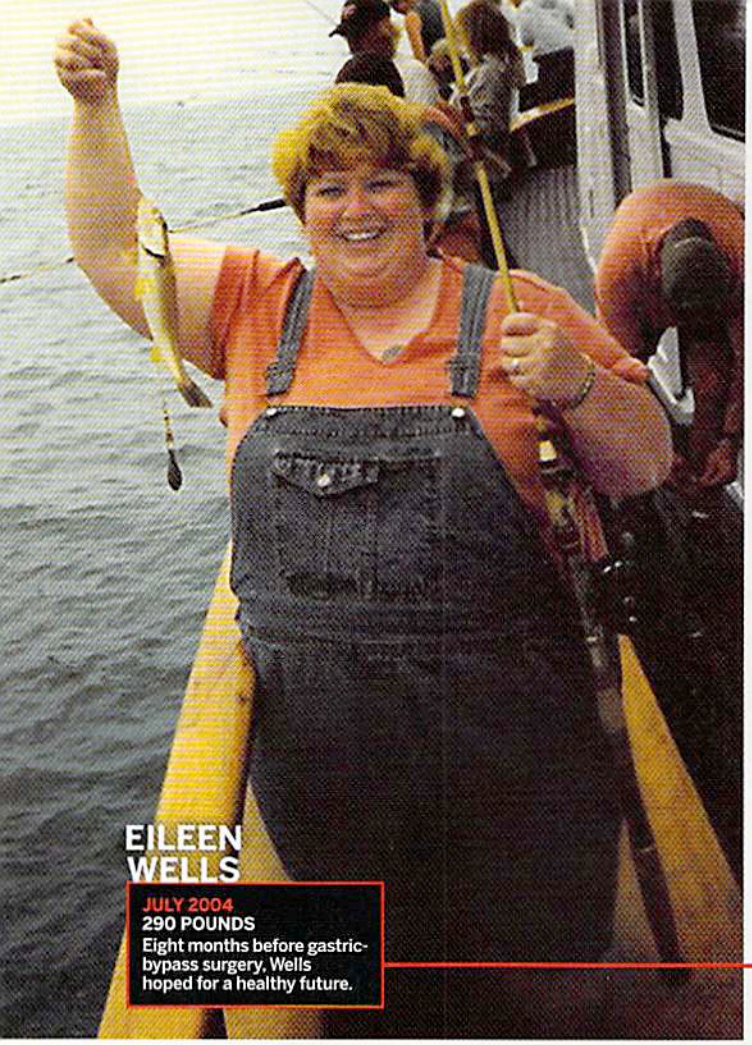
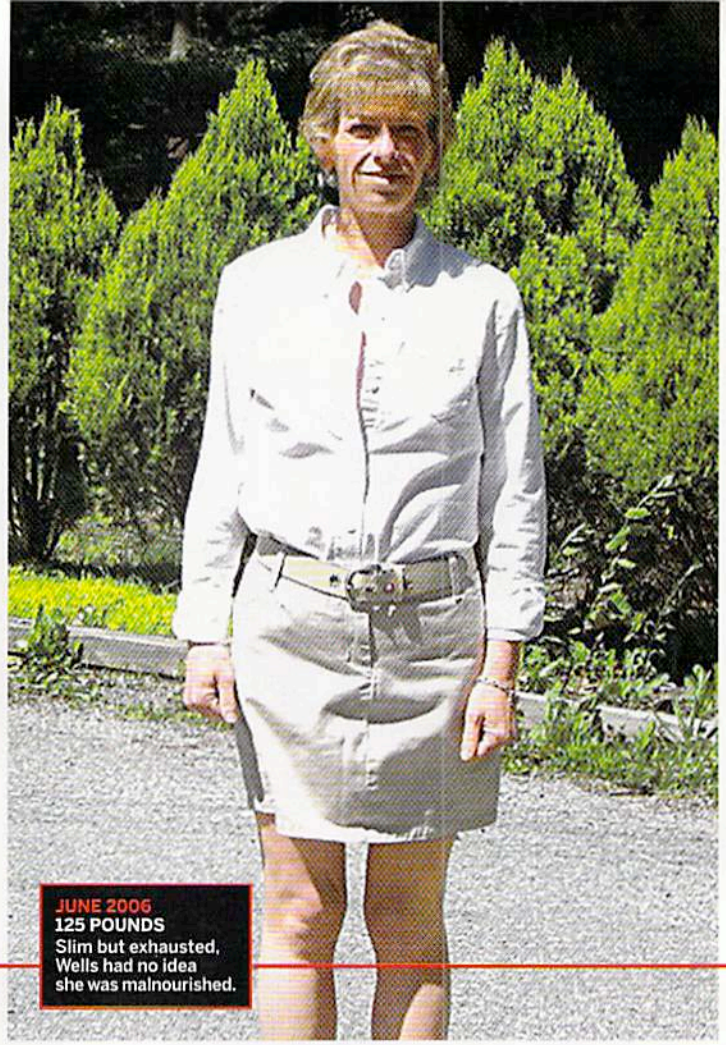


EILEEN WELLS

JULY 2004
290 POUNDS
Eight months before gastric-bypass surgery, Wells hoped for a healthy future.



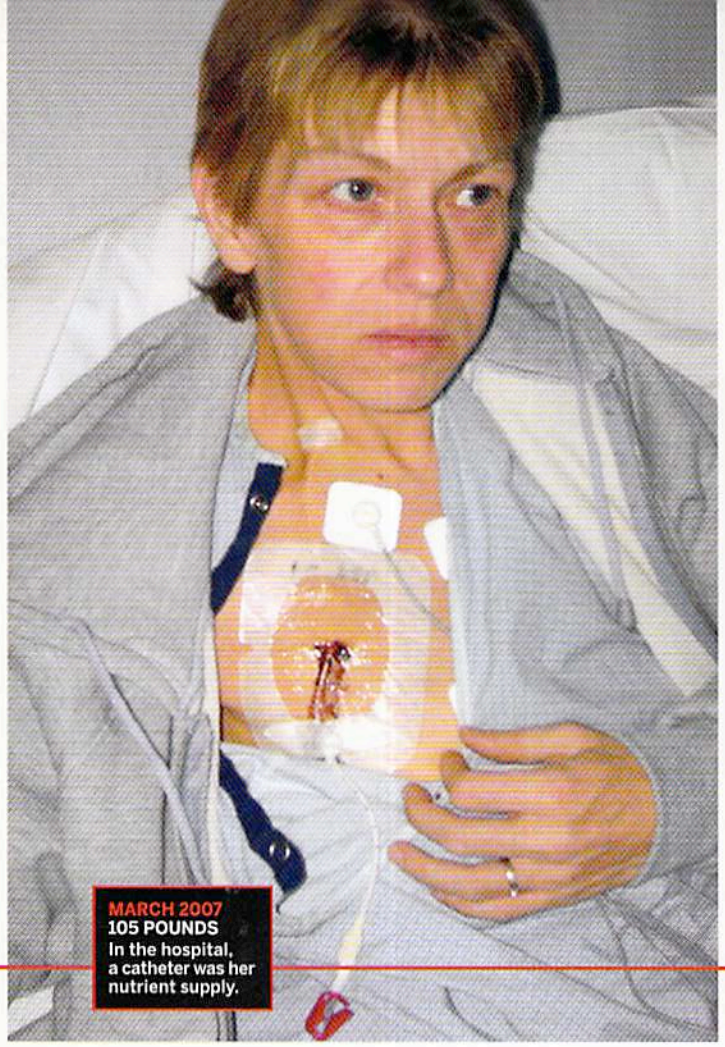
JUNE 2006
125 POUNDS
Slim but exhausted, Wells had no idea she was malnourished.

The weight loss miracle that isn't

New evidence of the health benefits of gastric-bypass surgery has doctors eager to recommend it. But some people say the risks are being greatly underplayed. Read the scary truth about a growing trend. By Sabrina Rubin Erdely

Eileen Wells was smiling as she was wheeled into surgery. She was too excited to feel nervous. At 38, she was about to get "a new lease on life," she says, echoing jargon in weight loss surgery ads. She had seen the before and after pictures in celebrity tabloids, watched the TV infomercials, listened to the patient testimonials and researched online. She was ready to begin her own transformation. At 5 foot 3 and 290 pounds, she was sick of being fat. Her joints ached. Her feet hurt. A stroll through the mall near her home in Greenwood Lake, New York, was enough to leave her sweat-slick and gasping for air. She was anxious to say good-bye to sleep apnea and dieting, ready to take control. And so in March 2005, Wells underwent a laparoscopic gastric bypass. She was grinning right up until the anesthesia knocked her out.

From the menu of weight loss (bariatric) operations, Wells had chosen the Roux-en-Y bypass, the most popular option in the United States. The surgery sectioned off her stomach to a thumb-sized sac—sharply limiting the amount of food Wells could eat—then connected it to a deeper portion of her small intestine, to limit absorption of the calories she did consume. (An increasingly popular alternative, gastric banding, cinches in the stomach to restrict its capacity.) The rearrangement required Wells to radically overhaul her eating habits. She learned to eat tiny, frequent meals, cutting her food into pencil eraser–sized bites. On her doctor's orders, to replace nutrients no longer absorbed by her digestive tract, she faithfully swallowed a multivitamin, calcium and B_{12} supplements and two protein shakes daily. Soon she resembled



MARCH 2007
105 POUNDS
In the hospital, a catheter was her nutrient supply.

APRIL 2008
155 POUNDS
After her reversal, Wells jokes that she's a "weight loss surgery reject."

COURTESY OF SUBJECT (4)

the women in those weight loss infomercials: Fifteen months post-op, Wells had lost an amazing 160 pounds—more than half her body weight—bringing her down to a trim 130.

But although Wells looked like a satisfied customer, she didn't feel like one. Seven months after surgery she had developed an agonizing ulcer on the new inner seam between her stomach and intestine, which required a second operation. Not long afterward, Wells recalls eating a bite of tuna steak her husband, Ron, had prepared and doubling over in pain; an ambulance rushed her into surgery yet again, this time for an intestinal hernia—her bowel had snagged on a slit in her abdominal wall. A fourth procedure followed to ease the pain of the abdominal scarring from her previous surgeries. Meanwhile, Wells's gastrointestinal pain had become so severe that she could barely eat. One day while shoe shopping, she realized she couldn't flex her right foot. Within weeks her limbs began to tingle, her energy evaporated and her weight plummeted. She stopped menstruating. By late 2006, Wells had shrunk to 105 pounds.

"I feel like I'm dying," she told Ron. Months of doctors' visits revealed that Wells had beriberi, a disorder caused by extreme thiamine deficiency. Rarely seen outside 19th-century Asia, it's present enough among those in the weight loss–surgery world that doctors call it bariatric beriberi.

A SO-CALLED SHORTCUT

"I was a model patient! I did everything right!" Wells says today, still in disbelief that after all the hype and hope, her surgery turned out so disastrously. But as she learned the hard way, doing everything right after bariatric surgery is no guarantee of success.

That fact may come as a surprise: With glowing media reports of its health benefits and a roster of celebrity success stories, weight loss surgery is beginning to feel like the miracle cure of the moment. Last year, doctors performed 205,000 bariatric surgeries, marking an 800 percent increase from a decade ago. As of 2004, 82 percent of patients are women, according to the U.S. Agency for Healthcare Research and Quality (AHRQ) in Rockville, Maryland. Weight loss surgeries are poised to become even more popular in the wake of findings that gastric bypass and banding can send type 2 diabetes into remission in many people. A 2007 report from the University of Utah School of Medicine in Salt Lake City found that obese patients who had bypass surgery had a 40 percent reduced risk of dying in the seven years after the procedure, compared with obese people who didn't have the surgery. Bariatric surgeons are using results like those to make the case for surgery as a preventive measure against cancer, heart disease and diabetes in patients who are severely obese.

But despite the growing popularity of obesity surgery—and the general perception that it's a shortcut to thinness and good health—it's no easy path. The American Society for Metabolic & Bariatric Surgery (ASMBS) in Gainesville, Florida, puts gastric-bypass surgery's death rate at between 1 in 1,000 and 1 in 200. In one AHRQ study, 4 in 10 patients developed complications within the first six months, including vomiting, diarrhea, infections, hernias and respiratory failure. Up to 40 percent of gastric-bypass patients can suffer nutritional deficiency, potentially resulting in anemia and osteoporosis; seizures and paralysis have

been reported in extreme cases. Some of these malnourished patients experience bizarre neurological problems, as Wells did.

Even if patients avoid the major pitfalls, they could be in for a world of intestinal discomfort. Not to mention how difficult it is to retrain yourself to subsist on 3-ounce meals and vitamin pills after surgery. "If you're here for the quick fix, then this surgery is not for you," affirms Kelvin Higa, M.D., immediate past president of ASMBS. "This is a serious lifelong commitment." It's an adjustment so profound that patients are screened to make sure they're psychologically up to the task—a test that, according to a recent study in the *Journal of Clinical Psychiatry*, one fifth of would-be patients fail.

All this for a surgery that the experts admit is poorly understood. Few randomized, controlled studies (the gold standard of research) have been performed comparing gastric bypass with nonsurgical weight loss therapy. Although initial weight loss can be dramatic—gastric-bypass patients typically shed around 70 percent of excess weight—patients gradually regain 20 to 25 percent of what they lose. For people with extreme obesity, defined as having a body-mass index of 40 or greater, gastric bypass often merely shifts them into the obese category. Obese patients can drop to overweight status (a BMI of 25 to 29.9). Yet fewer than 10 percent of patients achieve a normal BMI of 18.5 to 24.9, reports Lee Kaplan, M.D., director of the Massachusetts General Hospital Weight Center in Boston. Altogether, weight loss surgery remains an uncertain proposition, and although potential patients must meet certain criteria (as the women interviewed for this article did), experts caution that the surgery is definitely not meant for the mainstream. "Because it's risky, it's only appropriate for a tiny fraction of people with obesity—the sickest 1 to 2 percent," Dr. Kaplan says. "The idea that all obese people should get surgery is insane." Yet that's the way weight loss surgery is being peddled to the public.

THE SELLING OF A SURGERY

Before Ellen Marraffino underwent gastric-bypass surgery in December 2003, she attended an information session at a hospital in Orlando, Florida, and was surprised to find a revival-like atmosphere. "They herded us like cattle into this large conference room. There were at least 100 people, all terribly desperate to lose weight," recalls Marraffino, a 49-year-old former teacher. "They paraded the successful patients, giving them the microphone: 'I never thought I could wear a size medium in my life, and now I'm so happy and things are wonderful!' And everyone's clapping. People were getting all whipped up, and the doctors were selling the surgery," she adds.

Free seminars have proliferated around the country, as doctors, hospitals and bariatric surgical centers find new ways to promote their services. Add to this the proliferation of billboards, TV ads and websites covered in flashing before and after photos and exclamation-studded enticements, looking more like ads for personal-injury lawyers than for a risky surgery. "Is gastric-bypass surgery right for you? Click here to see if we can help you qualify!" beckons one Houston practice. Another site announces a "competitive packaged price" for gastric banding patients opting to pay out-of-pocket—a route that allows doctors to avoid dealing with insurance and ensures they'll get paid in full, as insurance companies have strict rules about which candidates qualify and sometimes don't cover the entire cost. Although self-payers are a small segment of patients, their numbers shot up 62 percent in a two-year span, according to a study by HealthGrades, an organization in Golden, Colorado, that rates the quality of health care providers. That's a remarkable growth for an elective surgery averaging $25,000.

Meanwhile, the manufacturers of two competing brands of gastric bands—Allergan, which makes the Lap-Band, and Johnson & Johnson, maker of the Realize Band—have taken the unusual step of marketing a major surgery directly to consumers. In November 2006, Allergan introduced a TV campaign for the Lap-Band, and both companies have websites allowing would-be patients to watch or read testimonials from happy customers, link to loan providers before surgery and track their progress afterward. At the Johnson & Johnson site RealizeMySuccess.com, a banding patient can create a 3-D model of herself and see what she might look like after a dramatic weight loss. "It works much like the cosmetic surgery industry: It's heavily advertised,

JUNE 2006
180 POUNDS
Thankful to be alive, but angry she suffered rare complications

marketed directly to patients, especially to women. And there's lip service being paid to health, but for patients the great motivator is to improve appearance," asserts Paul Ernsberger, Ph.D., nutrition professor at Case Western Reserve University School of Medicine in Cleveland.

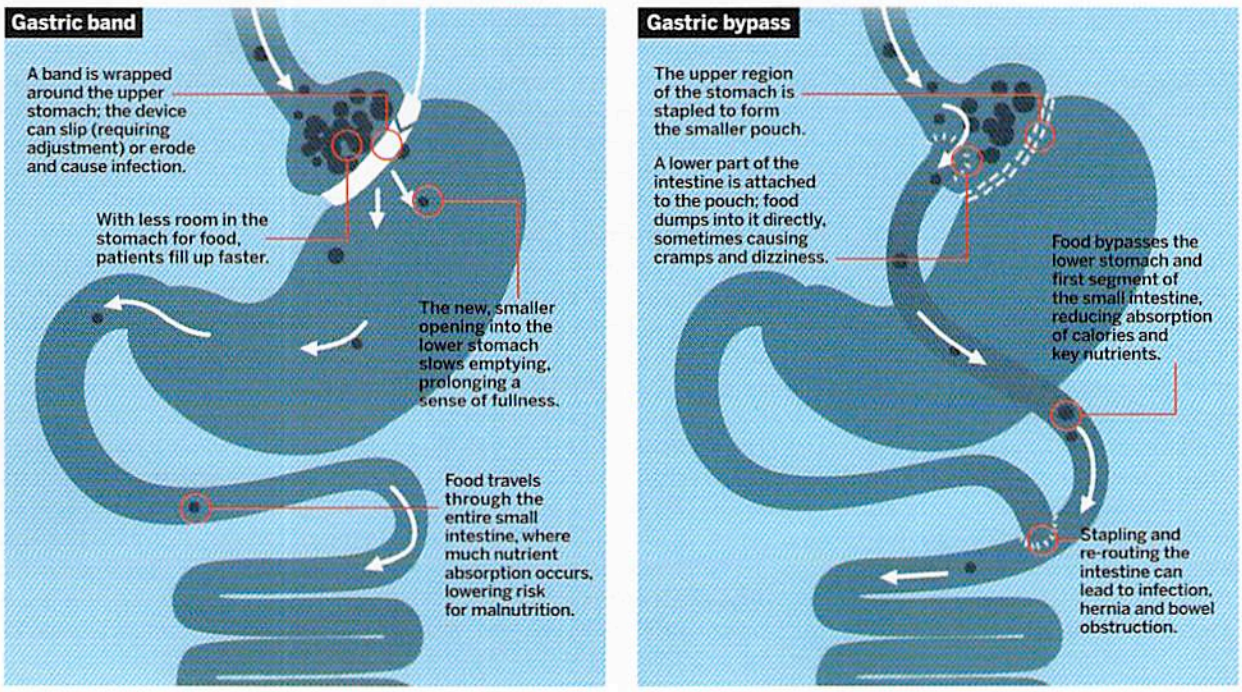
Neil Hutcher, M.D., a surgeon in Richmond, Virginia, who has performed more than 4,000 gastric-bypass surgeries, agrees that more emphasis should be put on bariatric surgery's potential health benefits, pointing out that last year's University of Utah study presented some of the strongest (although still nonrandomized) evidence yet of the surgery's disease-fighting powers. The study, which was published in *The New England Journal of Medicine*, found that bypass patients were 56 percent less likely to die of coronary heart disease, 60 percent less likely to die of cancer and 92 percent less likely to die of diabetes than obese people who did not have surgery. "That should be the headline: Surgery Cures Type 2 Diabetes!" Dr. Hutcher exclaims. "This is about disease, and disease going away. To think we're out there as pseudo-plastic surgeons, that's totally bass-ackwards."

Either way, more doctors are entering the field. Anyone can hang out a shingle, because there's no official certification for bariatric surgeons and no mandatory training requirements; a surgeon who has $10,000 to spend can learn banding or bypass in a five-week "mini-fellowship." The investment is a good one; surgeons' fees average $1,300 to $1,800 for gastric bypass, and some bariatric surgeons offer tummy tucks and other procedures to remove excess skin, charging up to $14,000. Seeking to create some quality control, the ASMBS designates hospitals whose bariatric programs meet its standards as "Centers of Excellence," helps sponsor yearlong hospital fellowships and has created an ethics committee. "But we're not watchdogs; we only know what is reported to us," admits Dr. Hutcher, a past president of ASMBS; as a voluntary society, the ASMBS wields limited power to tame the no-holds-barred feel of this burgeoning field.

Drs. Hutcher and Higa both say that some physicians and patients skimp on necessary follow-up care—such as visits with a nutritionist, gastroenterologist and psychologist—to save time and money, stay within their budget and maximize profits. "It's daunting to some doctors how much you have to spend on the follow-up program. Not everyone's doing what they should," Dr. Higa says. The ASMBS has also admonished clinics for flouting the generally accepted guideline that surgical candidates must have a BMI of 40 or more, or a BMI of 35 to 39.9 plus be suffering serious obesity-related health problems; some centers advertised surgery for patients who had only 40 pounds to lose. In the worst cases, Dr. Hutcher says, doctors outright lie by making impossible guarantees in their ads. *(continued on page 150)*

BANDING VS. BYPASS SURGERY: HOW THEY WORK

Both gastric banding and bypass involve creating a 1-ounce upper-stomach pouch to limit capacity for food and facilitate rapid weight loss. But the surgical techniques differ significantly—and carry some distinct side effects and health risks. —*Carin Gorrell*



COURTESY OF SUBJECT (4). ILLUSTRATIONS: PAUL OAKLEY.

The weight loss miracle that isn't

(continued from page 149) "'Permanent weight loss.' No such thing. 'No risk.' There ain't no such animal as no risk," he says. "If you see a doctor's website that says these things, run like hell."

THE UNADVERTISED COMPLICATIONS

Operating on the obese always presents major challenges. "One of the first tenets you're taught as a surgical trainee is to fear fat," Dr. Hutcher says, in part because it crowds the organs and makes it hard to see. Twenty-two percent of bariatric-surgery patients experienced complications before they even left the hospital, findings in the journal *Medical Care* reveal. Those problems ranged from the life-threatening—such as infection and respiratory failure—to milder complications such as vomiting and diarrhea. And a 2005 *Journal of the American Medical Association* study found that 20 percent of gastric-bypass patients were rehospitalized the year after surgery, sometimes for follow-up operations. (Those same patients' hospitalization rate averaged 8 percent in the year before the procedure.) "It's those additional surgeries you worry about, because there's a significantly increased risk in repeat operations," largely due to internal scarring, points out Mass General's Dr. Kaplan.

In September 2006, 37-year-old Jennifer Ahrendt of Jacksonville, Florida, was one year post-op, having shed an astonishing 200 pounds, when she was struck to the floor by a bolt of pain. "It was excruciating, right in the center of my breastbone and straight through to my back," Ahrendt remembers. "It felt like everything inside me had ruptured." A trip to the emergency room revealed Ahrendt had gallstones—a condition shown to strike about 40 percent of gastric-bypass patients—and would need another surgery to remove them. Ironically, gallstones are a sign of weight loss success, because rapid weight loss crystallizes cholesterol in the gallbladder, forming hard deposits. They are so common that many bariatric surgeons remove the gallbladder during the initial surgery. After all, bypass surgery makes that organ irrelevant: Its job is to store bile, whose destination—the first portion of the small intestine—has been wiped off the anatomical map.

Gallbladder flare-ups are the least of a patient's post-op worries. Bowel obstructions, a risk in any surgery, are an especially serious danger for those who have gastric bypass. "What you have then is a blind loop: The intestine is obstructed in one direction and partitioned in the other direction, so there's no exit," Dr. Higa explains. "If they don't get surgery within 12 hours, the bowel could dilate and explode," potentially killing them.

Tammy Cormier of Mamou, Louisiana, found that out the hard way. In October 2003, doctors diagnosed a bowel obstruction after Cormier developed the worst pain of her life. "It was worse than childbirth," she remembers. Doctors knocked her out and wheeled her into surgery to resolve the problem. But a month later, Cormier was out to dinner with friends when she again cried out in stomach-clutching agony. In the hospital, tests revealed another bowel obstruction. The last thing she remembers is being rushed into surgery. She woke up three days later in intensive care, hooked up to a ventilator. Cormier recalls, "It was traumatic, one of the most horrible experiences of my life," leaving emotional scars so deep that recently, while on a Caribbean cruise for her honeymoon, a cramp in her side brought on a full-blown panic attack. "All I could think about was ending up back on that ventilator," she says.

Because gastric bypass rearranges the digestive tract, it's unsurprising that patients can find themselves rife with gastrointestinal complaints. Eighty-five percent of people who have gastric bypass experience "dumping syndrome," when sugary, undigested foods empty directly into the small intestine, causing nausea, light-headedness, cramping and gas. And then there are the true GI disasters, such as the horror Dana Boulware went through. Almost immediately after her banding procedure in January 2003, Boulware started having trouble keeping food down.

"It was like surgically induced bulimia," says Boulware, a 46-year-old data entry specialist in Houston. "No matter how small a bite I took, no matter how much I chewed, I would feel it just sitting there—a pain in my chest like a heart attack. Then it would come right up." She managed to tough it out for 20 months because, she says, her surgeon urged her to stick with it, continually telling her to chew her food more thoroughly. Finally, when Boulware's esophagus felt scarred from vomiting and the enamel had worn off her teeth, a second surgeon advised removing the band. Boulware readily agreed—"I think I would have taken it out myself if I had known how," she says. Still, she considers herself lucky. Boulware's best friend had a similarly unhappy gastric-band experience but was determined to give surgery another try. In September 2005, her friend underwent a duodenal switch—a relatively uncommon form of weight loss surgery that involves removing a large portion of the stomach and bypassing a significant section of the small intestine—and developed a leak in her bowel. She died days later of sepsis.

WHEN THE FAT MAKES ITS WAY BACK

Some bariatric-surgery patients may rationalize any suffering they experience as the cost of losing weight. But even so, they may not keep the pounds off—and the svelte ideal they're aiming for may be a pipe dream in the first place.

Lisa Tannehill of Grants Pass, Oregon, had high expectations when she had a duodenal switch at age 38. "I'm a big believer in the surgery," she avers—and remains so despite having to fight through a post-op nightmare of a hernia and a reaction to pain meds. In the first 18 months, she dropped 100 pounds from her 325-pound frame. From there, however, Tannehill's weight plateaued—and then, to her horror, the pounds began creeping back on. "I didn't do anything differently!" she says. "I still ate tiny meals!" Nevertheless, six years post-op, Tannehill has leveled off at 240 pounds, a net loss of 85 pounds.

The greatest period of weight loss is the 12 to 18 months after bariatric surgery, after which you start to see weight regain, according to Meena Shah, Ph.D., an obesity researcher at the University of Texas Southwestern Medical Center at Dallas. Her 2006 review of the controlled studies done on the issue revealed that the disease-fighting properties of both bypass and banding surgery go down as patients' weight goes back up.

Why isn't weight loss more lasting? More evidence is needed, but one possible explanation is physical: If you keep overfilling the stomach, it can stretch from its tiny postsurgical size to perhaps double its size. In the case of gastric bypass, hormones may also play a role: Researchers have found that the surgery alters the balance of hormones *(continued on page 152)*

The weight loss miracle that isn't

(continued from page 150) such as ghrelin that regulate hunger and fullness. "For the first four or six months, we actually have to remind patients to eat," says Sandra Arioli, a registered nurse who runs a gastric-bypass support group at the Renfrew Center eating disorders clinic in Coconut Creek, Florida. Six months later, hormonal balance shifts again and the appetite returns, sometimes with a vengeance, Arioli says. "That's when they have to start listening to their body because it becomes harder to change their eating behaviors." Patients need to get into the exercise habit—a task easier said than done—and come to terms with life after food. "Post-op, these people grieve for the loss of food," Arioli says. "Food is their comfort. And if you don't figure out how to find comfort in other ways, you're going to go with what you know. These are some serious eaters."

But a new theory might provide some answers about post-op weight gain, and prove that willpower has little to do with it. Researchers are now theorizing that the reason patients lose a certain amount of weight in the first place is because gastric bypass, in part by toying with hormones, somehow lowers the body's natural set point, the weight your system is most comfortable maintaining. A patient's hunger returns, because the body has achieved that lower set point. "The surgery changes our physiology, the way the body responds to food. It makes heavy people more like people who are naturally thin," enthuses Dr. Kaplan, who is conducting cutting-edge research on the topic. "Understanding this as a set-point issue allows us to stop blaming the patient who doesn't do as well, because they were just built that way. What they lose is what they lose, and they can't expect to lose any more."

Figuring out the mysteries of bariatric surgery has become an urgent new frontier. Once experts understand how it works, they hope to be able to re-create its positive results in nonsurgical ways—so the surgery can be phased out altogether. "Surgery is the best thing we have right now, but it isn't the optimal cure," Dr. Higa says. "We need to figure out why it works, so we can eliminate it. If we do this right, we won't be doing surgery for obesity in 50 years."

GIVING UP ON A MIRACLE

Months of surgeries and nutrition therapy failed to pull Eileen Wells out of her downward spiral. "I was a skeleton, just wasting away," she remembers. "My doctor told me that if I didn't gain weight, I might die." Which is why in June 2007, Wells found herself being wheeled into surgery yet again—crying this time—en route to having her gastric bypass reversed.

Some experts argue that, unfortunately, bariatric procedures are not truly reversible. "If you have a two-story addition put on your house, and then you tell the guy take it down—well, he might take it down, but your house might never be like it was," says Louis Flancbaum, M.D., a retired bariatric surgeon in Teaneck, New Jersey. Removing a gastric band is easier than reversing a bypass. But in all, bariatric reversals—or take downs, as patients call them—are imperfect procedures with one near-guaranteed result: Patients will regain much of the weight they've lost. Moreover, people who have their bands removed may find future weight loss surgery more risky, according to the ASMBS.

Nevertheless, it seems inevitable that as the number of bariatric-surgery patients continues to rise, so, too, will the number of complications and reversals. And although experts assert reversal surgery is exceedingly rare—less than 1 percent of cases—a number of women interviewed for this article have undergone it.

Ellen Marraffino got her bypass reversed this past December after being unable to keep down solid food for five years. And in April 2004, after Tammy Cormier developed chronic diarrhea lasting four months—draining her to 95 pounds—a team of doctors concluded she had no choice and agreed to perform the reversal. And so after writing her will, saying her good-byes and selecting her coffin, Cormier went under the knife. Today, she says her stomach is partially paralyzed from all the severed nerves, she's missing a foot of intestine and she's back up to 180 pounds. "But I'm alive," Cormier says wistfully.

For women who wanted so desperately to lose weight, going back to square one feels like the ultimate defeat. "Do I regret having gastric-bypass surgery? Yes, I regret it," Wells admits. She maintains that for some people who are severely overweight, the procedure can be a lifesaver, even though her bypass put her out of work for nine months—and her reversal hasn't totally corrected her neurological symptoms. "I thought I was doing something to change my life for the better. But it made me feel a hundred times worse." ■

Sexy secrets

(continued from page 135)

Why do some pregnant women want sex so often?

Pregnant women are hopped up on estrogen 24/7, and while estrogen doesn't dictate arousal, Foley says, "it does impact the circulatory system: The skin glows, the blood flows—you get the picture." The libido often awakens during the second trimester, that happy interlude between suffering from nausea and feeling as if your clothing could accommodate the entire state of Wyoming. "You're over the fatigue," Foley says. "And you're uninhibited because you're not worried about getting pregnant." As for whether this randiness is a sign that you're having a boy, Foley says that's likely a wives' tale. Either way, take advantage!

Homosexuality: nature or nurture?

"Sexuality is mostly determined before we're born," says Glenn Wilson, Ph.D., coauthor of *Born Gay: The Psychobiology of Sex Orientation* (Peter Owen). "It's not just dictated by genes, but by womb chemistry, which is an environment effect, but of the physical, not the social, environment." On the genetic front, research shows that homosexuality appears to run in families: About 10 percent of brothers of gay men are also gay, compared with about 3 percent of the general population. Still, scientists maintain that prenatal environment (including a mother's diet and her stress levels during pregnancy) plays an important role. According to research published in *Nature*, homosexual women tend to have finger lengths similar to that of men, possibly due to higher exposure to testosterone in utero. "We still don't know exactly how much is nature and how much is nurture," says Richard Lippa, Ph.D., professor of psychology at California State University at Fullerton. "There are shades of gray, especially when it comes to women."

Why does it seem as if men want sex more than women do?

Testosterone is the hormone of desire, and men have heaps more of it than women do. That's why they often initiate sex after exercising or waking up in the morning, when testosterone levels are highest. "Men's urges are also more spontaneous and often stimulated by visual triggers," Davidson says. "A guy could watch golf on TV, see something that sparks a memory and get