Good boy!

A formerly obese dog’s weight-loss journey inspires thousands of people to follow suit.

The Obesity Issue

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To improve the health of people living with diabetes

Boehringer Ingelheim and Eli Lilly and Company are committed to researching and developing innovative treatments that make a difference for people affected by diabetes.
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EmPower, published by the American College of Endocrinology (ACE), the educational and scientific arm of the American Association of Clinical Endocrinologists (AACE), is dedicated to promoting the art and science of clinical endocrinology for the improvement of patient care and public health. Designed as an aid to patients, EmPower includes current information and opinions on subjects related to endocrine health. The information in this publication does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice may be appropriate.

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ACE is a scientific and charitable medical organization dedicated to promoting the art and science of clinical endocrinology for the improvement of patient care and public health.
Dear Reader,

Welcome to the Summer 2014 edition of EmPower Magazine!

We’re pleased to present what we believe is a very special and extremely informative issue that focuses almost exclusively on obesity...and rightly so.

Perhaps the most challenging medical issue of our time, the increasing prevalence of obesity in American society—and, in fact, around the world—is cause for great concern.

Now, physicians are recognizing that obesity is not simply a result of lifestyle choices alone, but a chronic disease state, paving the way for treatment plans that go beyond lifestyle changes to address consequences of the disease and best options for a successful treatment outcome. The issue is examined in detail in these pages.

We also explore the many less-well-known complications that overweight and obesity can potentially contribute to in one’s body, among them kidney disease, asthma, nerve damage, cancer...even dementia!

You can learn more about childhood obesity, female-specific obesity issues and the benefits of weight-loss surgery beyond losing weight.

Plus, our story about an extremely obese dog and his journey to regain a normal life will not only warm your heart, but perhaps offer some inspiration as well if you’re trying to lose weight.

To better health!

Sincerely,

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Executive Editor

DACE L. TRENCE, MD, FACE, MACE
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Dr. Yehuda Handelsman is the American College of Endocrinology’s (ACE) President. He is the medical director and principal investigator of the Metabolic Institute of America and an endocrinologist in solo private practice in Tarzana, California, where he developed and successfully utilizes comprehensive and unique multiple interventional approaches to the cardiometabolic high risk patient, preventing and managing obesity, diabetes and cardiovascular disease. He has been listed repeatedly in “Top Doctors of Los Angeles,” “Southern California Super Doctors” and “Best Doctors of America.”
Obesity is now considered a disease.

With recent developments among leading medical groups paving the way, there is now agreement among medical experts that obesity is a disease state based on scientific evidence, rather than the result of individual lifestyle choices.

In 2012, the American Association of Clinical Endocrinologists (AACE) declared obesity a chronic disease and explained the rationale for this designation. Subsequently, AACE and a number of other professional medical societies then brought this proposal to the American Medical Association (AMA) where differing opinions on this matter were carefully considered. In the end, the AMA agreed in 2013 that obesity should be considered a chronic disease, just like diabetes, hypertension, or asthma. “Recognizing obesity as a disease will help change the way the medical community tackles this complex issue that affects approximately one in three Americans,” AMA board member Dr. Patrice Harris said in a statement following the decision. She also suggested the new definition would help in the fight against type 2 diabetes and heart disease, which are linked to obesity.

Like any other chronic disease, obesity is caused by interactions among genes, environment and behavior. This means that obesity is inherited to a degree within families, but that the degree of obesity is also determined by behavioral and cultural determinants within the family and the environment in which the family lives.

Obesity fulfills the three essential characteristics of a disease established by the AMA itself. First, a disease is characterized by recognizable signs or symptoms. For obesity, this is an elevated body mass index (BMI), which is your weight in kilograms divided by height in centimeters squared; it may seem like complicated math, but you can find internet sites where you can enter your weight in pounds and height in inches to get your BMI result. This will tell you whether you are overweight, with BMI between 25 and 29.9, or obese with a BMI of 30 or above. In addition, the waist circumference is used to assess fat accumulation in the abdomen. We know that more fat in the abdomen (the “apple” shape) is associated with more metabolic problems than fat in the hips and thighs (the “pear” shape).

The second characteristic is that a disease involves abnormal functioning in some part of the body. In obesity, this could pertain to the hypothalamus in the brain, which regulates food intake and hunger. Normally, the hypothalamus would be satisfied with a healthy body weight, but, in obesity, is a driver for excess calorie intake. Another example is fat tissue can become infiltrated with inflammatory cells leading to abnormal secretion of factors into the blood stream. These factors then alter metabolism in other organs in the body and act to increase insulin resistance and risk of type 2 diabetes and metabolic syndrome, a cluster of conditions such as increased blood pressure, high blood sugar and abnormal cholesterol levels that
increase your risk for heart disease and other health problems, such as stroke.

Finally, a disease causes harm or even increased mortality. Clearly, obesity satisfies this criterion as well since it can lead to a wide variety of metabolic problems (diabetes, hypertension, dyslipidemia, which is an abnormal amount of cholesterol and/or fat in the blood, non-alcoholic fatty liver disease, infertility, cardiovascular disease) and so-called mechanical problems due to excess body weight (sleep apnea, osteoarthritis, urinary stress incontinence, immobility). High levels of body weight can also be associated with a shorter life span and decreased quality of life.

What obesity is not is a lifestyle choice. People who are obese generally do not want to be obese. Surveys have shown that over 90 percent of people with obesity have seriously attempted to lose weight at some point, and 50 percent are currently trying to lose weight. People with obesity face discrimination in employment, college admissions, romance, airplane seating, medical care and income. That is not to say that people with obesity cannot lead full, productive, happy lives; they can and do. At the same time, obesity carries with it significant health risks. Efforts and resources that people expend in attempts at weight loss indicate that a lower body weight is often a desired outcome. Unfortunately, billions of dollars are spent in interventions that do no good. These interventions include herbal remedies, magic exercise programs, and other gimmicks that will “melt the fat off” as advocated in cable TV commercials and by TV doctors. If these interventions sound too good to be true, THEY ARE!

The fact that obesity is a disease does NOT allow individuals to ignore the responsibility of adopting a healthy lifestyle as part of the treatment. Healthy meal choices with less caloric intake together with increased physical activity are critical in combatting obesity. However, it is no secret that achieving weight loss and sustaining weight loss over time are difficult. This difficulty arises from the body’s own mechanisms that caused the excess body weight in the first place. After weight loss, the amount of energy the body burns at rest goes down, appetite-stimulating hormones like ghrelin [GREL-in] increase, the hormones that make you eat less decrease, and psychological food choices become oriented to calorie-dense items enriched in sugars and fats.

All of this physiology makes people gain the weight back to the original higher body weight. In this way, obesity protects obesity. This is one of the reasons why endocrinologists believe that obesity is a disease.

The good news is that we have new and better tools to treat obesity, which can fight back against the body’s own efforts at maintaining high body weight. Scientific evidence supports the success of structured lifestyle intervention programs that include care from health care professionals, healthy meal patterns that include reduced caloric intake, meal replacements, behavioral counseling and increased physical activity. In addition, we have new weight-loss medications that have been proven to be safe and effective in clinical trials and have been approved by the Food and Drug Administration (FDA). Medicines approved in 2012 include Qsymia® and Belviq®, and two additional new medications are being evaluated by the FDA for approval in the fall of 2014. These medications should be considered as additions to lifestyle changes and will produce greater weight loss than achieved by lifestyle modification alone. This is because most of the medications work by suppressing appetite, and, in this way, improve the ability of individuals to be compliant with a reduced-calorie meal plan. This helps patients lose more weight, and, more importantly, to keep it off over a longer-duration of time.

Obesity fulfills the three essential characteristics of a disease.

The people that benefit the most from these weight loss interventions are people with obesity-related complications. Weight loss has been scientifically proven to treat metabolic syndrome and prediabetes by preventing progression to type 2 diabetes, to help control diabetes itself with less need for conventional diabetes medications, to lower blood pressure, and to improve blood lipids, sleep apnea, osteoarthritis, urinary stress incontinence, gastrointestinal reflux and other problems.

So what can you do to help yourself? Talk to your health care team, your specialist, your endocrinologist, about whether you are overweight or obese. Your health care team will assess whether you have any obesity-related complications. Weight loss has been scientifically proven to treat metabolic syndrome and prediabetes by preventing progression to type 2 diabetes, to help control diabetes itself with less need for conventional diabetes medications, to lower blood pressure, and to improve blood lipids, sleep apnea, osteoarthritis, urinary stress incontinence, gastrointestinal reflux and other problems.

(Continued on page 6)
Obesity is no longer considered a cosmetic issue that is caused by overeating and a lack of self-control. The World Health Organization (W.H.O.), the American Association of Clinical Endocrinologists (A.A.C.E.), the American Medical Association (A.M.A.) and other national and international medical and scientific societies now recognize obesity as a chronic, progressive disease resulting from multiple environmental, physiological and genetic factors. Still, the sobering statistics don’t lie: overweight and obesity are taking a huge toll on the bodies and pocketbooks of America.

The people of the United States are overweight by a total of about four billion pounds.

More than one-third of U.S. adults (78 million) are obese, a number that has more than doubled since the early 1960s.

Nearly one in three U.S. children (23.9 million) ages 2 to 19 are overweight or obese, a rate that has more than doubled in the last 30 years. According to the California Center for Public Health Advocacy, soda is the leading cause of childhood obesity in the United States.

At least one out of every five U.S. teenagers has abnormal cholesterol levels, a major risk factor for heart disease. Among obese teenagers, the rate jumps to more than 2 out of 5 and stands at 43 percent.

Obesity increases risk for endometrial (uterine) cancer by 39 percent, esophageal cancer by 37 percent, kidney cancer by 25 percent, colon cancer by 11 percent and post-menopausal cancer by 9 percent.

The National Institutes of Health (NIH) funding for obesity research is currently nearly $1 billion per year; the total cost of overweight and obesity in the U.S. is $270 billion per year.

A study examining one-year passenger airline fuel costs revealed airlines spent $275 million on 350 million additional gallons of fuel to compensate for the additional weight of their passengers.

Child-safety seat manufacturers are starting to make bigger models after a recent study showed that over 250,000 U.S. children age 6 and under are too large to use them.

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The Lesser-Known Consequences of Obesity

BY KATHLEEN L. WYNE, MD, PHD, FACE

When we hear about obesity on the news, the discussion is usually focused on the risk of diabetes and heart attacks for very obese people, usually in the range that is now called Class 3 (high-risk) obesity, formerly called “morbid obesity.” The dialogue rarely addresses the fact that the risks of complications start prior to the onset of Class 3 obesity and also when overweight, which is a BMI—body mass index—of 25-30 (see the article on “Diabetes and Obesity” on page 20 to learn how to calculate your own BMI).

What many don’t know is that obesity is an established risk factor for a number of serious medical conditions, including not only diabetes and heart disease, but also chronic kidney disease, heart failure, neuropathy, asthma, arthritis and cancer.

CHRONIC KIDNEY DISEASE

Chronic Kidney Disease (CKD) may develop prior to the onset of diabetes in the obese patient and can be diagnosed from a simple blood test called serum creatinine [kre-at-i-nin]. Serum creatinine is typically measured as part of a comprehensive metabolic panel, a group of 14 blood tests that provide an overall picture of your body’s chemical balance and metabolism, and should be measured at least annually in people who are obese. A glomerular filtration rate (GFR) is then calculated from the serum creatinine; this is a test that measures how well the kidneys are working and specifically estimates how much blood per minute is passing through tiny glomeruli in the kidneys, which filter waste from the blood. If either or both serum creatinine or GFR are abnormal, then your doctor will ask you to see a kidney specialist (a nephrologist).

The correlation between obesity and CKD was demonstrated in a large study of adults in Sweden which revealed that being overweight (BMI above 25) at age 20 was associated with a three-fold excess risk for CKD, in comparison with a BMI below 25. BMI above 30 among men and BMI above 35 among women any time during their lifetime were linked to three- to four-fold increases in CKD risk.

BMI is not the only marker for obesity, as some people have central obesity (the body shape described as an “apple,” in contrast to that of a “pear,” referring to where on the body more fat is located) without a BMI above 30, which is also a risk for metabolic complications.

(Continued on page 8)
A study completed in the Netherlands found that a higher waist-to-hip ratio was associated with lower GFR, lower effective kidney blood flow and higher filtration demand by the kidney, even after adjustments for sex, age, blood pressure and BMI.

The importance of performing the screening blood test in people at risk for CKD is that you may feel fine in the early stages and don’t develop any symptoms until the CKD is advanced, even possibly at the stage where dialysis or organ transplantation is needed. The goal is to identify kidney disease early when there may still be a possibility for either reversing the process or at least slowing the progression to kidney failure. In the case of obesity, the goal would be to proceed with weight loss followed by weight maintenance.

HEART FAILURE

Problems breathing (i.e., “shortness of breath”), fatigue, leg swelling and limited ability to exercise are often attributed merely to obesity, however these symptoms need to be evaluated to determine if the heart could be the cause, especially if one or more of these symptoms change between doctor visits.

Typically the physician is focused on looking for evidence of atherosclerosis [ath-er-ō-skler-ōsis] (accumulation of fatty material in the blood vessels), which causes blockages in the arteries of the heart, leading to heart attacks and failure of the heart to pump as well as it should. However, in the presence of obesity, physicians often find heart failure without significant atherosclerosis or evidence of prior heart attacks. This is thought to be due to the stress of the excess weight on the vascular system, atherosclerosis of the small vessels, and the inflammation that comes from fat tissue that causes chemical changes, adding to vessel blockages.

This type of heart failure is diagnosed by an ultrasound of the heart (echocardiogram) and is referred to as “heart failure with preserved ejection fraction,” or HFrEF. Patients with HFrEF tend to have fewer symptoms than those with HFpEF, suggesting that evaluation for possible heart failure should be done early rather than after many years of complaints. Although the treatment is the same for both types of heart failure, the goal of early diagnosis would be to slow or stop the progression of the heart failure to prevent the development of HFrEF. In this circumstance, the primary treatment will be weight loss and weight maintenance combined with regular physical activity.

NEUROPATHY

Symptoms of neuropathy [nu-rop-a-the] (nerve damage) can include numbness, tingling, or pain in the arms and legs. Evaluation of such symptoms should always include evaluation for problems in the spine. However, obesity has been found to be associated with neuropathy in both the arms (as an example, the wrist) and the legs.

The Utah Diabetic Neuropathy Study (UDNS), published in 2013, examined 218 individuals with diabetes mellitus type 2 (the diabetes that results from insulin in the body not working as well as it should, plus decreasing production of insulin by the body) without neuropathy symptoms, or with symptoms present less than five years, in order to evaluate risk factors for neuropathy development. The study found that obesity and triglycerides [trī-glī-sēdz] (sugar fats) were linked to the loss of small nerves associated with sensation in contrast to higher blood sugars, which were more likely to be linked to loss of nerve function of larger nerves such as those associated with motor function or movement. These findings suggest obesity and hypertriglyceridemia [hī-per-trī-glīsér-i-de-mē-a] (elevated concentrations of triglycerides in the blood) significantly increase the risk for neuropathy, separate from blood sugar control.

In a separate study of 676 patients with carpal tunnel syndrome (“pinched nerve” in the wrist that causes numbness and tingling in the fingers) who were referred for nerve testing studies to confirm this suspected diagnosis, obesity was associated with an increased risk of developing this very common nerve damage. The risk of developing the damage averaged nine percent (a range of five to 13 percent) for each increase in BMI in patients 60 years and older.

ASTHMA

Studies of lung function in obese adults have demonstrated decreased lung volume and capacity, as compared to healthy individuals.

When a patient presents with complaints of problems breathing, it is important that a full medical evaluation first be performed to determine if it is due to a lung- or heart-related problem. The evaluation of asthma in an overweight/obese person should include tests of lung function and assessment for allergic causes. These assessments may include the following lung function markers: forced vital capacity [FVC], forced expiratory volume in one second [FEV1], FEV1/FVC ratio, and forced
Obesity is also associated with an increased risk for the development of many malignancies (cancers), including colorectal cancer; esophageal adenocarcinoma (cancer of the esophagus); and cancers of the stomach, gallbladder, pancreas, liver, kidney, postmenopausal breast, uterus and thyroid, as well as non-Hodgkin lymphoma, multiple myeloma (cancer of the plasma cells, a type of white blood cell present in the bone marrow) and prostate cancer...and this list continues to grow.

In addition to an association with greater incidence of cancer, overweight and obesity increase the risk of death with most of the malignancies noted above, as well as for those with premenopausal breast cancer and squamous cell mouth and tongue cancer. In the United States, the effects of overweight and obesity have been estimated to contribute to 14 percent of cancer deaths in men and 20 percent of cancer deaths in women. The presence of obesity also makes it more difficult to determine the correct doses of chemotherapy, leading to decreased treatment effectiveness. Maintaining a BMI below 25 has been projected to help prevent as many as 90,000 cancer deaths per year in the United States.

But can intentional weight loss protect you from the development of cancer? The Swedish Obese Subjects (SOS) study suggests so. The study examined over 4,000 obese individuals, half of whom underwent bariatric (weight-loss) surgery, compared to half without this surgery and studied what happened to their health over an average of 10 years. Those that had had the bariatric surgery and had lost weight showed a 40 percent reduction in developing cancer. In another study looking at the results of over 7,000 very obese individuals who had undergone gastric bypass surgery compared to over 7,000 who had not had the surgery, after seven years there was a 60 percent decrease in cancer death in those who underwent the weight loss surgery. These data suggest that intentional weight loss can have a significant impact on both cancer incidence and death.

**SUMMARY**

The complications related to obesity may start as early as when the BMI just barely meets current criteria for obesity (currently a BMI of 30), and not when above 35 or 40 as we are often led to believe from what we see in media stories.

While maintaining a healthy lifestyle is of the utmost importance, any amount of weight loss, even 15 to 20 pounds if kept off, can have a significant positive effect on your long-term health. Set a short-term goal that should be realistic, such as losing 10 pounds in three months. This can be re-evaluated at the end of the three months with a new goal set for the next three months.
It’s a fact: Being overweight is bad for your brain.

Compared with normal weight individuals, people who are overweight in midlife have a 30 percent greater risk of developing dementia (memory loss and decreased cognitive function) such as Alzheimer’s disease later in life. Not only that, but obesity is associated with smaller brain sizes and decreased cognitive function in middle-aged people.

Besides high body mass index (BMI, a measure of body fat based on an individual’s height and weight), central obesity (large waist circumference) is also associated with dementia and so is type 2 diabetes, which is more common in people who are overweight or obese. People with type 2 diabetes have twice the risk for dementia and, as a group, perform worse than people without diabetes on tests of cognitive function on memory.

While it is possible that certain factors other than fat mass are at play, such as high-fat, high-calorie diets, lack of intake of certain vitamins or other nutrients and higher alcohol use, there is mounting evidence that fat itself affects the brain. Scientists used to believe that fat mass was an inactive reserve of body tissue. We now know that fat is an active endocrine organ that secretes numerous substances that have an effect on the rest of the body. These substances are called “adipocytokines,” and are involved in metabolism and inflammation.

Many such substances may play a role in the development of dementia, but the two with the most convincing scientific evidence are “adiponectin” and “leptin.” Adiponectin is involved in the regulation of energy expenditure, sugar metabolism and fat metabolism and is higher in thin individuals. Adiponectin blocks production of inflammatory “cytokines” and has been shown to have effects on protecting the brain. Rats who do not make adiponectin have been shown to be more susceptible to strokes.

Leptin is involved in the long-term control of body weight. New evidence shows that leptin also probably plays a role in memory, nerve growth, nerve protection and brain structure. Leptin improves nerve survival and slows nerve damage in animals with dementia. Giving leptin directly to mice brains improves their memory. People with obesity have high leptin levels, but also have leptin “resistance,” so the normally protective actions of leptin are not as effective. It has also been shown that in obese people, leptin may not reach the brain in adequate levels.

Thus, there is increasing evidence for a direct causal role of fat mass in the development of dementia. As our country’s population lives longer and simultaneously becomes fatter, obesity-related dementia may present a substantial public health problem. Treatments for dementia are only minimally effective, yet another reason to try to achieve and maintain healthy weight in midlife.
Everything you like about this magazine... and (much, much) more.

EmPowerYourHealth.org

EmPower Magazine’s online home.

The internet’s most comprehensive source for endocrine health information, written by endocrinology experts for you.

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OBIE DOG’S JOURNEY:
How a grossly overweight canine lost 55 pounds...and motivated people worldwide

BY MARY GREEN

Inspiration can come from the most unexpected of places.
Case in point: the remarkable story of a morbidly obese dachshund named Obie and his quest to shed weight and get healthy.

Obie’s story begins like that of so many other beloved canine companions. He was an adored family pet living a pampered life with his doting “parents,” an elderly husband and wife in Washington state. But the couple’s failing health limited their ability to provide Obie with an active lifestyle, and over time they compensated by pampering him with human food.

By the time the couple’s granddaughter-in-law reached out to dachshund rescue groups across the country in August 2012 begging for assistance, then-five-year-old Obie tipped the scales at an astonishing 77 pounds, almost three times the ideal weight for a standard dachshund.

Shortly thereafter, Portland, Oregon resident Nora Vanatta read a rescue group’s desperate online plea for help with Obie’s plight and stepped up to offer her assistance, sight unseen. Armed with a degree in animal science and 12 years of experience as a certified veterinary technician, Nora felt her training would enable her to help get Obie’s weight under control. “I read the story, and I was like, ‘How hard can it be?’” she says. “I felt compelled to help him, and since I already had two dogs, I didn’t think it would be much work to have another.” Then she met Obie face-to-face and was confronted with the severity of his condition.

“He was in the back of a small SUV and took up most of the space,” she recalls. “It was shocking to see his size. Obie BEFORE

Photos courtesy of Nora Vanatta

OBIE AFTER

BY MARY GREEN

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Obie’s story begins like that of so many other beloved canine companions. He was an adored family pet living a pampered life with his doting “parents,” an elderly husband and wife in Washington state. But the couple’s failing health limited their ability to provide Obie with an active lifestyle, and over time they compensated by pampering him with human food.

By the time the couple’s granddaughter-in-law reached out to dachshund rescue groups across the country in August 2012 begging for assistance, then-five-year-old Obie tipped the scales at an astonishing 77 pounds, almost three times the ideal weight for a standard dachshund.

Shortly thereafter, Portland, Oregon resident Nora Vanatta read a rescue group’s desperate online plea for help with Obie’s plight and stepped up to offer her assistance, sight unseen. Armed with a degree in animal science and 12 years of experience as a certified veterinary technician, Nora felt her training would enable her to help get Obie’s weight under control. “I read the story, and I was like, ‘How hard can it be?’” she says. “I felt compelled to help him, and since I already had two dogs, I didn’t think it would be much work to have another.” Then she met Obie face-to-face and was confronted with the severity of his condition.

“He was in the back of a small SUV and took up most of the space,” she recalls. “It was shocking to see his size.
We hauled him out and put him in the grass, where he looked up at me and wagged his tail and grinned and waddled a bit, then went potty” she says. “He was a happy dog inside that ginormous body. I realized then I would be able to help him.”

After Obie received the necessary approval of the other members of Nora’s pack—five-year-old dachshund Noggin and nine-year-old black lab Hunter – the business of nurturing Obie back to health began in earnest.

First, Obie underwent a thorough medical assessment to rule out any major issues that frequently result from being so obese. With no major health issues identified and the (surprising) all-clear, he then was put on a strict food regimen. “It was important for Obie to lose the weight slowly and steadily, so it was recommended that he lose one to two percent of his body weight per week,” Nora notes. To achieve that goal, she put him on a specially formulated diet of high-protein, low-calorie, low-fat prescription dog food with added fiber to help Obie maintain lean muscle mass while burning his excess fat as energy. The protein also served to increase his metabolic activity and helped him feel “full.” “I think he only ate people food prior, so he was very stubborn at first and took a day or two to try the dog food,” Nora says, “but it helped to have good role models like Noggin and Hunter show excitement at mealtime. I also tried carrots and apples as low-calorie snacks within the first week, all of which he turned his nose up at, but finally, when he saw the other two eating carrots, he decided they must be okay.”

Four days after his arrival, volunteers that helped transport Obie to his new foster home created a dedicated Facebook page to document for those involved in his initial rescue Nora’s efforts to restore him to a proper weight. What happened next was nothing short of extraordinary.

Every day, people from across the globe were discovering Obie’s profile, rallying to support the portly pooch from near and far. “It grew by a couple hundred of followers per day,” Nora says. “I got him August 18th, and by September 10th there were already several thousand people following him on Facebook and the national networks were calling me.” Appearances on NBC’s “TODAY” show, ABC’s “Good Morning America” and “LIVE! with Kelly and Michael” followed, as did articles in the New York Daily News, The Daily Mail, People magazine and more.

Yes, Obie was one hot dog.

But with media attention gaining momentum, it was important to Nora that Obie be portrayed as a weight-loss ambassador, not as a spectacle. “I love that Obie is bringing awareness to obesity and influencing people to take better care of not only their animals, but themselves as well,” she said in one of her first postings on Obie’s Facebook page.

And though Obie was adapting to his new diet (and his role as media darling), introducing exercise to his routine was initially out of the question. His weight was so confining that he had difficulty moving. Just taking a few steps wore him out. He was unable to lick his own paws. “It was exhausting for him to walk from one end of the house to the other,” she notes. Nora also had to take measures to protect his sagging underbelly (fondly referred to as his “bosom”) from dragging on the ground and causing chaffing and skin infection by outfitting him with a special body harness. In fact, Obie’s physical activity for the first eight months was limited to moving around the house or the yard with Noggin and Hunter or when he went with Nora to meet and greets promoting weight loss, she says.

Still, the combination of a proper diet and moderate exercise was steadily making an impact, with Obie losing one to two pounds per week on average. And, by April of 2013, Obie had lost an astonishing 40 pounds, more than half of his body weight. However, the large pendulous skin between his front legs was hindering his mobility and needed to be addressed. Thus, Obie underwent a doggie “tummy tuck” April 30th, at Oregon Expert Vets (Continued on page 14)
to remove more than two-and-a-half pounds of excess skin resulting from the massive weight loss. “It was getting warmer and I didn’t want him to have to wear his protective garment,” Nora says. “It also gave him plenty of time to recuperate and enjoy the summer while losing the remaining weight he needed to lose.”

Obie was fully recovered within two weeks “and he was ready to go,” Nora says.

Today, at his goal weight of 23 pounds, Obie is living a dog’s life, taking walks on the beach and hikes on the Oregon trails with Nora, Hunter and Noggin (his now-permanent family) while continuing to serve as an “ambassadog.” Fans flocked to Obie meet-and-greets during a late 2013 cross-country RV tour promoting obesity prevention, he recently was the guest of honor at the 14th Annual Wienerfest dachshund celebration in Embro, Ontario, Canada, made a return visit to TODAY and, at the time of this writing, has amassed a Facebook following of 317,000 and counting, bringing together a global community of humans and their pets united by his inspiring story and motivated to make a change.

One morbidly obese woman wrote to Nora that, inspired by Obie’s weight loss success, she had left her home to walk to her mailbox, something she hadn’t done in a year because of her weight. “It’s all about making conscientious choices and realizing where you want to be and what it will take to get you there and be happy,” Nora says. “I’ve get all kinds of messages daily from people who have lost weight thanks to Obie. They say, ‘If Obie can do it, so can I.’”

ONLINE EXCLUSIVE: Key takeaways from Obie’s weight-loss journey that you can apply to your own efforts at www.empoweryourhealth.org.

To learn more about Obie and his journey, visit: https://www.facebook.com/BiggestLoserDoxieEdition or www.obiedog.com.

For helpful information about obesity prevention and treatment, visit: http://www.empoweryourhealth.org/endocrine-conditions/obesity.
Bariatric surgery is a term used to describe a number of operations that are used to cause weight loss in people with obesity. When these procedures were developed many decades ago, they were designed just for weight loss and were associated with many surgical and nonsurgical complications.

However, two major changes have occurred recently which change the way we think about bariatric surgery. First, the main procedures that are used – gastric bypass, sleeve gastrectomy and adjustable gastric band – are considered safe, especially in the hands of an experienced surgeon, at an experienced hospital, and when the benefits versus risks of surgery are reviewed for the specific person considering this surgery and the benefits clearly outweigh the risks.

Second, in the past few years, there has been better understanding as to the overall potential benefits of this surgery beyond just the obvious effect of losing weight. Specific to effects on blood sugars in the presence of diabetes mellitus, high blood pressure (hypertension), cholesterol and other conditions, there is now great interest about whether improving these conditions through surgery can have an impact on lowering the risk of future cardiac disease or improve the ability to live longer.

In order to better grasp this idea, let’s review some recent advances in the way we address obesity. In

(Continued on page 16)
the past, obesity was considered to be a condition solely defined by an excess of body fat, determined by a body mass index (BMI) greater than 30 (see http://www.empoweryourhealth.org/endocrine-conditions/obesity) and treated with advice to eat less or go on a diet and exercise more. Nowadays, with the benefit of growing scientific research and clinical trial information, obesity is thought of as a more complex disease, involving nearly every part of the body, associated with many “obesity-related complications,” and managed using preventive strategies and many more options and approaches that can help in targeting weight loss and specific complications (see related story on page 4). Obesity-related complications include insulin resistance, a condition where there is insulin present, but it does not work as well as it should; type 2 diabetes, the diabetes which is a combination of the insulin present not working as well as it should, plus less than normal production of insulin; hypertension; high cholesterol and triglycerides (the major form of fat stored by the body in fat cells); heart and circulatory problems; depression; arthritis; stomach acid reflux; sleep apnea; and many others.

We have many tools now, including more structured lifestyle approaches (healthy eating, physical activity, sleep hygiene and behavioral medicine), new medications and, of course, safe and effective bariatric surgical procedures. In short, obesity as a complex disease can be approached in many different ways and should not be managed simply with one intervention, but rather with many interventions strategically fitting a person’s individual problems and needs.

Before describing the benefits of bariatric surgery, we must first look at the appropriate time to consider bariatric surgery. According to many professional medical guidelines, and especially considering the American Association of Clinical Endocrinologists’ (AACE) perspective on obesity care, lifestyle counseling should be initiated and maintained for all Americans, regardless of weight or other treatments, due to our constant exposure to an environment that is associated with obesity—keep in mind that two-thirds of all Americans are overweight or obese—a staggering number that is not being corrected nearly as fast as we would like. Depending on the presence and severity of obesity-related complications, a person with overweight or obesity may also need obesity medication or bariatric surgery. Your endocrinologist will be able to guide you through these decisions.

So what are the benefits of bariatric surgery? First and foremost, there is sustained and significant weight loss in many people, which may be seen long after the actual surgery is performed. Weight loss after bariatric surgery is usually expressed as a percentage of the excess weight lost and generally ranges from 30 to 70 percent at 10 years, depending on the procedure and other individual factors. Since weight loss can plateau after a number of years, continuation of lifestyle changes, possibly with more aggressive attention to changing lifestyle, must occur.

Obesity-related complications are generally related to weight; therefore the surgically induced weight loss can be associated with improvement in these obesity-related complications. In fact, as little as three percent weight
loss with lifestyle changes can be associated with a reduction in risk for metabolic and cardiovascular disease, compared with bariatric surgery weight loss figures well over 30 percent. Patients with type 2 diabetes have actually been found to be in remission (off all diabetes medications with a target A1c, average blood sugar level, over two to three months of 6.5 percent or less for at least a year), with reports as high as 70 to 90 percent of the time. Although these improvement percentages might diminish over the following years, as physicians are now learning with longer follow-up of those with diabetes, there is active research into whether this improvement—either shorter or longer-term—can have a beneficial effect on cardiac disease risk, which is so high in those with diabetes. Remission rates of 40 to 80 percent are also seen for hypertension, high cholesterol and/or triglycerides, sleep apnea and depression.

Even though many of these obesity-related complications improve, many others may not reach targets. Thus, continued follow-up with a doctor experienced in the care of patients with obesity is strongly recommended. These follow-up visits focus not only on the physical examination and measuring blood pressure, weight and body fat changes, but also blood tests for cholesterol, triglycerides, blood sugar and electrolytes, liver and kidney function, A1c blood counts and, depending on the specific bariatric procedure, specialized testing for nutrients, bone function and other markers for potential complications of surgery.

Overall, bariatric surgery patients can live longer and healthier lives, but again, this is based on being properly selected for surgery, having an experienced surgeon and hospital and continuing to practice a healthy lifestyle, as well as engaging an expert such as an endocrinologist in postoperative obesity, nutrition and metabolic care. From an endocrinologist’s standpoint, there is a remarkable surge of interest in optimizing obesity care, spanning better education of physicians and other healthcare professionals, scientific research and clinical trials of new or improved therapies, a greater focus on prevention, and accelerating the use of structured lifestyle interventions. This is indeed an exciting time for all of us to become healthier, and a successful comprehensive approach to obesity, one that includes all people and their individualities, can make that a reality. ⚖

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**Weight-Loss Surgery Guide**

Gastric bypass surgery contributes to weight loss in two main ways: either by restriction, in which surgery is used to physically limit the amount of food a stomach can hold, or malabsorption, where surgery is used to shorten or bypass part of the small intestine, thereby reducing the amount of calories and nutrients the body absorbs.

Deciding to get weight loss surgery isn’t an easy decision, and choosing a specific surgical approach will require a lot of thought and discussion with your physician. Here’s some basic information to get you started.

**ROUX-EN-Y GASTRIC BYPASS**

Roux-en-Y gastric bypass is the most common type of weight loss surgery. It combines both restrictive and malabsorptive approaches and can be performed as either a minimally invasive (laparoscopic) or open surgery. In the operation, the surgeon divides the stomach into two parts, sealing off the upper section from the lower. The surgeon then connects the upper stomach directly to the lower section of the small intestine, essentially creating a shortcut for the food, which bypasses a section of the stomach and the small intestine. Skipping these parts of the digestive tract means that fewer calories get absorbed into the body. With Roux-en-Y gastric bypass surgery, weight loss typically is rapid and dramatic. But, while this type of surgery causes rapid weight loss, it also puts the patient at risk of significant nutritional deficiencies, requiring diligent monitoring of diet and the need for supplements for the rest of the patient’s life. Gastric bypass is generally considered to be irreversible.

**SLEEVE GASTRECTOMY**

Sleeve gastrectomy is another form of restrictive weight loss surgery. In the operation, which is usually done with a laparoscope [lap-ah-rah-skop], a slender, tubular camera used to examine body cavities during certain types of surgery, about 75 percent of the stomach is removed. What remains of the stomach is a narrow tube or sleeve, which connects to the intestines. Sleeve gastrectomy is often used with people who are very obese or sick, since it is a simpler operation that is a lower-risk way to lose weight. Because the intestines aren’t affected, a sleeve gastrectomy doesn’t affect the absorption of food, so nutritional deficiencies are not a problem.

**ADJUSTABLE GASTRIC BANDING**

Gastric banding is among the least-invasive weight loss treatments. In this surgery, an inflatable band is used to squeeze the stomach into a smaller upper pouch and a larger lower section. The two sections are still connected, but the channel between them is very small, which slows down the emptying of the upper pouch, physically restricting the amount of food you can take in at a meal. Gastric banding is simpler to perform, recovery is usually faster than other procedures and it can be reversed by surgical removal of the band. However, weight loss from gastric banding is often less than that from more invasive surgeries. ⚖
Why is it so hard for women to win the battle of the bulge? Is it stress, female hormones, food cravings, or is it in the genes? Or, is it a combination of some or of all these factors? The truth is that most women in the U.S. (and many men as well, so no smugness here!!) are either overweight or obese and must fight the battle of the bulge lifelong.

FIRST, WHAT IS CONSIDERED BEING OVERWEIGHT AND WHAT IS CONSIDERED BEING OBESE?

Surprisingly, this is not as easy a question as it might seem. Experts continue to debate whether weight alone can define this (but 100 pounds might be too much if your height is three feet—hardly too much if your height is 10 feet), or whether we should use a measure of your waist (called waist circumference). Also hotly debated in recent years is whether we should use the BMI (body mass index), a measurement of the relationship between how tall you are and how much you weigh, to determine obesity. By agreement between experts, if your BMI is over 25, you are considered overweight, but if more than 30, then this is considered obese. A note of caution: for some individuals of different ethnicities, these criteria just do not hold, so check with your healthcare professional to review your personal data.

SECOND, WHY FIGHT THE BATTLE OF THE BULGE?

Sadly, much of the stigma of being overweight comes from the condition being viewed negatively in our society. Top performers, models, artists and athletes are pictured as being thin. Successful women are pictured as thin persons. And there is considerable data that overweight or obese people are discriminated against, not receiving merit promotions in their job and earning less than their thinner colleagues. Even personal goals of appearance do not favor being overweight. Excessive accumulation of fat around the waistline, arms, thighs and legs just doesn't look good—and there are many industries built around hiding this, trying to eliminate this cosmetically, surgically and through other means! But besides looks, the excess weight overweight women carry conveys a clear threat to a good health status and even one's longevity.

Although not all overweight women will have poor health, they tend to be less physically active and generally report that they have less energy and more fatigue. The contrast between desired appearance and the figure staring back at you from the mirror may bring out depression and mood changes. And, yes, overweight women are more prone to develop diabetes, hypertension, heart disease, gallstones, arthritis and gout.
Obese women also may have polycystic ovaries, which can affect their ability to conceive and carry a pregnancy to completion. If an overweight woman gets pregnant, her chances of developing hypertension or high blood sugar while pregnant are much higher than a woman who is at a healthy weight. Obesity has also been linked to some types of cancer, such as colon, breast and uterus.

**THIRD, SO WHY IS IT SO HARD TO LOSE WEIGHT?**

Sorry, but there’s no clear answer from the experts! This may have to do with the regulation of the satiety (feeling full from food) center in your brain and may be the way your body burns up the calories eaten (see related article on page 4). It certainly has to do with the amount of food you eat and the physical activity you perform, which might be different for each of us, adding to the frustration of why a certain amount of calories can be eaten by one person and weight remains at a healthy level, but the next person gains on the same calorie amount.

And there are many contributors to influence our eating. Much attention has been directed recently to the importance of getting enough sleep. Research shows that when sleep is shortened, which in present-day society is a frequent occurrence, there is increased intake of calorie-dense foods, which over time will lead to weight gain—in women as well as in men.

Additionally, we are only beginning to learn about the effects of stress on eating behavior. Although for some people (both women and men), acute stress can reduce appetite, there is a sizable population that turns to food for comfort, particularly women. Studies show that the particular foods people choose to eat, or overeat, when stressed are often foods that they normally avoid for weight control or health reasons, almost suggesting that stress can cause a loss of the control a person usually has to prevent themselves from eating what they know as fattening, unhealthy foods. So under stress, people tend to reach for snack foods. Added to this is the finding that eating such snacks has no effect on how much is eaten in a subsequent meal when in a stressful condition. So, there is clearly an increase in overall total caloric intake. Thus, someone who has stress frequently (and who doesn’t?) can wind up overeating highly caloric snack foods, often frequently, in an attempt to make themselves feel better. And women in particular are prone to eating in stressful situations, perhaps as an effect of being “mom,” who provides the hot chocolate for you when you have had a bad day. This becomes a rewarding behavior for mom, as she feels better that you feel better, but it’s not so good for her weight if she joins you.

**SO WHAT CAN WOMEN DO TO WIN THE BATTLE OF THE BULGE?**

It is important to stay physically active. The unfortunate and often typical lifestyle of constant sitting is not healthy. Ask for a standing workstation where you work—or at least one where you can stand some of the time. Very recent research suggests that just changing from sitting to standing can have a positive health impact. Use your breaks not to catch up or continue working at your computer, but get up and walk around. Walk the perimeter of your building at work or walk around the block if at home. Walk the stairs rather than the escalator. If you’re in an airport waiting for a flight, walk up and down the concourse. Try packing your grocery bags half full, so you have to make more trips from the car to the kitchen. Wear your iPod or plug into your portable music device when dusting or vacuuming and dance to the music. It’s great if you have the time for a sports club, but there are many ways to get the same activity in without club fees or the extra effort of having to travel to get your physical activity.

Be choosy with your food choices. That cookie or cupcake might look tempting, but think of the calories that come with it. Favor fruits and vegetables over chips and crackers. Make some dips for the veggies: mix herbs with yogurt or with low-fat mayonnaise if you or your family would like additional flavor. Chose lean meats; poultry and fish which can be a great source of low-fat protein.

And finally, choose a target healthy weight. Discuss what this might be with your health care team and keep that target in mind as you shop for groceries, go out to eat, and choose whether to use stairs or the escalator. When it’s all said and done, you are in charge of your health!
The Link Between Diabetes and Obesity

BY JANET B. MCGILL, MD, FACE

Type 2 diabetes mellitus (DM2), the diabetes that is a combination of insulin not working as well as it should in the body, plus a decreasing production of insulin by the body, is common and is now at its highest levels in U.S. history.

If you have diabetes, you already have been told that not controlling it can lead to serious complications affecting your vision, kidney function and nerve function, as well as increasing the risk for a heart attack, stroke and decreased blood flow to the legs, increasing the risk for amputation.

Those with DM2 are twice as likely to die from a heart attack or stroke than if they do not have diabetes. They are 17 times more likely to require an amputation due to decreased blood flow to the legs. And due to the delay in making a diagnosis of DM2 (as symptoms might not be present for years), kidney damage can be already seen in eight percent of patients at the time their diabetes is diagnosed and can be present in up to 40 percent of those who have had diabetes for 20 years or more. At diagnosis, 25 percent of patients with DM2 have already developed retinopathy [ret-i-nop‘ă-thê], damage to the blood vessels of the retina and about two percent of the diabetic population is blind. These statistics have pushed research aimed at preventing diabetes, rather than waiting to treat the disease or its complications.

And if these statistics aren’t frightening enough, diabetes challenges you every day to manage your blood sugar, your blood pressure and your cholesterol. Often, the drugs and tools required for this management can add up quite quickly, straining your budget.

Obesity is particularly associated with an increased risk of developing DM2 and is a driving factor because it triggers insulin resistance, a condition in which the body produces insulin but does not use it effectively. When people have insulin resistance, glucose builds up in the blood instead of being absorbed by the cells, leading to type 2 diabetes or prediabetes.

Both being overweight with increased abdominal fat (often described as having an “apple” shape) and being obese is thought to contribute about 80 to 90 percent of all DM2 development. Women with a BMI of 23 to 25 have a four-fold higher risk of type 2 diabetes than those with a BMI less than 20. Those with a BMI 24 to 25 have a five-fold increased risk, and a BMI over 35 increases the risk of developing type 2 diabetes.

Yet clearly not all who are overweight or obese develop DM2. Additional contributing factors are ethnicity, genetics, age and maybe even a sedentary lifestyle. The development of obesity, diabetes, or both, may depend on the presence of genetic susceptibility to obesity and diabetes and perhaps also on early nutritional factors.

So what can you do if you have a risk of developing diabetes and are overweight or obese as defined by your BMI? Well….a lot!
A number of research studies have now shown that reducing body weight in overweight and obese people at high risk of developing diabetes can significantly decrease the risk of developing the disease. In a Chinese study of individuals with pre-diabetes (defined through testing these individuals by giving them a very sugary drink and then measuring their blood sugars to see if normal or high), the six-year incidence of diabetes was reduced by 36 percent in those treated with a low-fat, high-carbohydrate diet, by 47 percent through exercise only and by 39 percent through a regimen of diet and exercise.

A Swedish weight loss-intervention study looking at the effects of weight loss surgery for very obese individuals showed a two-year incidence of diabetes of six percent in those not receiving the surgery (whose weight loss was zero), compared to only 0.2 percent in those treated by surgery and who lost weight. Most of this benefit was still present at 10 years post-surgery, when the incidence of diabetes was still five-fold lower in those having had the surgery, corresponding to an 80 percent protection.

The U.S. Diabetes Prevention Pilot Program showed that, with a combination of weight loss of about seven percent accompanied by about 150 minutes a week of exercise, the risk of developing DM2 in those identified as "at-risk" decreased by 58 percent in three years.

What, then, can you do if you already have been diagnosed with diabetes? Data shows that a 15 to 20 percent weight loss in the first year after diagnosis of DM2 has been shown to reverse the excess mortality of being overweight and having DM2. A deliberate weight loss of just one to 19 pounds has been shown to be associated with a 30 to 40 percent reduction in diabetes-related mortality. And your need for medication will also be decreased; whether pills to treat high blood sugar or insulin, weight loss is associated with lower doses needed to treat your DM2. Even medication for the control of high blood pressure or high cholesterol can often be decreased with weight loss.

This is all helpful, positive information, yet it contrasts with the published scientific concept known as “obesity paradox,” which suggests that weight gain is associated with a decreased risk of early death if you have DM2. As with many studies in medical science, findings need to be repeated and repeated and repeated through different researchers looking at the same question. Hence, a very recently published study looking at over 11,000 individuals having DM2 over 16 years’ time and the effects of the disease on their health over that time showed that the “obesity paradox” just does not hold. Not surprisingly, the researchers reported that those with DM2 who were overweight or obese when diagnosed with diabetes, were more likely to have died than those at the higher end of normal weight. In particular, if you were diagnosed with DM2 before age 65 and gained weight, your mortality risk was higher than if you were over 65 years at DM2 diagnosis and gained weight. And another similar study examining federal government data reported that being obese was associated with “at least” a 20 percent increased risk of early death. Those between ages 45 to 64 years old and defined as obese had a life span of seven years less than those in the normal weight category.

A deliberate weight loss of just one to 19 pounds has been shown to be associated with a 30 to 40 percent reduction in diabetes-related mortality.

So what should be the take home message? It’s a simple one: Cut your portion sizes down, walk away from tempting snacks and unhealthy food, and take a walk around the block when you get home! ☉

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THE DISTURBING TRUTH ABOUT CHILDHOOD OBESITY

BY MARY GREEN

The statistics are nothing short of alarming: In the past 30 years, childhood obesity in the U.S. has more than doubled in children 6 to 11 years of age, quadrupled in adolescents and even has risen more than seven percent amongst toddlers and preschoolers ages 2-5.

In fact, the number of overweight or obese youth now stands at a record-busting 23.9 million in our country, according to the Centers for Disease Control and Prevention (CDC). Of this number, 17 percent, or 12.5 million children and adolescents 2-19 years of age, are obese; children are considered obese when their body mass index, a measure of weight in relation to height, exceeds that of 95 percent of their peers of the same age and sex.

Further, a new study by the University of North Carolina School of Medicine found an upward trend in the most severe forms of obesity—those in which children have a BMI that is 120 to 140 percent higher than that of their peers.

This epidemic of childhood obesity is already causing a broad range of weight-related health problems that previously weren’t seen until adulthood: One of the largest studies of its kind, released in 2014, found that nearly one-third of children between the ages of 9 and 11 has either high cholesterol or borderline high cholesterol.

Retaining the excess weight greatly increases a child’s likelihood of developing serious medical conditions in adulthood, among them high blood pressure, early heart disease, diabetes, bone and joint problems and sleep apnea, not to mention more immediate skin conditions such as heat rash, fungal infections and acne. As if the physical woes tied to obesity aren’t enough, there are also psychological effects: A new study finds that obese teens are more likely to face rejection by their peers, plus obese children are more prone to low self-esteem, negative body image and depression and are at risk for eating disorders.

Perhaps the most disheartening is a worrisome report just released by the CDC indicating that overweight kids don’t think they’re overweight. The CDC’s National Center for Health Statistics found that 76 percent of overweight boys and girls believe they are “about the right weight,” while 42 percent of obese children consider their weight about right, suggesting that overweight and obesity are perceived as the “new normal.”

The CDC study found that minority children and those from poorer backgrounds—demographic groups with higher rates of adult obesity—were more likely to misperceive their weight. This finding is key, as a child’s proper perception of his or her weight is important for inspiring behavioral changes like eating healthier and getting more exercise.

Beyond genetic factors and medical conditions, a number of lifestyle studies have drawn conclusions regarding the reasons behind the out-of-control overweight and obesity numbers. It’s generally accepted that a change in lifestyle choices is at the heart of the matter. Kids are eating more processed and fast foods—and, thus, empty calories—than ever before. Forms of entertainment have changed as well. Children these days spend their time playing video games, watching television, texting, chatting on the phone and sitting in front of their computers. Plus, school physical education and after-school sports budgets have been slashed in many districts across the country.

Not all of the news is dismal, however. Although overall child obesity rates remain unchanged, the CDC’s National Health and Nutrition Examination Survey (NHANES) data published in early 2014 showed a notable decline in obesity among children aged two to five years, plummeting 43 percent during the period from 2003-2004 to 2011-2012.

It appears that a combination of state, local and federal policies designed to reduce obesity is beginning to make a difference. School-meal standards championed by First Lady Michelle Obama and implemented through the Healthy, Hunger-Free Kids Act were initially met with resistance from pupils when nutritionious school-meal menus were introduced in the fall of 2012, even leading to student-led boycotts in some districts. However, it seems they’ve warmed up to a healthier way of eating: 70 percent of school administrators surveyed by University of Illinois at Chicago researchers report that students now generally like the new lunches, which feature more whole grains, vegetable and fruits and lower fat levels.

Still, there’s plenty of room for healthy change... tons of it.

For information about children’s health and proper nutrition, visit the American Association of Clinical Endocrinology’s patient education website at: http://www.empoweryourhealth.org/kids-health/sound-nutrition.
Help Your Child Develop Habits for Healthy Growth

BY JOANNE KARIMBAKAS, MS, RD

Early one-third of American youth are overweight or obese, putting them on a path to serious health problems that were once only seen in adults, such as type 2 diabetes, high blood pressure, high cholesterol and kidney disease. In addition, youth that are overweight or obese may also develop joint pain or breathing problems that could make it tough to keep up and play with other kids. If you are worried about your child’s weight, talk to your health care provider.

Taking action to improve the health habits of your family is an importance strategy for helping your child achieve and maintain a healthy weight for his or her age. As a parent or caregiver, you play a big part in shaping your children’s health habits. Help them by providing healthy foods, encouraging daily physical activity and enough sleep, and limiting your kids’ play time in front of the computer, tablets, smartphones and TV to two hours per day.

To help our children achieve healthy growth and live healthier lives, we need to work together as families and communities. For ideas on how to get your community involved and take action, check out the Weight of the Nation for Kids films.

Start the conversation to get your family on the road to better health.

You are your children’s most important role model when it comes to forming healthy habits. If you make healthy food choices, provide ways to be more active and limit computer and television screen time, your kids will, too. Creating habits around healthy eating and physical activity can make it easier for the whole family to get to and stay at a healthy weight.

Make Your Home a Healthy Eating Zone:

• Eat together! Children who eat meals with their family are more likely to eat fruits, veggies and other healthy foods.

• Give your kids a healthy breakfast every day. Try oatmeal or whole-grain, low-sugar cereal, fruit and low-fat or nonfat milk. Toss sliced apples, berries, bananas or whole-grain cereal on top of fat-free or low-fat yogurt.

• Encourage kids to drink water when they are thirsty. Limit sugar-sweetened beverages, sports drinks and juice.

• Watch portion sizes, especially in fast-food and other restaurants. Often the portions served are enough for two or three people. Young children’s portion sizes should be smaller than those for adults.

• Include your children in planning and making meals. Children may be more willing to eat the dishes they help prepare. Go to the grocery store together and help them to choose plenty of fruits and vegetables, whole grain foods that are lower in sugar and salt and low-fat or fat-free dairy products.

Choose physical activities your whole family can enjoy.

Set a good example by going for a family walk or bike ride. Playing ball or jumping rope with your children shows them that being active is fun. Children need at least 60 minutes of physical activity a day. You can break the time into smaller

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Emergency Management Team Goes “All-In” with My Diabetes Emergency Plan

By Beauty KolenC

According to the most recent report issued by the Centers for Disease Control and Prevention (CDC), 29.1 million people in the United States are living with diabetes. This number continues to rise every year. In addition, the CDC reports that an estimated 86 million American adults aged 20 years or older have pre-diabetes. The startling number of patients affected by this disease is serious cause for concern among emergency management teams across the country.

Any emergency brings chaos to people and their environments, particularly those with chronic diseases like diabetes. It is vital that they – and those in the community who are charged with their care – are prepared for emergency situations in advance. The My Diabetes Emergency Plan ensures that safety.

Initially conceived by the American College of Endocrinology (ACE) in partnership with Lilly Diabetes following the devastating chaos of Hurricane Katrina in 2005, the My Diabetes Emergency Plan is a comprehensive resource for endocrine patients who find themselves in crises. From roadside breakdowns in the middle of nowhere to unexpected evacuations and natural disasters, a well-prepared emergency kit is of paramount importance for patients with diabetes and their families.

The My Diabetes Emergency Plan program is now in its eighth year, giving communities across the nation a valuable tool to help citizens assemble comprehensive emergency kits of their own.

The plan has three components: A pocket-sized checklist, an instructional “how-to” video and an educational website. The 17-point checklist – available in English and Spanish versions – outlines everything a person with diabetes would need in a kit to avoid potentially life-threatening disruptions in their medical care. It also offers diabetes patients practical steps to take in advance of an emergency...before they’re faced with a difficult situation. Checklists are provided free of charge to patients and emergency management personnel, as well as other public servants involved with diabetes patient care.

In southwest Houston, Texas, the Fort Bend County Office of Emergency Management has been putting the My Diabetes Emergency Plan to use in their community for more than two years. Kathy Renfrow, the county’s emergency management planning coordinator, discovered it at a Juvenile Diabetes Research Foundation (JDRF) walk and knew that the plan would be beneficial to her community.

“They fit so well with the theme of our other emergency preparedness information—to ‘Make a Plan, Build a Kit and Stay Informed.’ The fact that they are wallet-sized ensures that people can easily share the information,” said Renfrow.

The U.S. is one of the top five countries in the world affected by unforeseen emergencies, according to the Annual Disaster Statistical Review by the Centre for Research on the Epidemiology of Disasters. Each year, Fort Bend County’s 500,000 residents live with flash floods, tornadoes and hurricanes. The Emergency Management department has distributed thousands of copies of the pocket-sized cards thus far.

Renfrow says that Fort Bend County includes the My Diabetes Emergency Plan checklists in displays at health fairs, at local community centers and workshops. The community also features the pocket cards during its disaster preparedness events year-round and have the plan available in the office lobby for first responders to pick up.

“Many times I’ve witnessed family members picking up one of the My Diabetes Emergency Plan cards and saying they needed to give it to a loved one,” said Renfrow. “It gives them a sense of relief knowing they can provide some concrete preparedness information ahead of an emergency.”

If you are interested in receiving your own copy of the My Diabetes Emergency Plan, visit www.mydiabetesemergencyplan.com to request a free durable, wallet-sized, trifold checklist and to view the “how-to” video.
When children with type 1 diabetes experience the everyday fun and freedom of camp with others just like them, something incredible happens. Diabetes isn’t the focus of their day. Lilly Diabetes believes that every child should have the opportunity to go to camp, and that’s why we’ve provided insulin and a variety of carefully designed resources to diabetes summer camps for more than 10 years. We help camps care for your child’s unique, personal needs so your child can focus on what’s most important — having a summer to remember.

LillyDiabetes.com
To register for a camp near you, visit www.diabetescamps.org.
Help Your Child Develop Habits for Healthy Growth

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parts during the day, such as walking the dog, jumping rope or playing ball for 20 minutes, three times a day. If your children see you being physically active and having fun, they are more likely to be active on their own.

Aim for enough sleep.
Children need about nine to 11 hours of sleep every night. Getting enough sleep is important for their growth and has been linked to better performance in school.
• The body doesn’t work well with too little sleep. Research also suggests that a lack of sleep may be linked to too much weight gain.
• Taking the TV out of kids’ bedrooms also may help improve their sleep.
• Set regular bedtime routines for your children.

To learn more about helping children and families develop healthy habits, check out the many free resources of the National Institute of Diabetes and Digestive and Kidney Diseases at www.niddk.nih.gov. For example, the NIDDK’s Weight-control Information Network provides healthy eating and physical activity suggestions in the booklet, Helping Your Child: Tips for Parents (http://win.niddk.nih.gov/publications/child.htm) and additional tips for parents in the booklet Helping Your Overweight Child (http://win.niddk.nih.gov/publications/over_child.htm).

Tips to help children stay healthy

• Encourage children to be physically active.
• Serve child-sized portions of healthy foods.
• Limit sugar-sweetened beverages.
• Limit your kids’ play time in front of the computer, tablets, smartphones and TV to two hours per day.
• Set a regular bedtime routine. Children should get nine to 11 hours of sleep every night.

POWER TO THE PEOPLE: How You Can Help to Vastly Improve Diabetes Care in America

Here’s the good news: More than 30 federal agencies are doing great work to improve the health care for our nation’s diabetes patients.

Here’s the not-so-good-news: These agencies work independently, with little coordination and communication between them. Thus the outcomes and potential benefits to patients are drastically hindered.

Diabetes is one of the most serious health concerns of our lifetime, and, as new data from the CDC shows, things are going from bad to worse.
• 29.1 million (9.3 percent) of Americans have diabetes – an increase of 13 percent from 2011
• 86 million people in the U.S. over 20 years old are considered prediabetic – up 9 percent in three years.

Total costs associated with diagnosed diabetes in 2012 have risen to $245 billion from $174 billion in 2007 – up 41 percent. As the epidemic of diabetes continues to grow, we need a better plan of attack to impact the problem in a meaningful way.

This is where you can help.

The American Association of Clinical Endocrinologists (AACE) is championing a solution by calling on Congress to pass the National Diabetes Clinical Care Commission Act (H.R. 1074/S.539). This important bill will create a public-private commission composed of endocrinologists, front-line diabetes healthcare providers and patient advocates that will identify critical gaps in existing federal diabetes programs and redundant activities, leading to recommendations that will better coordinate and leverage these programs and thus consolidate and improve the focus of taxpayer-funded activities.

The National Diabetes Clinical Care Commission Act has the support of the entire diabetes advocacy community, including the AACE, American Diabetes Association, Juvenile Diabetes Research Foundation and American Association of Diabetes Educators, among many other organizations. The time for action is now and YOU have the power to create change!

If you or a loved one has diabetes or are at risk of getting the disease, or are a healthcare professional involved in diabetes care, contact your lawmakers in Washington, D.C. to urge passage of this vital legislation.

To send a prewritten email to your U.S. Representative and two U.S. Senators, please visit: https://www.aace.com/diabetesbill.
THE WEIGHT ISN’T GOING TO LOSE ITSELF – GET UP AND GET MOVING!

Despite a rising, recognized prevalence of overweight and obese people in the U.S., most of these individuals are not actively doing much, if anything, to lose their extra weight. A recent report on an analysis of data obtained from almost 23,000 obese adult participants in the 2012 National Health and Wellness Survey, an annual Internet-based survey given to randomly selected U.S. citizens who represent a typical sample of the adult U.S. population, revealed that the majority of individuals responding were not doing anything about their excess weight.

Fifty-nine percent of those considered obese answered that they were not actively making any effort to lose their weight. Two percent reported taking prescription weight-loss medication or having bariatric surgery. And 39 percent were trying methods including decreased calorie intake, increasing physical activity or both. But most were doing nothing—not a healthy choice!

What is the take-home message?

If you are concerned about your weight, talk to your health care team about resources available to you; many are free and web-based and can be accessed through your smart phone, tablet or computer. If you need additional help, ask about a referral to a registered dietician, an exercise trainer or exercise physiologist, and talk with your doctor about whether you might be a candidate for medication or surgery. Obesity is now considered a disease, with risk for significant complications...heart attacks, stroke, cancers and many others. Information and help are available!

THE PROOF IS IN THE PUDDING?

Okay, okay, you might be thinking. I will get in to see my doctor or other healthcare team member to start my program to better health by getting some of this weight off. But what can I do right now? Is there any science to help me? Well, yes there is.

At an international meeting this May in Europe, study results were reported that showed yogurt ingestion by itself, and even more so if added to a Mediterranean diet plan, could have a significant impact on reducing the risk of obesity. The report highlighted results from a follow-up over 6.6 years of adults, not obese at the start of the study and an average age of 37.1 years, who were asked about their intake of low-fat yogurt and other foods at the entry into the study. Every two years, they were asked again to report their food intake, and weight, among other data, was obtained. Of the more than 8,500 individuals in the study, 1,860 study participants became either overweight or obese over the subsequent 6.6 years. Among the dietary questions asked was whether participants ate one serving of yogurt daily...

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News to EmPower You!

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(considered as a high intake by study definition), or two or less servings per week (defined as low consumption).

Those reporting a high consumption had a 12 percent lower risk of becoming overweight or obese than those reporting the low consumption. If the high yogurt intake was also reported in the setting of a Mediterranean diet rich in fruits, vegetables and fish, then the risk of becoming overweight or obese decreased by 25 percent as compared to neither high intake of yogurt or no Mediterranean diet. If high-fat yogurt was included with a Mediterranean diet, then the risk was decreased by an amazing 36 percent! If high-fat intake was combined with a diet high in fruit intake, the risk for becoming overweight or obese was decreased by 21 percent, as compared to low intakes of both.

What is the take-home message?

Is yogurt magic? Of course not! But clearly it could be a more filling snack and food than many other possible choices. There are many types of yogurts, as well as many portion sizes. Watch the carbohydrate content of yogurt if you have diabetes, particularly if there are additives to your yogurt choice, such as preserved fruits or fruits in syrup. These can contain a lot of carbohydrates, not the best of choices if you are worried about your blood sugar. You can add fresh fruit to your plain yogurt. Even vanilla-flavored yogurt can be tasty, but again, look for the carbohydrate content per serving! And enjoy the bounty of summer fruits and vegetables—it makes the Mediterranean diet easy this time of year!

OBESITY A GATEWAY TO EVEN BIGGER HEALTH PROBLEMS

You might now be thinking, enough of this concern about weight! Sorry...the data just keep supporting that being significantly overweight just is very bad for health. Adults with class III obesity (defined as a body mass index—BMI—of 40-59.9, or, as example, a weight of 350 pounds for a female with a height of 5 feet 6 inches) are more likely to die from all causes than those within normal weight range, but particularly from heart disease, cancer and diabetes. Among more than 9,500 study participants classified as obese class III (BMI 40.0-59.9) and over 300,000 normal weight (BMI 18.5-24.9) participants, investigators looked at what happened medically to these participants over 30 years. Adjustments were made for sex and age and excluded those who reported ever smoking cigarettes or already having a known history of chronic disease, including heart disease, cancer, stroke or emphysema.

Among participants categorized as class III, mortality rates were almost triple for men and for women. Heart disease deaths were the largest complication for those with class III obesity, followed by cancer and diabetes. Within the class III range, hazard ratios increased for total deaths and deaths due to heart disease, cancer, diabetes, nephritis/nephrotic syndrome/nephrosis (kidney problems), chronic lower respiratory (lung) disease and influenza/pneumonia as BMI increased.

What is the take-home message?

If your weight falls into this high of a BMI (and an easy way to calculate your BMI is to google “BMI calculator,” which will ask for your height/weight and then automatically give you the calculated result), ask your health care team what you can do to help yourself.

STOP STRESSING OUT

Finally, let’s talk about stress and its effects on heart disease. It has been well known that stress is not good for cardiovascular optimal health. The challenge has been defining how much stress is acceptable (if any?) and how much is not. Could it have different effects among different individuals, how can stress be measured, and goodness, what is the mechanism for this? Not easy questions, not easy to research.

A recent study has suggested a mechanism for the negative effect of stress on atherosclerosis, the ongoing damage to blood vessels of the heart (as well as those vessels going to and from the heart). A lot of attention has been paid to inflammation of these vessels, inflammation through an increased production of inflammatory products called cytokines [si-toe-kin-es]. Researchers recently reported results from a study showing disturbing images to study participants who then had brain activity measured, as well as thickness of their carotid (main neck vessel arteries), in combination with blood levels of a specific inflammatory marker change could certainly be much faster.

What is the take-home message?

None of us can get away from stress entirely. But we can take advantage of what is known to help with stress management: spend “down time” with family and friends, take a walk with your dog, work in your garden or plan some time away. All are helpful and good for your heart and circulatory vessels!
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