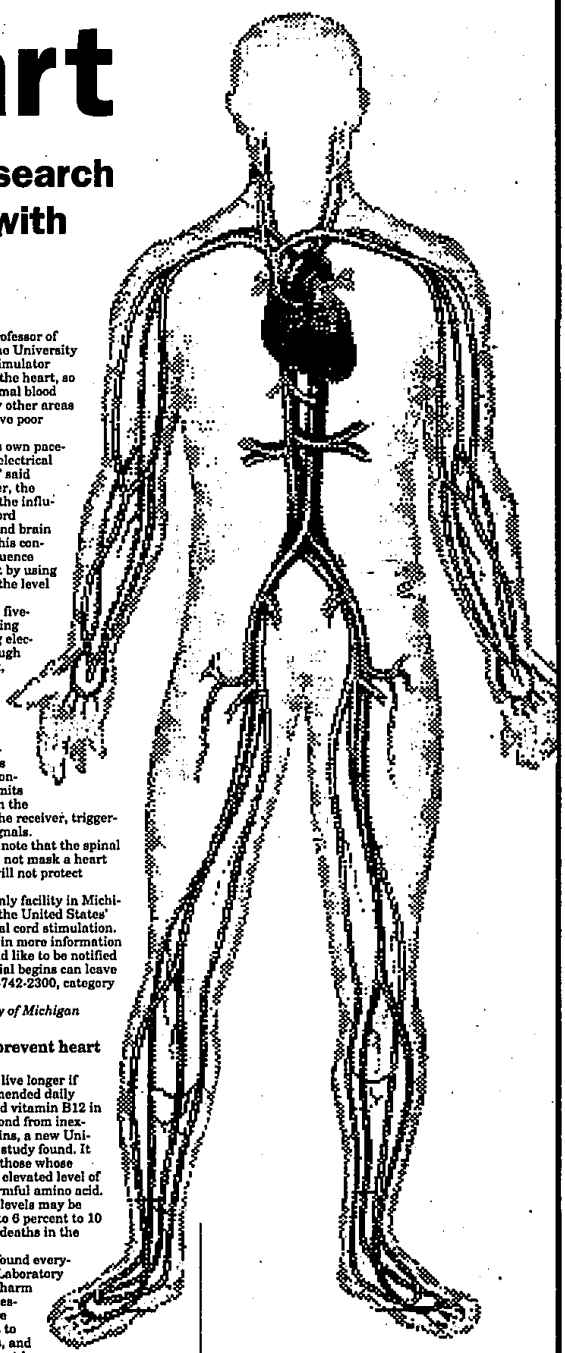
Registration is through March 28, and participants are requested to attend a free orientation session from 4-5 p.m. Wednesday, March 21 or March 28 at St. Mary Mercy Hospital.

The HMR program includes the option of a medically supervised program and a non-medically supervised program, depending on the amount of weight loss desired. Both options use nutritionally complete weight-loss foods (shakes, bars and entrées) as the basis of the diet. Specially designed lifestyle education classes focus on lowering fat and calories without going hungry.

To pre-register, call (734) 655-1783. St. Mary Mercy Hospital is located at 34675 Five Mile Road in Livonia.

Straight from the heart

New procedures and research continue to aid people with heart disease



Although the death rate from cardiovascular disease has declined in the United States during the last decade, it still claimed almost 950,000 lives in 1998, the most recent year for which data are available, according to the American Heart Association.

That figure includes 469,841 from coronary heart disease and 158,448 from stroke. Cardiovascular diseases include high blood pressure, coronary heart disease (including heart attack and angina), stroke, congenital cardiovascular defects and congestive heart failure among others.

However, in the area of research, new procedures and prevention, there is good news from the medical community in the battle against coronary heart disease.

Angioplasty and stents

Angioplasty procedures performed today to re-open blocked arteries are more than 10 percent more successful than procedures performed in the mid-1980s, according to a recent report in *Circulation: Journal of the American Heart Association.* And individuals who receive the procedure are 40 percent less likely to require follow-up bypass surgery or an additional angioplasty to revascularize – or re-open – their coronary arteries.

Much of this improvement is due to the development and wide use of coronary stents, mesh tubes placed in the artery to hold it open after the angioplasty balloon catheter is removed.

"With stents, the artery is opened to a larger degree, and there is less closing of the artery over time," said researcher Dr. Katherine M. Detre, a professor at the University of Pittsburgh.

Unfortunately, restenosis – or the re-clogging of an unblocked artery – can happen. The approach to limiting restenosis has been radiation, but cell overgrowth at the edge of the radiated area of the artery can cause re-narrowing.

A recent study published in the Jan. 16 issue of *Circulation: Journal of the American Heart Association* shows that angioplasty with drug-coated stent appears to limit the re-clogging of heart arteries and reduce the need for repeat procedures. The drug, sirolimus, was administered directly to a human artery by adhering it to a stent. Sirolimus is an immunosuppressant drug used to prevent kidney transplant rejection. It works by preventing cell overgrowth.

Source: American Heart Association

Drilling holes in the heart

Transmyocardial revascularization, or TMR, a surgical procedure that uses a laser to drill holes in the heart, can reduce or alleviate angina in a majority of individuals for at least five years, a major study shows.

TMR uses a carbon dioxide laser to make multiple channels in the heart for the blood to flow through. There are several theories as to why TMR works: The laser channels may provide a new source of blood to the heart; it may trigger angiogenesis, the stimulation of new blood vessel growth; or it may simply destroy the nerves in the affected area of the heart, numbing the heart and thus relieving chest pain.

"Whatever symptom relief these patients had at one year seems to be holding true out to five years," said Dr. Keith Horvath, lead researcher of the TMR and assistant professor of cardiovascular surgery, Northwestern University Medical School. "We have a significant number of patients who have experienced pain relief for as long as eight to nine years following their TMR."

TMR most likely won't replace coronary artery bypass or angioplasty as the most common method of treating coronary artery disease. But TMR may be used for people who are high-risk candidates for a second bypass or angioplasty; people whose blockages are too diffuse to be treated with bypass alone; some patients with heart transplants who develop atherosclerosis after their transplant.

Source: American Heart Association

Electrical pulses reduce angina

Ninety to 95 percent of people who suffer from angina are able to control their angina with traditional therapies including medication, aggressive lifestyle changes, and procedures like angioplasty, bypass and transmyocardial revascularization.

But what about the other 5 to 10 percent? The answer may be spinal cord stimulation, a therapy that has been studied in Europe for more than 10 years as a treatment for angina. Most commonly, spinal cord stimulation is used to treat patients with chronic back pain.

The spinal cord stimulator works by supplying very small doses of electrical current to a key part of the spinal cord, the cervical and upper thoracic spinal cord, explained Dr. Jeffrey Rosenthal, clinical assistant and professor of anesthesiology at the University of Michigan. The stimulator alters blood flow to the heart, so that areas with normal blood flow begin to supply other areas of the heart that have poor blood flow.

"The heart has its own pacemaker and its own electrical conducting system," said Rosenthal. "However, the heart is also under the influence of the spinal cord through the brain and brain stem. It's through this connection that we influence activity at the heart by using electrical pulses at the level of the spinal cord."

After a successful five-day trial period during which a stimulating electrode is placed through the skin in the neck, the patient is ready for implantation of the battery and receiver underneath the skin in the abdomen. Afterwards, the patient is given a hand-held control unit that transmits radio waves through the abdominal wall to the receiver, triggering the electrical signals.

It is important to note that the spinal cord stimulator will not mask a heart attack, but also it will not protect against it.

U-M will be the only facility in Michigan to take part in the United States' clinical trial of spinal cord stimulation. Patients interested in more information and those who would like to be notified when the clinical trial begins can leave a message at 1-800-742-2300, category 6220.

Source: University of Michigan Health System

Can a vitamin prevent heart disease?

Americans might live longer if they got the recommended daily level of folic acid and vitamin B12 in middle age and beyond from inexpensive multivitamins, a new University of Michigan study found. It would most benefit those whose blood tests show an elevated level of homocysteine, a harmful amino acid. High homosysteine levels may be associated with up to 6 percent to 10 percent of all heart deaths in the United states.

Homocysteine is found everywhere in the body. Laboratory studies show it can harm the lining of blood vessels, encourage more smooth muscle cells to grow in vessel walls, and create an environment in which blood clots more easily.

Fortunately, scientists have found that folic acid can lower homocysteine levels by helping in its breakdown. They've determined that the most effective dose for this effect is 400 micrograms a day, coincidentally the Food & Drug Administration's new recommended daily allowance. Higher doses don't seem to lower homocysteine levels much further.

Because there's evidence that high folic acid can mask a deficiency of vitamin B12, the U-M group and others have recommended that B12 be taken along with any folic acid supplements. Most multivitamins contain both nutrients, as do whole grains, oranges and green vegetables.

Source: University of Michigan Health System

Soy to the world!

For the first time, researchers report that whether a person's cholesterol levels are high or normal, those who add soy to their diets may see an increase in levels of "good" cholesterol in their blood.

Results of the clinical trial in China were presented at the American Heart Association's 41st Annual Conference on Cardiovascular Disease Epidemiology and Prevention.

When 40 grams of soy protein were added to the daily diet of a group of men and women with normal lipid profiles, their levels of "good" high-density (HDL) cholesterol increased, while their levels of "bad" low-density lipoprotein (LDL) cholesterol were not significantly affected," said Dr. Jiang He, associate professor of epidemiology at Tulane University School of Public Health and Tropical Medicine in New Orleans, and lead author of the report.

After 12 week study participants who ate cookies containing soy protein supplements every day showed a 4.7 increase in HDL compared to the control group. Although there was a small increase in LDL among soy-consuming participants, it was not considered significant. Among people with high cholesterol, a number of U.S. studies have shown that daily soy protein consumption actually lowers LDL, in addition to raising HDL levels.

Unlike the vegetable protein contained in most grains and legumes, soy protein is "complete," meaning that it contains all the essential amino acids found in animal protein.

Source: American Heart Association