

1

ATHLETIC SINCE CHILDHOOD,

Kyle still wasn't able to keep off the weight. Now, at nearly half his former size, he enjoys playing baseball more than ever.

Kyle Kupfer is almost half the boy he used to be. Last year, at age 16, he carried 329 pounds on his 5-foot 8-inch frame, a weight that his overworked knees could barely support.

Like many overweight teens—some 17 percent of American children and adolescents are overweight, according to the National Center for Health Statistics—he was developing diabetes and struggling with sleep apnea. For years, he had tried one diet after another, consulted nutritionists, and sweated under personal trainers, only to see his weight continue to creep upward. “I couldn’t be that way anymore,” says Kyle, who lives in Manalapan, N.J. “Every day was harder than the one before.”

So when he and his mother learned that a groundbreaking study of weight loss surgery performed on adolescents was being conducted at NYU’s Program for Surgical Weight Loss, it seemed like an idea whose time had come. The trial involved gastric banding surgery, also known as the LapBand, in which surgeons use laparoscopic techniques to place a silicon ring around the upper part of the stomach, leaving the patient feeling full after eating only a fraction of what he used to eat.

Kyle came to NYU for an information session and met George A. Fielding, M.D., Associate Professor of Surgery, who has performed more LapBand operations on adults and teens than any other surgeon in the world. “I really trusted him,” says Kyle. “He understands completely, and he wants kids to have better, healthier lives.”

Dr. Fielding understood Kyle’s struggle better than most doctors. He himself had struggled with his weight nearly all his life, topping out at nearly 320 pounds, and losing and gaining the same 70 pounds four times during the 1980s. Since having LapBand surgery, he’s lost 110 pounds. “Kids like Kyle are comfortable with me,” says Dr. Fielding, “because they know I get it.”

Two years later, Kyle has lost 140 pounds—nearly 100 of it in the first year after the surgery. He no longer has diabetes, and he feels transformed, he says.

When Teen Diets Fail

2

ADOLESCENT PATIENTS LIKE KYLE

have drawn a lot of attention to the program recently, but most of its patients are adults.



"I'm not drained after a short walk, I can play baseball so much better, and I'm fitting into clothes I couldn't wear before," he says. "Although I never had an issue with having friends, now I put myself out there more. I'm always out with my friends. I'm more energetic, more confident, and up for anything. I can really enjoy life!"

Some critics of weight loss surgery for young people insist that surgical approaches are a last resort, and should not be used in the teen years, but Kyle disagrees. "I did try everything," he says. "They won't do the surgery unless you can show that nothing else has worked and that you're really motivated."

With the adolescent trial, in which 53 boys and girls ages 13 to 17 lost nearly half their excess weight over the course of 18 months, NYU's program is in the vanguard of this field. The program was founded in 2001 by pioneering surgeon Christine J. Ren, M.D., Associate Professor of Surgery, who is Dr. Fielding's Co-Director and his wife as well. NYU has some of the best outcomes in the nation and was named one of four "better performers" among the 29 participants in the University HealthSystem Consortium's (UHC) Bariatric Surgery 2005 Benchmarking Project. Together, Drs. Ren, Fielding, and Marina Kurian, author of *Weight Loss Surgery for Dummies*, who joined the practice in 2007, have performed more than 7,000 weight loss procedures.

The center offers two main types of weight loss surgery: LapBand, which Kyle Kupfer had, and Roux-en-Y gastric bypass, in which the surgeon creates a small pouch at the top of the stomach to restrict food intake. The pouch is connected to a Y-shaped section of the lower intestine, bypassing other parts of the digestive system. This limits food intake and also restricts the amount of calories and nutrients absorbed by the body.



Although gastric bypass has received more media attention—thanks in large part to celebrity patients like Al Roker, Star Jones, and Carnie Wilson—LapBand surgery is, in many ways, a safer and easier approach. The minimally invasive procedure takes just 30 to 40 minutes to perform, and patients are usually back at work or school within five days. Complication rates are low—most centers report a mortality rate lower than 1 in 2,000. And because LapBand doesn't change the way the body absorbs food, unlike gastric bypass, it poses no risk of nutritional deficiencies.

With LapBand surgery, most patients

lose 50 to 65 percent of their excess body weight within two years. That's less than with gastric bypass—most patients who have that surgery lose 60 to 80 percent of their excess weight in that time. But at three years, explains Dr. Fielding, the weight loss curves for the two surgeries meet.

Because the band is adjustable, it can easily be tightened or loosened. A fine needle is used to access a reservoir positioned under the skin. The reservoir is connected to a saline-filled balloon that forms the inner lining of the band, widening or narrowing the opening as needed. The band usually needs to be adjusted a few times during the first

A Longer Life After Weight Loss Surgery

Can you really live longer if you shed the pounds? Previous studies have shown that losing weight reduces the risk of diabetes

and high blood pressure, but it wasn't known whether people lived longer as a result. Now, two recent studies in *The New England Journal of Medicine* suggest that weight loss through

bariatric surgery does indeed lengthen life. The studies show that weight loss "saves lives in obese patients," wrote George A. Bray, M.D., of Pennington Biomedical Research Center

in Baton Rouge, in an editorial accompanying the studies in the journal. "Thus, the question as to whether intentional weight loss improves life span has been answered, and the answer appears to be a resounding yes," he wrote.

The studies tracked the fate of nearly 20,000 obese adult patients in the United States and in Sweden. Those who underwent bariatric surgery had a 30 percent to 40 percent lower risk of dying over the next seven to 11 years than those who didn't have the

operation. The mean body mass index of the adults in the study was 40.9, a measure of extreme obesity since the index for normal weight ranges from 18.5 to 24.9.

The studies also confirmed the health benefits of losing weight. In the U.S. study, surgery patients were 92 percent less likely to die from diabetes, 56 percent less likely to die from coronary artery disease, and 60 percent less likely to die from cancer some 7.1 years after surgery compared to obese patients who didn't have the surgery. ●

3

Drs. Christine Ren, George Fielding and Marina Kurian (left to right)

believe that over 90 percent of morbidly obese adolescents qualify for bariatric surgery because diet and exercise have failed to control their weight.



year after surgery and less frequently after that as patients reach their desired weight.

“With bypass, they lose weight very quickly at the beginning, which is very appealing. But virtually all regain some weight. If they eat a bit, the pouch softens a bit, and once that happens, it’s a done deal,” says Dr. Fielding. “The adjustability of the band is one of its great advantages. You don’t get quite the initial surge of weight loss, but you also don’t regain the weight.

“I couldn’t be that way anymore,” says Kyle. “Every day was harder than the one before.”

It’s the same outcome with one-tenth to one-twentieth the risk.”

Gastric bypass is the preferred option for a number of patients—those uncomfortable with the idea of having a “foreign object” permanently implanted in their body, those who can’t return for regular band

adjustments, and those whose insurance might not cover LapBand.

Adolescent patients like Kyle have drawn a lot of attention to the program recently, but most of its patients are adults. Typical patients are in their 40’s, with a body mass index (BMI) of about 48—well into the morbidly obese category, since a healthy lean weight is a BMI below 25. “They’ve tried everything: Weight Watchers, Jenny Craig, Atkins, Slimfast, drugs, and none of it has worked,” says Dr. Fielding. “And the bottom line is, none of it does work—not long term, not for morbidly obese people.”

He points to someone like Ryan Benson, who won the first season of the weight loss reality TV show *The Biggest Loser*, dropping from 330 pounds to 208 during the competition, only to regain within two years 90

of the 122 pounds he’d lost. According to the National Weight Control Registry, only one-fifth of dieters with a history of obesity sustain a loss of 10 percent of their body weight for a year or more.

But Dr. Fielding’s typical patients—depending on whether they’re male or female—can expect to lose between 70 and 100 pounds within the first year after surgery and a total of 120 pounds or more by the end of the second year, reaching a BMI of 30 within two years. “They have an 80 percent chance of going off all the medications they’re on for high cholesterol, high blood pressure, and diabetes.”

Many medical specialists initially viewed bariatric surgery as a fad, but the skyrocketing rate of physician referrals to the Program for Surgical Weight Loss indicates that minds are changing. “It’s sort of a viral thing,” says Dr. Fielding. “Doctors are seeing with their own eyes that their patients are losing weight and, medically, they’re coming off all their drugs for various diseases. In the past year, we’ve had dramatically more doctor referrals.”

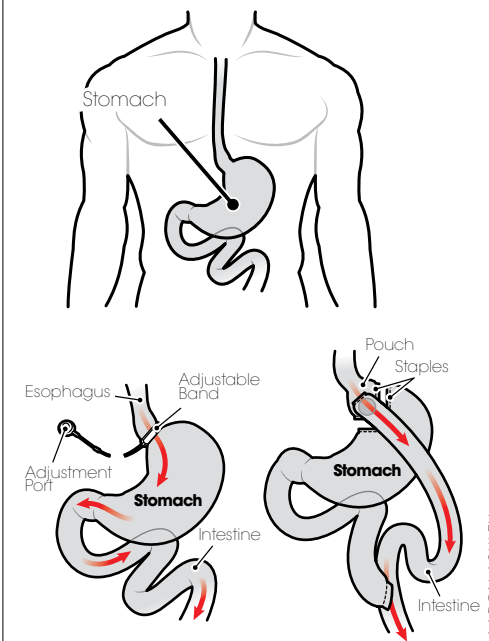
While some may consider weight loss surgery the easy way out, Dr. Ren admonishes that it’s anything but. “Nobody wants to have surgery,” she explains. “It’s reflective of how bad the problem is that someone would elect to have surgery because they’re so obese. It affects every part of your life: your health, your psychological and emotional state, and your quality of life overall.”

Kyle Kupfer agrees. “This surgery is the best thing you could do for yourself if you’re in the situation I was in,” he says. “I’m not going to say it’s easy, but if you want it enough and do what they tell you to do, you can do it. And once you do, you’ll be so much happier.” ●

For more information, visit www.nyuweightloss.org

How Bariatric Surgery Is Performed

Bariatric surgery, or weight loss surgery, limits the amount of food the stomach can hold by surgically reducing its capacity to a few ounces. The primary types of bariatric surgery—gastric bypass and adjustable gastric banding—are performed using an open approach or a laparoscopic one.



GASTRIC BANDING
A removable gastric band is applied to the opening from the esophagus to the stomach. This decreases the amount of food the stomach can hold, and in turn the appetite. The diameter of the band is adjusted via a port inserted into the wall of the abdomen, just beneath the skin.

GASTRIC BYPASS
The stomach is permanently reduced to a pouch the size of an egg. This pouch is then reattached to a tube of intestine that bypasses two feet of the intestines. The amount of food consumed is restricted by the size of the pouch and the connection between the pouch and the intestine.

PHOTOGRAPH: JOANNE SAVIO ILLUSTRATIONS: AARON ASHLEY