# Keep a Close Eye on Dieting Diabetes Patients

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#### BY JANE SALODOF MACNEIL Contributing Writer

LAS VEGAS — Physicians need to monitor diabetic patients in weight loss program more closely than nondiabetic ones, Holly R. Wyatt, M.D., said at the annual meeting of the North American Association for the Study of Obesity.

These patients are more difficult to manage than the general population, according to Dr. Wyatt, medical director of the Colorado Weight Center for Human Nutrition at the University of Colorado

Health Sciences Center in Denver. Nonetheless, they can lose weight, she said, and they will be able to reduce or stop many of their medications if they do. "You have to be-

come an expert and

believe you can help your patients lose weight," she rallied clinicians at the meeting, cosponsored by the American Diabetes Association. "We're not talking a huge amount of weight loss; we are talking a realistic amount," she said.

Diabetic patients need a multipronged approach, incorporating diet, activity, behavioral counseling, and medication, Dr. Wyatt said. Diet by itself is not enough. Moreover, adjustments will be necessary when the goal shifts from short-term weight loss to long-term weight maintenance.

Restricting calories is most important early on, according to Dr. Wyatt, but the clinician has to produce a plan the patient can follow. "Just telling patients to eat less is not an approach. You have to do more than that," she said. For example, she cited meal replacements (such as Slim Fast) as being very effective in the short term because they help patients control portions.

Clinicians must monitor blood glucose and insulin levels as these will change when diabetic patients start to lose weight. The physician may need to stop or reduce insulin and some other medications by 25%-50%, Dr. Wyatt advised.

Exercise is critical to long-term success in weight maintenance, she said. But telling sedentary patients to move more does not work any better than telling then to eat less, she said. Instead, she recommended writing an exercise prescription

for these patients. "One of the most effective is a pedometer, and slowly getting them up to 10,000 steps a week," she said. An interim goal would be having the patients increase their steps by 500 over

baseline each week.

"At the end of the day when they look at the pedometer, they know they made a difference," she said.

"Self-monitoring is absolutely critical," Dr. Wyatt continued. "Patients who use food and activity diaries are more successful than those who don't."

Physicians should use all available tools, including medication, according to Dr. Wyatt. Weight-loss drugs can help maintain 10% weight loss at 1 year, she said.

Finally, Dr. Wyatt said the physician should not become discouraged if a patient starts to gain back weight.

"When patients come in and they've regained some weight, you feel like they failed and you failed as caregiver," she said. "No one failed. It's common in a chronic disease. Some people fail several times before they actually succeed."

### Antioxidant Enzyme Variants Linked To Pancreatic Cancer Risk in Diabetics

LAS VEGAS — Genetic variations in two major antioxidant enzymes may increase the risk of pancreatic cancer in people with diabetes mellitus, according to a study presented at the annual meeting of the North American Association for the Study of Obesity.

An ongoing, hospital-based, case-control study found that pancreatic cancer risk was nearly four times higher (odds ratio, 3.8) in diabetic patients who had a catalase variant. The risk was nearly six times higher (odds ratio, 5.7) if they had a variant of superoxide dismutase. The patient population included both type 1 and type 2 diabetics; the majority had type 2 diabetes.

"Any change in these genotypes would make the individual at high risk of pancreatic cancer," said Manal M. Hassan, M.D., a molecular epidemiologist at the University of Texas M.D. Anderson Can-

LAS VEGAS — Genetic variations in cer Center, Houston, in her report of the two major antioxidant enzymes may increase the risk of pancreatic cancer in poster added to the program.

> Type 2 diabetes is a significant risk factor for pancreatic cancer. Dr. Hassan said the investigators hypothesized that an impaired defense against oxidative stress makes some patients more susceptible to pancreatic cancer.

The study has so far compared 556 cases of pathologically confirmed adenocarcinoma of the pancreas with 344 spouses of M.D. Anderson patients who had other forms of cancer. The goal is to enroll 800 pancreatic cancer patients, she said.

The researchers hope to develop a model that could identify which patients are most susceptible. "A large-scale study, to assess the interaction between our findings and obesity indicators such as weight change, is warranted," Dr. Hassan said. —Jane Solodof MacNeil

### Fasting Plasma Glucose Misses Children's Diabetes, Prediabetes

#### BY KATE JOHNSON Montreal Bureau

QUEBEC CITY — The fasting plasma glucose test is inadequate, compared with the oral glucose tolerance test, in screening high-risk pediatric patients for type 2 diabetes and prediabetes, according to results of a new study.

"This is further evidence that impaired fasting glucose and impaired glucose tolerance are two distinct entities," said Stasia Hadjiyannakis, M.D., a pediatric endocrinologist at Children's Hospital of Eastern Ontario in Ottawa.

The study included 152 children aged 5-18 years (mean age 13 years), who underwent a 2-hour oral glucose tolerance test (2h OGTT) and a fasting plasma glucose (FPG) test.

The children were referred for the tests for evaluation of a number of conditions, including obesity, irregular menses, hirsutism, dyslipidemia, and/or acanthosis nigricans, said Dr. Hadjiyannakis, who reported the findings at the joint annual meeting of the Canadian Diabetes Association (CDA) and the Canadian Society of Endocrinology and Metabolism.

American Diabetes Association guidelines recommend the FPG test alone as the initial screening test for pediatric type 2 diabetes and prediabetes.

But recent studies suggest that even children with normal FPG values can

#### have abnormal 2h OGTT results—indicating impaired glucose tolerance, even though the fasting plasma glucose level is normal.

"If you only screen them with the FPG test, you would miss picking up this abnormality," Dr. Hadjiyannakis told this newspaper.

Her study found that of the 152 children who underwent the 2h OGTT and the FPG test, 130 (86%) had normal results on both.

Of the 22 with abnormal results, 13 had abnormal FPG levels that would have been picked up by an FPG screening test alone.

But the remaining nine children had normal FPG levels (defined in this Canadian study by CDA criteria of 5.7 mmol/L [103 mg/dL] or greater).

Eight of these children had 2h OGTT levels between 7.8 and 11 mmol/L (140-199 mg/dL), defined as impaired glucose tolerance. One child had a level greater than 11.1 mmol/L (above 200 mg/dL), defined as type 2 diabetes.

If they had been screened with the FPG test alone, 9 of 13 (73%) of those with impaired glucose tolerance and 1 of 2 (50%) of those with type 2 diabetes would have been missed, Dr. Hadjiyannakis said.

She said the study results suggest that in high-risk children, physicians should consider screening with both the FPG test and the OGTT.

## Women With Diabetes Miss Out on Mammography

#### BY KATE JOHNSON Montreal Bureau

QUEBEC CITY — One-third of menopausal women with diabetes do not receive annual screening mammography, according to results of a large study.

"Even though they had more frequent visits to physicians, compared with healthy women, women with diabetes have a 32% lower likelihood of getting mammograms," said Lorraine Lipscombe, M.D., a research fellow at the Institute for Clinical Evaluative Sciences, Toronto.

The retrospective study included about 69,000 women with diabetes, aged between 50 and 69 years, and compared them with about 663,000 controls of the same age, she reported at the joint annual meeting of the Canadian Diabetes Association and the Canadian Society of Endocrinology and Metabolism.

The medical records were taken from a provincial database as well as the Ontario Diabetes Database and tracked for 2 years, starting from their first physician visit to determine whether they had a screening mammogram, said Dr. Lipscombe, also of Sunnybrook and Women's College Health Sciences Centre, Toronto. Compared with healthy women, those with diabetes had more physician visits per year (9 vs. 7) and were more likely to see a specialist (29% vs. 11%). However, significantly fewer diabetic women had at least one screening mammogram during the study period (38% vs. 47%, odds ratio 0.68).

This finding is of particular concern in light of evidence that suggests there may be an increased risk of breast cancer in women with diabetes, Dr. Lipscombe told FAMILY PRACTICE NEWS.

The mechanism for this increased risk may be a higher rate of obesity in this population, which can predispose women to breast cancer. It may also be related to insulin exposure, she said.

"Not just treatment with insulin, but possibly also the fact that there is a state of insulin resistance for many years before the onset of diabetes. This means that the body makes more insulin than normal, and because insulin is a growth factor it can increase the risk of breast cancer."

The study results suggest that primary preventive care may be suboptimal in diabetes patients, and physicians should consider ways to ensure that patients get regular mammography reminders, according to Dr. Lipscombe.