Low-glycemic-index diet can be confusing

Diet researchers reported Thursday that a high-protein, low-glycemic-index diet may work best for maintaining a weight loss. But they concede that many people may not understand just how to achieve such a diet.

While it's easier to understand which foods are high in protein -- eggs, turkey and dairy products -- knowing the glycemic index (GI) of foods can be trickier.

Moreover, just because a food is low on the glycemic index doesn't mean it's more healthful, said the authors of the Diogenes study, published Thursday in the New England Journal of Medicine. For example, carrots have a high glycemic-index value (72) while chocolate is low (49).

People should aim to eat healthy foods that are low on the glycemic index, the researchers said.

A high-glycemic-index food is above 70, while a medium food is from 55 to 70 and a low-glycemic-index food is below 55.

The glycemic index refers to how fast carbohydrates are broken down in the body. Those that are broken down rapidly tend to cause spikes in blood sugar that may alter hormones and increase feelings of hunger. Low-glycemic-index foods, that break down slower, may leave a person feeling more satisfied.

The diet is similar to what nutritionists routinely recommend for good health: Avoid fatty foods and added sugar. Eat lots of fruits and vegetables and fiber. Choose whole grains.

For higher protein content, aim to eat lean meat, poultry, fish, eggs and low-fat dairy products, the researchers said.

For low-glycemic-index, choose fruits carefully. Apples, pears and strawberries are lower GI foods while bananas, pineapple, grapes and melon are higher.

Nearly all vegetables are low GI except for corn. Carrots, beets and parsnip should be eaten raw to keep the GI level down. Whole grains are much lower in GI than white bread or white rice. Cook pasta and potatoes al dente and eat them cold to lower GI.

"Glycemic index is a difficult concept to follow," said the lead author of the study, Thomas Meinert Larsen, of the University of Copenhagen. "If you look at tables listing glycemic index foods, the data are not very reliable. It's very difficult to know if that cereal you just bought is low GI if the information is not provided on the package."

Here's a sample high-protein, low-glycemic-index diet from the authors of the study.

Breakfast: Low-fat yogurt with muesli (no added sugar), whole-grain crispbread with low-fat cheese, an orange.

Morning: Vegetable sticks and low-fat cheese sticks.

Lunch: Whole-grain rye bread with lean meat or cold cuts, mackerel in tomato sauce and miscellaneous vegetables.

Afternoon: Whole-grain rye bread with low-fat liver pate and cucumber.

Dinner: Stir-fried turkey with vegetables and whole-grain pasta, avocado salad with feta cheese and sugar peas.

Drink water or low-fat milk.

(Source: Latimes.com)

Pilot transplant project aims to spur kidney swaps

WASHINGTON (AP) — Too often, would-be kidney donors are wasted because the friend or loved one they want to help isn't a match. Now a new national database promises to help find matches for those frustrated pairs so they can be part of so-called kidney exchanges and cut the wait for a transplant.

If the long-awaited pilot project by the United Network for Organ Sharing pans out, specialists predict it eventually could result in an extra 2,000 to 3,000 transplants a year through "kidney paired donation," where someone donates a kidney on a patient's behalf so they can receive a compatible organ from someone else in return.

The "more people involved, the more people match," explains Dr. Dorry Segev at Johns Hopkins University Hospital, which pioneered kidney swaps and is one of four transplant coordinating centers helping to run the UNOS project.

Kidney paired donation is increasing but still rare — with more than 760 performed in the last three years — and patients today often must track down participating centers on their own and travel hundreds of miles for surgery.

"I do have friends that are on dialysis that can't afford to come this far to receive a transplant," says Heather Hall, 31, of Denham Springs, La., who was one of 16 patients to receive a new kidney during an unusually large exchange last week at Georgetown University Hospital in Washington.

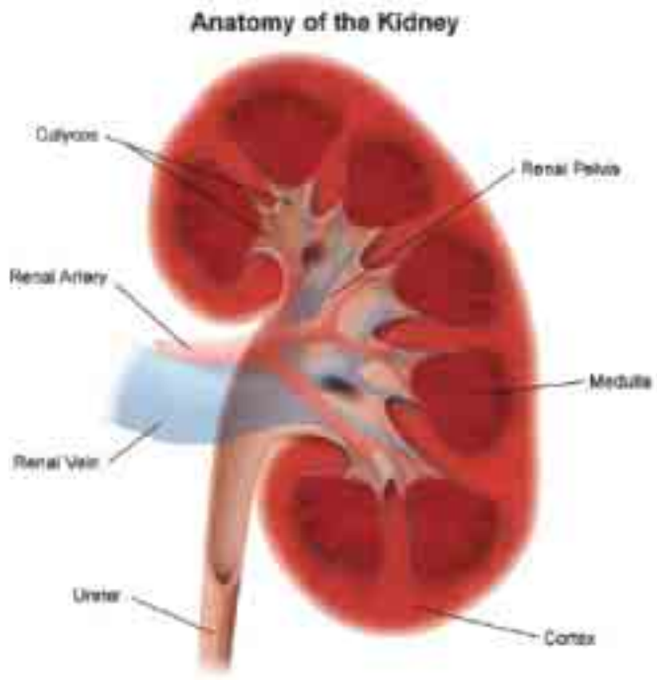
Born with bad kidneys and needing her third transplant, she read about Georgetown's program after doctors in Louisiana said she'd become too hard to match. Her aunt donated on her behalf.

The UNOS project, which began last month, is part of a broader effort to increase kidney paired donation, considered one of the best bets at boosting live-donor transplants — the optimal kind. Some transplant centers already have formed regional alliances to mix and match larger numbers of patients and their would-be donors. Even some small hospitals are making a name for themselves by amassing lists of potential swappers. "We're trying to tell folks, 'Don't take no for an answer,'" says transplant surgeon Dr. Adam Bingaman of San Antonio's Methodist Specialty and Transplant Hospital, who led another 16-way kidney exchange this month.

Of the more than 87,000 people on the years-long national waiting list for a kidney, at least 6,000 instead could qualify for a kidney swap if only they knew about that option, Bingaman recently wrote in the New England Journal of Medicine.

Fewer than 17,000 kidney transplants are performed in the U.S. each year, and just over a third are from living donors, relatives or friends who happen to be biologically compatible.

Without their own donor, patients await a cadaver kidney — and nearly one in three patients may never get one because their immune system has become abnormally primed to attack a new organ, says Georgetown kidney transplant director Dr. Keith Melancon. Black patients are most at risk, but anyone can become "sensitized" from pregnancy, blood transfusions, dialysis or, like Louisiana's Hall, a previous transplant.



Kidney paired donation evolved as an alternative for people with incompatible donors, especially those super hard-to-match.

The UNOS project aims to spur more of them. Any of the 77 transplant centers participating so far merely submits key matching information about a patient and his or her would-be donor to UNOS' database, which periodically alerts centers to potential matches with people from other parts of the country.

The first attempt late last month — when the database contained just 43 kidney patients and 45 donors — turned up seven potentially matching pairs, says Dr. Kenneth Andreoni of Ohio State University, UNOS' kidney committee chairman. The rest is up to the home hospitals of the patients and donors, who ship each other blood samples necessary for final compatibility testing and then set up the operations.

Transplant specialists are divided on whether the UNOS approach will prove best, or whether regional alliances or developing "centers of excellence" for kidney swaps might be more effective. In San Antonio, Bingaman notes that a third of his hospital's 180 live-donor kidney transplants this year were part of exchanges. That's a big increase from 71 live-donor transplants in 2007, before he began swaps.

That debate aside, people can stay on their home hospital's transplant list and be part of the pilot national database, potentially increasing their chances of finding of a match, says Hopkins' Segev.

Being fat aged nine can lead to raised heart disease risk

Children who are overweight by the age of just nine are at a higher risk of going on to develop heart disease, researchers have found.

If they have not slimmed-down by the time they are 15 they already exhibit a range of risk-factors linked to its development in later life.

They have higher blood pressure, cholesterol levels and blood insulin levels than normal by the time they sit their GCSEs - all of which raise the chance of a premature death from heart disease.

Tam Fry of the National Obesity Forum said that the study, published today (FRI) in the British Medical Journal, provided more evidence that childhood obesity should be tackled at an earlier age.

He said: "We have left things too late for far too long. If you start early enough, you might be able to nip it in the bud. We should be assessing our children on a routine basis."

If the forthcoming public health white paper did not tackle the issue it would be an "error", he warned.

In the Bristol University study, led by Professor Debbie Lawlor of its School of Social and Community Medicine, more than 5,000 children aged nine to 12 were measured for body mass index (BMI) and other indicators of fatness.

They were measured again at 15, when their blood pressure was also taken and blood samples analyzed.

At the younger age almost a quarter were either overweight or obese (18.5 percent and 4.5 percent respectively). Those who remained so at 15 had significantly higher blood pressure, cholesterol and insulin levels than thinner children.

However, those who thinned-down tended to reduce their risk factors, with girls appearing to recover better than boys.

The authors said: "Greater adiposity [fatness] begins to adversely influence cardiovascular risk factors even in childhood / adolescence".

Heart disease leads to about 200,000 deaths in Britain a year.

(Source: Daily Telegraph)

Merck's risky bet on heart drugs may yield pills with Lipitor-like success

When Pfizer Inc. abandoned a cholesterol pill four years ago after spending $1 billion to develop it, Richard Clark, Merck & Co.'s chief executive officer, was tempted to give up on a similar drug in testing.

Both companies had spent years pursuing powerful new treatments designed to boost the good cholesterol that ferries fat from the bloodstream even as they reduce bad cholesterol. The goal was to give doctors a new way to combat the world's biggest killer, cardiovascular disease. Then, in 2006, a study found that Pfizer's product, torcetrapib, raised blood pressure and caused more heart attacks, not fewer.

New York-based Pfizer stopped developing its product and left Merck, of Whitehouse Station, New Jersey, at a crossroads, Bloomberg Businessweek reports in its Nov. 29 issue. If Merck proceeded with its pill, it risked spending hundreds of millions of dollars more on a failure. If Merck quit, it risked throwing away what might become the world's most valuable medicine.

"There was a huge debate at every level from the research teams to the top levels of leadership," said Luciano Rossetti, Merck's senior vice president of global scientific strategy, in a telephone interview. "It was a high-stakes game."

The experimental pills are in a new family known as CETP inhibitors. For six months, Merck's researchers examined and re- examined their version, called anacetrapib, in test tubes and in lab rats. The results came up positive; the drug didn't raise blood pressure in animals. Clark decided that Merck, a leader in heart research for 50 years, would press ahead.

Unprecedented Success

That gamble paid off. Last week Merck officials told thousands of heart doctors gathered in Chicago for the American Heart Association's annual meeting that new data showed anacetrapib reduced bad cholesterol by 40 percent. The pill also raised good cholesterol by an unprecedented 138 percent, according to a company-sponsored study of 1,623 patients.

"This is totally unprecedented territory," said Christopher P. Cannon, a cardiologist at Brigham & Women's Hospital in Boston and the study's lead researcher. "If what we are seeing now is borne out in larger studies, this could be the next big thing that could benefit hundreds of millions of people."

For Merck, after a decade of high-risk research, anacetrapib is one of four cardiovascular treatments in final testing that each have the potential for at least $1 billion in yearly sales by 2016, according to Robert Hazlett, an analyst at BMO Capital Markets in New York. Two of the drugs target cholesterol, and two aim to prevent blood clots.

Pfizer and Merck, the two biggest U.S. drugmakers, have been locked in a 25-year battle to dominate the cholesterol market, one of the highest-stakes pharmaceutical businesses. New drugs in that area cost more than $1 billion each to develop, and worldwide sales last year topped $35 billion, according to IMS Health Inc., a research company in Norwalk, Connecticut. The standard treatments for high cholesterol, called statins, reduce LDL, the bad cholesterol that clogs arteries and causes heart attacks. In 1987, Merck received regulatory approval to market the first statin, Mevacor. Pfizer followed a decade later with Lipitor, a drug that soon eclipsed Merck's statins to become the world's best-selling medicine.

Lipitor has been hard to beat, so pharmaceutical companies in search of new blockbuster drugs have been shifting their research focus to maladies such as cancer and Alzheimer's disease, where breakthroughs may be easier to come by. In January, Pfizer itself said it would narrow its drug-development pipeline to 500 projects in six illness areas; cardiovascular disease wasn't one.

(Source: Bloomberg)

Type 1 diabetes death rate is falling, but not fast enough

Death rates have dropped significantly in people with type 1 diabetes, according to a new study.

Researchers also found that people diagnosed in the late 1970s have an even lower mortality rate compared with those diagnosed in the 1960s.

The "encouraging thing is that, given good (diabetes) control, you can have a near-normal life expectancy," said the study's senior author, Dr. Trevor J. Orchard, a professor of epidemiology, medicine and pediatrics in the Graduate School of Public Health at the University of Pittsburgh, Penn.

But, the research also found that mortality rates for people with type 1 still remain significantly higher than for the general population -- seven times higher, in fact. And some groups, such as women, continue to have disproportionately higher mortality rates: women with type 1 diabetes are 13 times more likely to die than are their female counterparts without the disease.

Results of the study are published in the December issue of Diabetes Care.

Type 1 diabetes is an autoimmune disease that causes the body's immune system to mistakenly attack the body's insulin-producing cells. As a result, people with type 1 diabetes make little or no insulin, and must rely on lifelong insulin replacement either through injections or tiny catheter attached to an insulin pump.

Insulin is a hormone that allows the body to use blood sugar.

Insulin replacement therapy isn't as effective as naturally-produced insulin, however.

People with type 1 diabetes often have blood sugar levels that are too high or too low, because it's difficult to predict exactly how much insulin you'll need.

When blood sugar levels are too high due to too little insulin, it causes damage that can lead to long term complications, such as an increased risk of kidney failure and heart disease. On the other hand, if you have too much insulin, blood sugar levels can drop dangerously low, potentially leading to coma or death.

These factors are why type 1 diabetes has long been associated with a significantly increased risk of death, and a shortened life expectancy.

However, numerous improvements have been made in type 1 diabetes management during the past 30 years, including the advent of blood glucose monitors, insulin pumps, newer insulins, better medications to prevent complications and most recently continuous glucose monitors.

To assess whether or not these advances have had any effect on life expectancy, Orchard, along with his student, Aaron Secrest, and their colleagues, reviewed data from a type 1 diabetes registry from Allegheny County, Pennsylvania. The registry contained information on almost 1,100 people under the age of 18 at the time they were diagnosed with type 1 diabetes.

The children were sorted into three groups based on the year of their diagnosis: 1965 to 1969, 1970 to 1974 and 1975 to 1979. As of January 2008, 279 of the study participants had died, a death rate that is 7 times higher than would be expected in the general population.

When the researchers broke the mortality rate down by the time of diagnosis, they found that those diagnosed later had a much improved mortality rate. The group diagnosed in the 1960s had a 9.3 times higher mortality rate than the general population, while the early 1970s group had a 7.5 times higher mortality than the general population. For the late 1970s group, mortality had dropped to 5.6 times higher than the general population.

The mortality rate in women with type 1 diabetes remained significantly higher, however, at 13 times the rate expected in women in the general population.

In addition, blacks with diabetes had a significantly lower 30-year survival rate than their white counterparts -- 57 percent versus 83 percent, according to the study.

Although Orchard said it isn't clear why women and blacks have higher-than-expected mortality, Barbara Araneo, director of complications therapies at the Juvenile Diabetes Research Foundation, said that both discrepancies have been found in other research, and that one theory is that blacks may have a greater genetic susceptibility to heart disease or high blood pressure.

And, for women, she said previous research has shown that, "women with diabetes lose their innate protection against [heart disease], similar to the loss sustained in postmenopausal phases of life." But, she said, it's not clear how diabetes causes this loss.

The overall message of the study, however, is a positive one.

"The outcome of this study shows that diabetes care has improved in many ways over the last couple of decades, and as a result people with diabetes are living longer now," said Araneo, adding, "Managing and taking good care of your diabetes is the surest way to reduce the risk of developing complications later in life."

"What we're seeing now is incredibly encouraging, but it's not necessarily the full story yet," said Orchard, who noted that improvements in diabetes care should continue to lower mortality rates in people with type 1 diabetes.

(Source: HealthDay News)