

# Weight Loss Cut Health Costs Only Temporarily

BY JANE SALODOF MACNEIL  
Contributing Writer

LAS VEGAS — One of the first studies to look at the effect of weight loss on ambulatory care costs has found a puzzling yo-yo pattern, Gregory A. Nichols, Ph.D., said at the annual meeting of the North American Association for the Study of Obesity.

Medical costs decreased an average of \$350 per person for 458 Kaiser Permanente health plan members during the first enrollment year after they lost at least 5% of their body weight in the plan's voluntary Freedom From Diets program. However, these costs started to rebound 3-4 years later, driven up in large part by the health care needs of the patients who maintained their weight loss.

"There could be some explanation, but clearly we need to do a lot more work," said Dr. Nichols, a senior research associate at Kaiser Permanente's Center for Health Research in Portland, Ore. The effect, he acknowledged, seems counterintuitive.

The study did find an economic advantage for Kaiser. Costs went up an average of \$480 in the first enrollment year for the 547 patients who did not lose weight in the program. The net difference, \$830, was statistically significant, he said.

Another conundrum, however, was that a control group of 2,290 Kaiser Permanente members who did not enroll in the program and did not lose weight had consistently lower costs than did the Freedom



From Diets participants. The control group was matched for age, gender, and body mass index (BMI) of 35 kg/m<sup>2</sup> or above, Dr. Nichols said at the meeting, which was cosponsored by the American Diabetes Association.

Dr. Nichols' study was supported by a grant from GlaxoSmithKline.

Audience members speculated that people who were enrolled in a voluntary program might be more inclined to incur health care costs than would those who were not. Another possible explanation, Dr. Nichols said, was that those who signed up for the weight loss program might have been more motivated because they had comorbidities.

In another presentation of Kaiser Permanente research, Jonathan Betz Brown, Ph.D., a senior investigator with Nichols, found that pharmaceutical savings were the only cost efficiency for 67 patients.

Reduced use of antidiabetic, antihyperglycemic, antihypertensive, and gastrointestinal drugs resulted in a \$510 savings. Pharmaceutical costs went up \$393 for candidates who did not have bariatric surgery, and \$432 for general members of the health plan. Total medical costs for the bariatric patients rose, however, from \$5,359 the year before surgery to \$5,705 the year after and \$6,013 2 years later.

Dr. Brown said the study might have been too short and too small to find a cost benefit so soon after an expensive procedure. The operation costs \$29,824 on average, he said. ■

**Those who signed up for the weight loss program might have been more motivated because they had comorbidities.**

DR. NICHOLS

# Musculoskeletal Symptoms Improve After Gastric Bypass

BY PATRICE WENDLING  
Chicago Bureau

CHICAGO — Musculoskeletal symptoms are very common in the morbidly obese, but improve significantly as early as 6 months after gastric bypass surgery, Michele Hooper, M.D., said at the 2004 World Congress on Osteoarthritis.

In a study of 48 consecutive patients, 52% had complete resolution of musculoskeletal symptoms, in weight bearing and non-weight bearing sites, 6 months after surgery. Fibromyalgia symptoms resolved in 90% of patients.

Such benefits may even become more pronounced with time, as weight loss generally plateaus at 24 months and many of the patients were still obese at the time of the study.

While these highly motivated patients may not reflect the general obese population, the benefits seen with weight loss indicate that prevention and treatment of obesity could improve musculoskeletal health and function, said Dr. Hooper of University Hospitals of Cleveland.

She reported on 47 women and one man, mean age 44 years, who were evaluated before and 6 months after laparoscopic or open Roux-en-Y surgery. The mean weight of the women before surgery was 292 pounds (body mass index 51 kg/m<sup>2</sup>) and 202 pounds (BMI 36 kg/m<sup>2</sup>) after the procedure. The male patient lost 103 pounds and had a BMI of 54 kg/m<sup>2</sup> and 39 kg/m<sup>2</sup>, respectively.

The percentage of patients with comorbid conditions at baseline decreased after weight loss: hypertension (52% vs. 14%), sleep apnea (46% vs. 14%), depression (33% vs. 14%), gastroesophageal reflux disease (31% vs. 11%), type 2 diabetes (30% vs. 7%), and asthma (30% vs.

7%). Ninety percent of fibromyalgia symptoms resolved.

The dramatic resolution of fibromyalgia symptoms may be due to a decrease in comorbid syndromes, particularly depression, and an increase in physical activity, Dr. Hooper said at the meeting.

Lower extremity symptoms improved with weight loss, with the exception of hip and trochanteric bursitis complaints. Upper extremity symptoms improved, with the exception of epicondylitis.

The proportion of patients affected by symptoms decreased significantly as follows: knee symptoms (75% at baseline vs. 44% after weight loss), ankle/foot (46% vs. 8%), shoulder (40% vs. 27%), lumbar spine (38% vs. 15%), hand (35% vs. 21%), carpal tunnel syndrome (31% vs. 15%), hip joint (23% vs. 15%), trochanteric bursitis (29% vs. 17%), and epicondylitis (13% vs. 4%).

At 6 months, scores on the Western Ontario and McMaster University Osteoarthritis (WOMAC) composite index improved 67% from baseline. WOMAC subscales improved for pain (51%), function (74%), and stiffness (64%).

Short Form-36 Health Survey scores significantly improved in seven of eight domains measured, and the remaining one domain, general health, was close to normal at baseline.

"The WOMAC osteoarthritis index offers significant potential for assessing musculoskeletal outcomes in obese subjects after gastric bypass surgery, and should be explored further," Dr. Hooper said. "The SF indicates that obesity is associated with a poor quality of life, which improves significantly after weight loss associated with gastric bypass surgery." ■

## Study Supports Leptin's Role In Regulating Appetite

LAS VEGAS — The hypothesis that leptin plays a role in regulating appetite gained ground in a small government study that found leptin levels affect how long a person can go before becoming hungry between meals or full when eating.

Eight patients with lipodystrophy ate shorter, less caloric, more satisfying meals after injections of exogenous leptin brought their leptin levels to normal ranges for their weight, according to investigator Jennifer McDuffie, Ph.D., of the National Institute of Child Health and Human Development's Unit on Growth and Obesity.

After 4 months of leptin therapy, the patients had an average weight loss of 5% and better glucose homeostasis, Dr. McDuffie reported at the annual

meeting of the North American Association for the Study of Obesity. The time until patients became hungry increased by about an hour, and the time until they felt full during meals was cut by about 40 minutes.

"Insulin, glucose, and triglycerides all decreased about 50%," she said at the meeting, cosponsored by the American Diabetes Association. Ghrelin levels dropped more than twofold.

NAASO president Louis J. Arnone, M.D., of Cornell University, New York City, praised the study as "a very nice demonstration of the appetite effect." He told Dr. McDuffie, "A lot of people question whether leptin has an effect on appetite, and you have shown very conclusively that that it does."

—Jane Salodof MacNeil

## Physician Survey Finds Negative Attitudes Toward Obese Patients, Weight Loss Options

LAS VEGAS — A survey of 218 Louisiana physicians found widespread disapproval of obese patients and limited use of current clinical strategies for managing obesity, Catherine M. Champagne, Ph.D., reported in two posters at the annual meeting of the North American Association for the Study of Obesity.

Of respondents, 63% said most health professionals have negative attitudes toward obese patients, and 64% said obese patients are resistant to long-term change. Also, 74% agreed with a statement characterizing obese patients as inactive overeaters who usually do not follow their doctors' advice.

Asked about the weight loss options that they gave their patients, the physicians most often checked off calorie counting (31%),

Weight Watchers (29%), and popular diet books (23%). Only 9% recommended exchange lists for weight management. Even fewer (2%) suggested meal replacements such as Slim-Fast.

"We need continuing education for primary care physicians in their office-based assessment and intervention practices," said Dr. Champagne, chief of nutritional epidemiology/dietary assessment and counseling at the Pennington Biomedical Research Center in Baton Rouge, La.

Most physicians were concerned about obesity in their patients and the nation. Half the respondents ranked obesity as a very serious health risk in their practices, and 84% recognized obesity to be a disease similar to hypertension or diabetes, she said at the meeting, which was

cosponsored by the American Diabetes Association.

In some cases, she added, patient attitudes might be factors in the physicians' choices. For example, 56% of physicians rarely or never prescribed weight-loss medications approved by the Food and Drug Administration. Their patients may not want to take these medications, she said. The Food Pyramid and Dietary Guidelines for Americans were almost as unpopular, with 39% of physicians saying they rarely or never encourage patients to follow them.

The survey was sent to all physicians listed in Louisiana's medical registry for East Baton Rouge and 13 rural parishes. About 22% responded, more than twice as many as expected, Dr. Champagne said.

—Jane Salodof MacNeil