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When kids with type 1 diabetes go off to camp, we help them pack.

Lilly believes everyone, including those who grow up with type 1 diabetes, should look back fondly on childhood as a time of fun, freedom, and learning. That’s why we provide Lilly Camp Care Packages, supplying children at diabetes camps with book packs filled with educational materials and resources to help them manage their diabetes.

For more information, please visit LillyDiabetes.com.
A Note from the Editors:

Dear Reader,

Thank you for picking up this edition of EmPower Magazine, a Power of Prevention publication. Whether you found this magazine in your doctor’s waiting room or received it from a friend, we are happy that you have chosen to read our publication and hope that it inspires you to learn more about your health.

This issue has many exciting articles and topics new to our readers. You will read about Jay Hewitt, a businessman, motivational speaker and triathlete who is determined not to let type 1 diabetes keep him from crossing the finish line. This issue will also address a few new and intriguing topics, such as how to manage diabetes in special situations and the effects of anorexia on the endocrine system. In addition, you will learn about the fresh design and concept for proper nutrition and portions — the nutrition plate.

We are also pleased to introduce you to Trainer Joe, a professional fitness instructor who will be featured in each issue of EmPower Magazine. His articles will focus on the importance of physical activity and provide tips for exercising and living healthy.

EmPower Magazine is just one of many initiatives created by the American College of Endocrinology, in conjunction with the American Association of Clinical Endocrinologists. You can read past issues of the magazine and learn more about the program at EmPowerYourHealth.org.

We encourage you to read this issue and consider all of the aspects of your endocrine health. We hope that you learn something new, and we always welcome your feedback!

Sincerely,

[Signature]

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Executive Editor

Etie S. Moghissi, MD, FACP, FACE
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Co-Editor

EmPower Magazine is published by the American College of Endocrinology (ACE), the educational and scientific arm of the American Association of Clinical Endocrinologists (AACE), 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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AACE is a professional medical organization with more than 6,000 members in the United States and 91 other countries. Founded in 1991, AACE is dedicated to the optimal care of patients with endocrine problems. AACE initiatives inform the public about endocrine disorders. AACE also conducts continuing education programs for clinical endocrinologists, physicians whose advanced, specialized training enables them to be experts in the care of endocrine diseases, such as diabetes, thyroid disorders, growth hormone deficiency, osteoporosis, cholesterol disorders, hyperlipidemia and obesity.

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.

Dr. Donald Bergman is in private practice in New York City and is board certified in internal medicine and endocrinology and metabolism. He is Clinical Professor of Medicine at Mount Sinai School of Medicine in New York City. Dr. Bergman is past president of AACE and ACE. In 2003, during the AACE presidency, Dr. Bergman founded EmPower, previously known as “Power of Prevention”, a program that encourages people to partner with their physicians in establishing healthy lifestyles and demonstrating the importance of primary and secondary prevention. He serves as Executive Editor of EmPower Magazine.

Dr. Etie Moghissi is board certified in endocrinology, diabetes and metabolism and is in private practice in Marina del Rey, California. She is a Clinical Associate Professor of Medicine at UCLA. Dr. Moghissi is a recognized expert in the field of diabetes and is actively involved in direct patient care as well as in professional medical education. She has published in peer-reviewed medical journals including Endocrine Practice and Diabetes Care. She serves as President Elect of the American Association of Clinical Endocrinologists.

Dr. Dace Treence is Director of the Diabetes Care Center and Associate Professor of Medicine at the University of Washington Medical Center in Seattle. She is also the University of Washington Endocrine Fellowship Program Director and Director of Endocrine Days, a medical education program for endocrinologists practicing in the Pacific Northwest. She is on the American College of Endocrinology Board of Trustees, and chairs the OHE Committee.

[Image of Dr. Donald Bergman]

[Image of Dr. Etie Moghissi]

[Image of Dr. Dace Treence]
Jay remembers asking the endocrinologist three questions in the hospital: 1) What is diabetes? 2) Am I going to die? and 3) Is there a cure? The doctor explained the condition and ways to manage and treat it, but told Jay there was no cure. His life was about to change. No cure? It wasn’t easy for Jay to hear.

“It became a turning point for me. I soon realized that my health was up to me until someone finds a cure.”

Jay spent much of the next decade researching and learning everything he could about diabetes. He read about the benefits of exercising and staying involved, even with diabetes. Jay was determined, so in 2000, he decided to do something he had never done before – run a marathon.

“I didn’t want people to see me as sick or weak. I wanted to test myself, maybe send a message to this disease: ‘you’re messing with the wrong guy.'”

He trained for months to build up the strength to compete and traveled to Hawaii to complete the 26.2 mile race. He even raised money for the American Diabetes Association. Jay wasn't a top finisher, but he finished the race. While he was there, a fellow competitor told him that this same location was home to one of the world's most famous endurance events, the Ironman triathlon. Every triathlon has three events – swimming, biking and running, but not every triathlon is an Ironman triathlon. The Ironman triathlon is the longest, most grueling triathlon race. Participants must swim 2.4 miles, bike 112 miles and run 26.2 miles, totaling 140.6 miles in one day.

Jay was nervous to compete in a triathlon at first, but he decided if he was able to finish a marathon, he could at least train for a triathlon. In 2002, after two years of training, completing several marathons and shorter Olympic distance, and half Ironman triathlons, he completed his first Ironman Triathlon.

“It was an incredible honor; so humbling to wear U-S-A on my chest,” he says.

To date, Jay has competed in 14 Ironman triathlons, with his best finishing time being 9 hours, 47 minutes. He is often asked about the challenges he faces as a triathlete with diabetes. Jay is quick to note that one must be very determined and disciplined to manage diabetes while competing. He has to check his blood sugar before, during and after each race and he has learned to cope with using his insulin pump while wearing a wetsuit for the swimming part of the competition. He must carefully balance his nutrition and hydration during the race. Through hours of training and testing he has determined that he needs between 60 and 80 grams of carbs per hour—any less and he will get low blood sugar, any more and he will get high blood sugar and risk dehydration later in the race. He will burn approximately 11,000 calories and consume several gallons of fluid in an Ironman triathlon.

“When I’m racing I don’t forget that I have diabetes,” Jay explains. “But I do forget that the other athletes don’t have...”
Diabetes. It’s just a part of my race and all the steps I take to manage it are just the things I have to do to get to the finish line. Some races I get it right, other races it doesn’t go as planned. I have to be able to adapt and keep going.”

Jay stresses that having diabetes is not an excuse to give up. While he hopes to influence others who have diabetes, he is passionate about inspiring people with and without diabetes. Jay has always been motivated by the thought of crossing the finish line and he recognizes that everyone else has goals they would like to accomplish. Whether it involves reaching an ideal weight or making a promotion, everyone has a “vision” of their finish line in mind. Jay took this idea to the next level and developed Finish Line Vision™, a motivational concept to inspire others to set goals and reach their finish lines.

Jay admits that having diabetes can be difficult, especially when taking insulin in public or checking blood sugar levels multiple times a day, and always having supplies and glucose handy to prevent or correct low blood sugar.

“You have to plan, prepare and be able to react and adapt, kind of like the ironman,” he adds with a smile.

But he has learned to overcome his adversities by looking ahead to his finish line. Today, Jay speaks around the country and even internationally, inspiring others with Finish Line Vision™.

Jay explains that at the end of the day, his is just like anyone else – he’s a husband, a father, a businessman, and an athlete who just happens to have type 1 diabetes.

“It’s all about making the worst thing that ever happened to you, the best thing that ever happened to you. Use it as motivation. Improve your health, be a role model for your family and others to eat healthy and exercise. You will reach your finish line.”

To read more about Jay and learn about how to reach your finish line, check out his new book, Finish Line Vision, available in late 2011 or visit his website, www.finishlinevision.com.

HELPING STUDENTS WITH DIABETES BE SAFE AND SUCCESSFUL AT SCHOOL

By Joanne Gallivan, MS, RD

As a parent of a child with diabetes, you know the importance of safe glucose (sugar) levels and the warning signs that your child needs help. Because your child spends so much time in school, you also want the school nurse, teachers, and other school staff to learn these same things.

“The need to manage your child’s diabetes doesn’t stop at the school door. There is a guide for schools that, quite literally, can be a lifesaver,” said Griffin P. Rodgers, MD, MACP, Director of the National Institute of Diabetes and Digestive and Kidney Diseases of the National Institutes of Health (NIH).

Updated Guide Helps Keep Your Child Safe at School

School staff can get the guidance they need from the manual, Helping the Student with Diabetes Succeed: A Guide for School Personnel. The guide was produced by the U.S. Department of Health and Human Services’ National Diabetes Education Program (NDEP). Its use is supported by major diabetes and education organizations, including the American Association of Clinical Endocrinologists [en-doh-cri-NA-lo-jists]. The latest edition provides the most current expert advice for managing diabetes and diabetes-related emergencies at school. It is a practical guide to the health information and training schools need to help students with diabetes be safe and participate fully in school life.

The guide is a great tool for both schools and parents. You can download it from the NDEP website at www.YourDiabetesInfo.org/schoolguide or order a free copy by calling 1-888-693-NDEP (1-800-693-6337).

The guide provides A to Z information about

• how diabetes is managed
• how students need to balance insulin, nutrition and physical activity
• how to identify and respond to diabetes emergencies, and
• where to find more information about diabetes.

GETTING YOUR SCHOOL READY FOR YOUR CHILD WITH DIABETES

From the bus driver in the morning to the athletic coach after school and all the teachers and school staff

Continued on page 26

Ms. Gallivan serves as the Director of the National Diabetes Education Program (NDEP) at the National Institutes of Health (NIH). She is a Registered Dietitian and a member of the American Diabetes Association (ADA), the ADA’s Diabetes Care Practice Group, and the Maryland Dietetic Association. Ms. Gallivan received her Bachelor of Science degree in nutrition from the University of Connecticut and her Master’s degree in community nutrition from the University of Maryland. Ms. Gallivan has authored several articles on the National Diabetes Education Program and made numerous presentations about diabetes and NDEP at professional and consumer meetings.
LIPID MANAGEMENT AND DIABETES

BY CHRIS K. GUERIN, MD, FACE

Did you know that one of the major concerns about diabetes is that it increases your risk for heart disease and stroke?

There is good and bad news. Unfortunately, the chances of dying from heart disease or stroke are two to four times higher in people with diabetes than in people without diabetes. The good news is that you can largely reduce these risks by managing your risk factors for heart disease. In one study, researchers tried to achieve optimal blood glucose (sugar), blood pressure, and lipid control in people with diabetes. They were able to reduce the study patients’ development of heart and blood vessel disease by nearly 50%—a significant amount! If you have diabetes, it is also very important give up smoking, pay attention to what you eat, and be physically active. These three things are called TLC’s (therapeutic lifestyle changes).

Let’s examine lipid (blood fats) levels in more detail. We are all aware of cholesterol [ko-LESS-ter-ahl], but sometimes when people talk about lipids, they only know their total cholesterol. LDL cholesterol, also known as the “bad” cholesterol, is the blood fat most associated with heart disease and stroke. HDL cholesterol, the so-called “good” cholesterol, is protective against heart disease. But even with high HDL cholesterol, we still pay attention to LDL cholesterol. You may be surprised to know that the average LDL cholesterol level in people with diabetes is about the same as in people without diabetes.

You may ask, “Why do patients with diabetes then have a higher risk of strokes and heart attacks?” The answer is that their cholesterol is of a different quality—something we call “dense” rather than “light and fluffy.” The small and dense cholesterol is associated with hardening of the blood vessels, which leads to heart attack and stroke.

Therefore, it is highly recommended that people with diabetes take cholesterol-lowering drugs such as statins. Sometimes combination medication approaches are used to decrease LDL cholesterol and triglycerides [try-GLIH-ser-ides] (sugar fats), and raise HDL cholesterol. Doctors can prescribe niacin—to raise HDL-cholesterol levels. Fibrates and/or fish oils are used to treat high triglyceride levels. Doctors are always looking for a better way to predict who is at risk for blood vessel problems. You may see on your blood tests the term “non-HDL cholesterol” or “apolipoprotein [ah-poh-lih-pro-teen] B.” These tests might be better for predicting risk factors in people with diabetes. Later this year, there may be new guidelines that might incorporate some of these additional lab tests.

As mentioned earlier, TLCs refer to therapeutic lifestyle changes. Many attempts have been made to define an “ideal diet” for a person with diabetes. A commonsense approach to food choices can be a very good start. Let’s start with your weight. Weight issues are a problem for many people with or without diabetes. Health benefits of weight loss can begin with only a 5%-10% loss from your current weight. In The Diabetes Prevention Program study, people at high risk for getting diabetes could reduce their risk for diabetes by almost 60%. They only had to lose about 7% of their weight and exercise about 150 minutes per week (about 20 minutes per day).

Is there a “magic diet” that would be the best? Many books tell you that they contain THE answer. But what do we really know? Eating simple sugars, or simple carbs, are what raise blood sugar in your body. There are many simple carbs that most people are aware of, such as juices, milk, soda, donuts, candy, cake, and crackers, that raise one’s blood sugar levels. However, there are other foods that you might not be aware of that have a similar effect. These carbs include white rice, most pasta, flour tortillas or white bread, potatoes (fried or mashed) and instant cereals. Better choices are brown rice, whole wheat pasta, whole grain tortillas or bread, small baked potatoes, and old-fashioned oatmeal.

To increase your physical activity, you do not have to run a 10K tonight! Fitness has been shown to be a predictor of heart health. Even people who are overweight or obese have lower heart and blood vessel problems than those who are thin but not fit. Aim for 30-45 minutes most days of the week, although as mentioned earlier, even 20 minutes daily has benefit. It is helpful to cross train so as to avoid injury. Cross training means using different exercises. For example, you may walk on most days, but swim or use some light weights three times a week. It is always better to go for more repetitions with lighter weights if you want to build up muscle, rather than very heavy weights which may lead to more injuries. Muscles is very important in terms of burning calories, even when you are not active.

Unfortunately all heart problems may not be preventable in every person with diabetes. Family history can put you at risk, as can increasing age, whether or not you have diabetes. But other risk factors can be acted on—be choosy about what you eat, and move, move, move! Quit smoking if you are smoking. Get your cholesterol levels checked and discuss with your doctor if you need medication to improve those levels. Get your blood pressure checked and know your numbers, and work with your medical team to get them to GOAL! 🌐

Dr. Guerin is an Endocrinologist practicing in North San Diego County. He trained at the Mayo Clinic in Rochester, Minnesota. Following his Residency and Fellowship at the Mayo Clinic, he was a Post-Doctoral Scholar of the NIH (National Institute of Health). Currently, he is an Assistant Clinical Professor of Medicine at University of California San Diego. He is also the Director of Diabetes Services at Tri-City Medical Center in Oceanside, California. He has been active as a Clinical Research Investigator in the areas of Diabetes and Lipid metabolism and is Board Certified in Clinical Lipidology. He has a personal interest regarding prevention of Cardiovascular Disease in patients with Diabetes.
Along the route talk about what you are trying to achieve and what you have already achieved. Having a buddy to walk with you can motivate you while you are exercising, and can also give you that extra push to get out the door when you don’t feel like exercising. Remember that results come in both superficial forms and physical forms as well. In the beginning you will start seeing benefits in your sleeping patterns, confidence and endurance. Next, you will notice physical changes. So, don’t let the scale be the only factor that you use to judge your success!

In closing, take a deep breath! You are making changes that will benefit not only you but your loved ones who surround you. There is not a journey out there that does not require a head scratch every now and then. It’s alright to have doubts and concerns about attempting something new. However, I assure you that the old adage of “without your health, you have nothing” stands true for anyone ever questioning if it is too late to make a change for the better.

MEET TRAINER JOE

EmPower is proud to partner with Joe Fulir to bring you real, manageable, physical activity guidance. “Trainer Joe” is a certified personal trainer with certifications from the National Academy of Sports Medicine and the World Instructor Training School. He has specialty certification in TRX Suspension Training and Kettle Bell Training, and this summer received his Biggest Loser Trainer certification.

Q: Who is Joe Fulir?
Joe: One of the first things people ask me is my ethnicity. My mother is Filipino and Spanish, and my father is Caucasian from Pennsylvania. I was born in Pittsburgh and went to high school in Maryland before going into the Marines.

Q: What drew you to become a personal trainer?
Joe: (laughs) Not exactly. I always knew that I wanted to be an entrepreneur. I started a general contracting company to help work my way through school. That is how I earned my degree from the University of North Florida in Psychology.

Q: What’s the one thing you would say to anyone thinking about starting up a fitness program?
Joe: Don’t talk about it; be about it. That’s always been my motto and it applies to everything in life, not just fitness. Anyone can take on little steps to improve their health and wellbeing. A lot of people talk about the changes they are going to make in their lives. Don’t talk about it; Be about it.

Q: So, what is your philosophy as a personal trainer?
Joe: I am an educator, first and foremost. I don’t want to train people for months on end. I want to give someone the education they need to understand how to do physical activity, and why. I want them to understand the relationship between their nutrition, their physical activity, and their overall health. I want people to be able to walk into a gym, a fitness center in a hotel, or just a local park, and have the ability to safely and effectively work out their entire body.

Q: You are very passionate about this. Is it personal for you?
Joe: Diabetes runs rampant in my father’s family. I’ve seen what it can do to families. I want to give people a chance to grow up with and not old with their grandchildren and their great-grandchildren.

Q: Last question: What’s the one thing you think you can do to make changes?
Joe: Take on little steps to improve their health and wellbeing. A lot of people talk about the changes they are going to make in their lives. Don’t talk about it; Be about it.

EmPower is an online personal training program. A place where you can be accountable and learn the tools and techniques you need to make changes in your day to day life. www.empowerfitnessprogram.com

About Joe:

Joe: I learned in the Marines that it takes different techniques to motivate people. I saw that results came from not only physical but mental fitness as well. I knew that I wanted to be able to help people change not only their appearance, but also help them address some of the mental factors that coincide.

E:

BY JOE FULIR

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Joe:

THE PATH TO A FIT LIFE BEGINS HERE

Our mission is to create a fun and fulfilled path consisting of our own body’s ability to move around. All we have to do is move one step to a fit life is go for a walk! This is going to be like no other walk you have been on before. This walk is going to be the only factor that you use to judge your success!

Let the journey begin! As we go through everyday life we face obstacles we must overcome to advance in our endeavors. Why should fitness be a chore? Instead, think of it as the next challenge in life to break through.

The benefits of fitness range from better sleep to more energy and confidence to get through the day. I am here to let you know that tomorrow is going to be promising and can also give you that extra push to get out the door when you don’t feel like exercising. Remember that results come in both superficial forms and physical forms as well. In the beginning you will start seeing benefits in your sleeping patterns, confidence and endurance. Next, you will notice physical changes. So, don’t let the scale be the only factor that you use to judge your success!

When on this walk, I promise you that much! This walk is going to be the only factor that you use to judge your success!

Along the route talk about what you are trying to achieve and what you have already achieved. Having a buddy to walk with you can motivate you while you are exercising, and can also give you that extra push to get out the door when you don’t feel like exercising. Remember that results come in both superficial forms and physical forms as well. In the beginning you will start seeing benefits in your sleeping patterns, confidence and endurance. Next, you will notice physical changes. So, don’t let the scale be the only factor that you use to judge your success!
ANOREXIA NERVOSA: An Endocrine Problem?

BY RIFKA SCHULMAN, MD

You've likely heard about eating disorders such as anorexia nervosa [a-nor-EK-ee-uh-nur-VOH-suh] or you might know someone who has anorexia. But did you know that people with anorexia are more than just “too skinny”? Actually, they also have problems with their hormone systems.

WHAT IS ANOREXIA NERVOSA?

Anorexia nervosa is a serious eating disorder that affects about 1 in every 100 teenagers. It can lead to serious health problems, sometimes even death. How is a person with anorexia nervosa diagnosed? They have to have lost enough weight that they are less than 85% of expected body weight, and they have to have an intense fear of gaining weight, a disturbed body image (thinking you are fat when you really aren’t), and no menstrual period (in females) for at least three months.

Anorexia affects mostly women, but it can affect men as well. There are two major types: “restrictive” and “binge-purge.” The restrictive type means that the person eats very little and exercises too much. The binge-purge type means that the person overeats and then tries to remove the food or weight by vomiting, taking laxatives (pills causing diarrhea), or diuretics (pills making them urinate more). About one-third of patients will completely recover, one-third will regain weight but still continue to have some of the prior eating behaviors, and one-third will remain sick for years.

WHY IS ANOREXIA SO DANGEROUS?

Anorexia has very serious effects on many parts of the body. One common problem is abnormal electrolytes [ee-LECK-troh-lites] (sodium, potassium, etc.) in the blood. If they are very abnormal, it can lead to irregular heart rhythms and even death. Muscles can become weak all over the body, including the heart muscle. This is because of lack of protein. In people with anorexia the lungs can collapse, the gut can slow or get inflamed, the blood count can get too low, brain tissue can decrease, and the skin can change. All of this is because the person is starving himself or herself.

ANOREXIA AND THE ENDOCRINE SYSTEM

In addition to all of those harmful effects on the body, anorexia affects many aspects of the endocrine (hormone) system. The body reacts to the lack of nutrition by trying to conserve energy as much as possible. Through changes in hormone levels, only the most important functions of the body continue, while ones less important for survival shut off.

ANOREXIA AND OTHER HORMONES

The thyroid gland is also affected when a person starves themselves. Normally, the thyroid produces a hormone called T4 which is converted to T3, the active hormone, when circulating throughout the body. TSH, a hormone produced in the pituitary gland, stimulates the thyroid to produce T4 as needed. Any severe illness, including anorexia, prevents T4 from converting to T3. If there is a severe lack of T3, the heart rate and metabolism may slow, and body temperature may decrease below normal. In addition to a low T3, TSH and T4 may decrease in patients with anorexia.

ANOREXIA AND OSTEOPOROSIS

Osteoporosis [ah-stee-oh-pore-OH-sis], a problem of low bone density that puts the person at increased risk of fracture, is a common side effect of anorexia and can last for many years. The bones of a teenager with anorexia can be weaker than those of an old man or woman! This happens for several reasons. Many of the abnormal hormone levels mentioned above contribute to bone loss. Bone loss is linked to low estrogen, which results from the reproductive system “shutting down.” Poor nutrition also leads to decreased intake of calcium and vitamin D, which are necessary for bone health. In teenagers the bone loss is happening at a time when bone should be growing instead of shrinking. All of these factors lead to low bone mass which makes the person more at risk for fracture.

WHAT CAN BE DONE?

The good news is that despite all the medical and endocrine problems that can develop due to anorexia, many of them can be cured by fixing the underlying eating disorder and gaining weight. A team approach is often needed, such as a psychiatrist [sye-KYE-uh-trist] or psychologist [sye-KAH-low-jist], an endocrinologist [en-doh-cri-NA-lo-jist], and other health professionals. Knowing about the dangers of eating disorders is important because preventing anorexia will prevent so many other problems. Empower yourself with knowledge.

Dr. Schulman is a clinical fellow in the division of Endocrinology at Mount Sinai School of Medicine, NY. During the course of her training she has had the opportunity to care for several patients with severe anorexia nervosa and help manage their nutritional status and endocrine abnormalities.
THE WAR ON OBESITY: Whose Battle is it?

By Jeffrey I. Mechanick, MD, FACP, FACE, FACN, ECUU

The war on obesity is not just about how many people are overweight or obese. It’s also about the biology, physiology, and complications related to obesity. Certain genes are involved. Obesity is not just a result of a person’s lack of willpower. The problem of weighing more than one should have many factors. These factors include biology, the environment, society, and even cultural issues.

What environmental factors promote overeating? Fast foods, foods high in calorie content, impulsive eating, increased food selection, and skipped meals all have an impact on overeating. Stress and mood changes can also cause a person to have abnormal eating habits. Even boredom, fatigue, and just habit can cause one to eat more than the body needs.

The costs of obesity in society are high. Obesity-related disorders include diabetes, heart disease, arthritis, depression, and certain cancers. These disorders increase the costs in our healthcare system. This is something on everyone’s mind nowadays.

So, with all of this information, why on Earth have we not made more progress in fighting the war against obesity? Why is it that more than one third of American adults (over 72 million people) and 17% of children aged 2 to 19 years are obese? Since 1990, obesity rates for adults have doubled and rates for children have tripled. No corner of our society is spared. Obesity affects all ages, genders, races, ethnicities, socioeconomic groups, education levels, and parts of the world.

The focus now on this war against obesity is on “implementation.” Implementation means how we as a society can use the above information to produce change for the better. Education about healthy lifestyle, scientific discoveries to create new anti-obesity drugs, and technologic innovations for procedures to change our physiology are needed. Also needed are economic rewards for healthy behavior and penalties for unhealthy behavior. Banning trans fats and posting calories on menu items is a great start. But the future will need to include bolder efforts.

Let’s consider a few ideas, and maybe you can even think of others:

• Have street vendors for locally-grown fresh fruits and vegetables that are cheap to buy because they are partly paid for by the government. In turn, we should limit the number of street vendors with foods high in saturated fat.
• Offer cheaper whole grain/high fiber breakfast cereals, and tax sugary cereals.
• Include vending machines in schools, colleges, factories, malls, movie theaters, and amusement parks that contain healthy foods that people can afford. Also, limit the number of vending machines with junk food in these places.
• Offer low-fat, higher-protein, less-sugary foods in school cafeterias. Food should be made from scratch (less prepackaged foods).
• Promote healthy meals at social functions rather than the usual high-fat entrees and sweet desserts.
• Provide free healthy foods, such as fresh fruits and vegetables, on planes, trains, and in their stations, which might even be good for business.

This approach of “behavioral economics” may hold the answer. As adults, we all have the ability to make choices. Sometimes our choices can be poor, such as eating junk food and having unhealthy lifestyles. However, maybe it wouldn’t be so hard to make better choices if our environment would promote a healthy lifestyle, be more affordable, and would be more available and certainly more interesting. It would also help if we could be well-informed about choices that go with this healthy lifestyle.

In the meantime, we need safer and more effective drugs. These drugs need to at least help someone stick with a healthy lifestyle and get “ahead of the curve” by losing weight and improving their metabolic profile. Many factors cause obesity. Biological processes in people with obesity are complex. These future safer, more effective drugs can target appetite, hormones, and/or fat cell function. Our government must support ongoing research to combat the epidemic of obesity.

The new MyPlate campaign by the U.S. Department of Agriculture is a great start (www.ChooseMyPlate.gov).

Ultimately, doctors and scientists will need to work with the government and all aspects of our society so that each of us can live a longer, more high-quality life. At the same time, healthcare costs need to come down. The battle against obesity involves all of us!

Healthy Eating:
FROM PYRAMIDS TO PLATES

The United States Department of Agriculture has just released the newest version of healthy eating recommendations for Americans. Instead of the original Food Pyramid, the more recent MyPyramid, we now have MyPlate.

Why do we need a new way to learn about healthy eating? Maybe, it’s because the old ways were not working well. Obesity, diabetes, and metabolic diseases are still very common and are serious health risks. Scientific studies in nutrition have been very clear: plants are good for you. This means lots of fruits and vegetables. But saturated fats, sugary foods, salty foods, and excess calories are not good for you. This means fewer fast foods, processed foods, and sweets.

The basics of MyPlate are very easy and promise to help us all eat well to become healthier.

• Fill up at least half of your plate with fruits and vegetables, such as sliced apple, steamed broccoli, beans, and salad;
• At least half of the grains should be whole grains, such as wild or brown rice, oatmeal, quinoa [KEEN-wahl], and even popcorn (but you don’t have to add butter and salt);
• Meats are fine but should be lean and fill up less than a quarter of the plate;
• The fat on red meats and even poultry should be trimmed off;
• Fish is very good for you and the oil in fish can even be very good for you;
• Dairy products can be healthy but they should be low-fat or nonfat, such as low-fat or nonfat milk, cottage cheese, or yogurt.

Perhaps the most important message of MyPlate is that healthy food is to be enjoyed and even shared with family, friends, and others as part of everyday human interactions. However, portion sizes should be reduced to avoid overeating. Beverages should not be sugary; simple water is always a great choice. Everyone should learn how to read Nutrition Facts labels on food packaging so that healthy choices are easier and putting your plate together can lead to healthy living. Also, remember that plenty of physical activity and enough sleep at night leads to a healthy lifestyle.

AACE supports MyPlate and strategies to improve eating patterns.

www.aace.com/NutritionGuide

For more information about MyPlate, visit www.CompleteMyPlate.gov.
Managing My Diabetes During THOSE “SPECIAL TIMES”

BY PETER HUYNH, PHARM.D, CDE AND RHEA C. SMITH, PHARM.D

GETTING READY FOR A COLON EXAM

A common question many people using diabetes medications have is: "What do I do with my medications if I am having a colonoscopy [koh-luh-NAH-skuh-pee]?"

What is a colonoscopy and why is it recommended? A colonoscopy is a common medical test. During a colonoscopy, your doctor can see inside your colon and rectum. The colon is part of the large intestine and the rectum connects the colon to the anus. The procedure is used to look for early signs of cancer and to diagnose other problems, such as bleeding and inflamed intestines.

How do you prepare for a colonoscopy? On the day before your colonoscopy, you will be asked to change to a clear liquid diet. If you have diabetes, you can't change your diet or meal schedule without planning so that your blood glucose (sugar) can be properly managed. A helpful tip is to make to dose or frequency of use as you get ready for your procedure. These medications can be taken in combination with other glucose-lowering medications and may have different names. If you have any questions about your medication, ask your healthcare team. Medications that lower blood sugar are usually stopped or decreased on the day before your exam and stopped on the day of the colonoscopy exam. If you are on insulin, you will need to contact your provider for specific instructions in decreasing your insulin. If you are taking any blood-thinning agents, they may need to be adjusted up to 10 days before your colonoscopy. Non-prescription medications that need to be avoided are aspirin, aspirin-containing products, and non-steroidal anti-inflammatory drugs such as ibuprofen and naproxen. Please contact your healthcare team on how to manage these medications before you have the exam.

BLOOD GLUCOSE MANAGEMENT DURING ILLNESS

Your diabetes care can also be a challenge when you are sick with a cold, the flu, or have symptoms of vomiting and/or diarrhea. People with diabetes often think to decrease their diabetes medication use when ill, thinking that as you are not eating your normal diet, you automatically need less glucose controlling medicine. But that’s not true! Do not stop your glucose medications!

Often you may feel too ill to check your blood sugar. However, it is the very time when attention to your diabetes can be the most critical!

During illness, you are at a higher risk of developing hyperglycemia [hie-per-gly-SEEM-ee-ah] (high blood sugar) which could lead to sleepiness, confusion, and even coma, especially if you have type 1 diabetes (the type of diabetes in which your pancreas can no longer make insulin). Illness stresses your body, resulting in the release of hormones that help you get over your illness; but, unfortunately, these hormones can increase blood sugar even without food.

To prevent high blood sugar from getting out of control and making you have to go to the hospital, there are three key areas of focus: medications, checking (blood sugar and ketones), and fluids/food.

MEDICATIONS

1. Insulin: continue taking your normal insulin doses because your blood sugar may keep rising no matter whether you are eating or not. You might even need more insulin if your blood sugar continues to rise on your typical insulin doses.

2. Pills for controlling your glucose: unless your doctor tells you otherwise, continue taking all of your oral medications. Contact your healthcare team for help adjusting dosages if you are throwing up and cannot keep your pills down. If you are unable to keep anything down, contact your healthcare team as soon as possible!

3. Ask nearby family members or close friends to pick up your medication from the pharmacy or prepare your meds while you are ill. This can help ensure that you take the right pills and the right doses, because you have “another pair of eyes” to check pills and doses.

BLOOD GLUCOSE AND URINE KETONES:

Frequent blood sugar and urine ketones checks will help prevent as well as allow better treatment of hyperglycemia. Checking can prevent complications such as diabetic ketoacidosis [KEE-toe-ah-htuh-DOE-sis], as you will know if you need to get help or are getting better. Ketones should be checked if you have type 1 diabetes and have high blood sugar readings. However, ketones are also possible in people with type 2 diabetes.

The following are guidelines for monitoring your blood sugar and urine ketones:

1. Check blood sugar and ketones every two to four hours.

2. Record blood sugar readings and insulin doses to keep records of trends.

3. Contact your doctor if your blood sugar goes up and stays above your usual readings. Definitely contact your doctor if your blood sugar readings are above 300 and not coming down and you have ketones in your urine after checking 2 or more times in a row.

FLUIDS/FOOD:

When you are sick your appetite might not be normal, but it is important that you keep up your fluid intake. Food intake is not critical, but just water alone will not help your body to balance minerals and nutrients, which are needed to get you well again. Easily digested foods and liquids can contain small amounts of carbs (sugars) that your body can use as an energy source. This will help prevent fat breakdown that results in ketoadiposis, which would require you to go to the hospital for treatment.

Along with knowing how to manage diabetes during illness, it is also important to know when to contact your doctor. Symptoms such as throwing up, inability to keep hydrated, and worsening conditions should always be signals for a call to your healthcare team for advice. An even better plan is to not wait until you are ill; instead, discuss with your doctor what a sick day plan should look like, so that you aren’t unprepared when you get sick!

Dr. Huyhn is a clinical pharmacist and Certified Diabetes Educator at the University of Washington, Diabetes Care Center. He graduated at the University of Connecticut with his Doctor of Pharmacy, and has completed a diabetes research fellowship at Washington State University. He is actively involved in direct patient care and plays an active role in the diabetes education program at the University of Washington, Diabetes Care Center.

Dr. Smith is a clinical pharmacist at the University of Washington, Diabetes Care Center. She graduated at the University of Washington in 2007 with her Doctor of Pharmacy, and has completed her general practice residency at UW Medicine in Seattle, Washington. She is actively involved in direct patient care and plays an active role in the diabetes education program at the University of Washington, Diabetes Care Center.
It was an early morning just before sunrise. Some often enjoy the solitude of a morning jog or leisurely stroll by themselves. But on this morning, the people gathered to start their day together, stride in stride; national and international, young and old, physician and non-physician, all with one goal: to finish the race.

In April 2011, nearly 140 AACE Annual Meeting attendees eagerly assembled for the 4th Annual EmPower 5k Fun Run. The race took place along the world famous San Diego Harbor and waterfront, a scenic route boasting outstanding views of the city.

A fitness instructor led the group through a 10-minute aerobic warm-up before the start. Donald A. Bergman, MD, MACE, founder of EmPower and Chair of the ACE EmPower Committee gave a welcome to attendees. Etie S. Moghissi, MD, FACP, FACE, Editor of EmPower Magazine also welcomed everyone and energized attendees before runners and walkers took their place at the start line.

The horn blew and the participants were off! Dr. Richard Auchus of Dallas, Texas was the first male runner to cross the finish line at a time of 18:42. AACE Director of Finance Lydia Utley was the first female to cross the finish line at a time of 22:15. Ranmali Wimalawansa of North Brunswick, NJ was the first female walker to cross the finish line at a time of 35:06. Dr. Jonathan Leffert of Dallas, TX was the first male walker to cross the finish line at a time of 41:59.

Awards were presented to the top three male and female runners and walkers in their respective divisions. One by one, everyone finished the race, empowered by their accomplishments, making this year’s event the most successful to date. But this event wasn’t about the competition. It was about having fun and demonstrating what being an endocrinologist is all about. For more information of about the event and a full list of race results, visit www.tracs.net/aace5k/.

Congratulations to all of the participants for a job well done!

EMPOWERING ENDOCRINOLOGISTS TOO!

BY SARAH SENN

It was an early morning just before sunrise. Some often enjoy the solitude of a morning jog or leisurely stroll by themselves. But on this morning, the people gathered to start their day together, stride in stride; national and international, young and old, physician and non-physician, all with one goal: to finish the race.

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IN THE NEWS!

FDA’s Safety Announcement on the Use of the Diabetes Medication Actos (pioglitazone)

On June 15, 2011, U.S. Food and Drug Administration (FDA) announced that the use of the diabetes medication Actos (pioglitazone) for more than one year may be associated with an increased risk of bladder cancer. According to the FDA’s Safety Announcement, information about this risk will be added to the Warnings and Precautions section of the label for pioglitazone-containing medicines. The patient Medication Guide for these medicines will also be revised to include information on the risk of bladder cancer.

In response to this important safety announcement from the FDA, the American Association of Clinical Endocrinologists urges patients who are currently taking Actos or any combination of medication that includes pioglitazone, to continue taking all currently prescribed medications unless instructed otherwise by their healthcare provider. Stopping diabetes medications can result in higher levels of blood glucose that may cause serious short term health problems and could increase the risk of diabetes-related complications in the long term.

The American Association of Clinical Endocrinologists recommends that patients adhere to the following guidance provided by the FDA:

• There may be an increased chance of having bladder cancer when taking pioglitazone;
• Do not take pioglitazone if receiving treatment for bladder cancer;
• Talk to your doctor right away if you have any of the symptoms of bladder cancer including blood or red color in urine; urgent need to urinate or pain while urinating; pain in back or lower abdomen;
• Read the Medication Guide included with pioglitazone medicine as it explains risks associated with the use of the drug; and
• Talk to your healthcare professional if you have questions or concerns about pioglitazone medicines.

According to the FDA Safety Announcement, the five-year interim analysis of an ongoing ten-year study showed that although there was no overall increased risk of bladder cancer with pioglitazone use, an increased risk of bladder cancer was noted among patients who had been on pioglitazone the longest and had been on higher doses over time.

For more information please visit the FDA website (www.fda.gov). ®

PCOS: What You Need to Know

BY WALTER FUTTERWEIT, MD, FACP, FACE

You have been told that you have PCOS (polycystic [pah-lee-SISS-tick] ovary syndrome) in your late teens or twenties, and you are aware that it probably is the cause of your symptoms. You are wondering what you can do to stay healthy. Let us start by defining the syndrome.

PCOS is defined as an excess of your male hormone blood level. A bit of male hormone is normal in every female! When you have more male hormone than normal, you can develop skin features such as more body hair than normal on the face, arms, lower back, abdomen, and pubic area, and/or a laboratory test showing an elevated level of the specific male hormone testosterone [tes-TOS-tuh-ron]. Although ovaries can be enlarged, often they are of normal size. Irregular menstrual periods starting when you first get your period are common. PCOS is often associated with weight gain, tendency to crave carbohydrates, and difficulty in losing weight. You should be aware that one of three women with PCOS may have regular periods, but that does not mean you ovulate most of the time. Your doctor has probably looked for other causes than PCOS, by specific blood testing and other studies.

WHAT ARE THE RISKS IN WOMEN WITH PCOS?

Women with PCOS are at risk for developing type 2 diabetes and metabolic syndrome. This can happen in their teen years and before menopause. What is metabolic syndrome? Three of five factors listed below must be present:

1. High blood triglycerides
2. High blood pressure
3. Elevation of blood glucose (sugar) levels. This is insulin resistance. About one of three women with type 2 diabetes from when their periods first started through to menopause have PCOS. Metabolic syndrome is higher in obese women PCOS, and those with a family history of type 2 diabetes. Yet, this also occurs in some thin women with PCOS.
4. Increased amount of body fat accumulating around the waist.

5. Lower blood levels of HDL cholesterol [ko-LESS-ter-ahl].

The more factors that are present, the higher the risk of developing heart disease or stroke, sometimes prematurely, particularly in obese women with PCOS.

At least 50% of women in the United States are overweight or obese. This is defined by the body mass index (BMI). Those who are overweight have a BMI above 25, and those who are obese have a BMI of 30 or more. It is easy to calculate your BMI. Visit EmPowerYourHealth.org to find the BMI calculator and follow the instructions. A normal BMI less than 25 is a major goal, but even a 10% loss in body weight can change some of the Continued on page 20

Dr. Walter Futterweit is Board Certified in Endocrinology and Internal Medicine, and in private practice in New York City. He is actively involved as a Clinical Professor of Medicine at the Mount Sinai School of Medicine Division of Endocrinology and Internal Medicine. He is internationally known for his published studies and is the President of the Androgen Excess Society (AES).
hormonal changes (elevated insulin and testosterone blood levels). Complications of obesity in the long term include type 2 diabetes, heart attack, stroke, cancer of the breast and colon, and effects on fertility and a trigger to skin changes such as acne, hair in unwanted places, as well as thinning of scalp hair.

THE GOOD NEWS
You have the power to reverse many of the features of PCOS and reduce your possible health risks.

First, and most important, a change in lifestyle leads to improving your symptoms. This includes reducing your weight by portion control, reducing some of the carbs in your food, and allowing proteins of various sorts to be part of a meal. Cutting down on starches, pasta, and pastry is a start. You will notice that as you reduce calories below 1200 a day, hunger is reduced and you feel better and more energetic. Changing your lifestyle must also include exercise such as walking, going up flights of stairs instead of an elevator, and walking instead of driving short distances. A habit of walking, going up flights of stairs instead of an elevator, and even reversed to some extent with a more positive attitude and adhering to your physician’s advice.

In conclusion, early diagnosis and treatment is essential in PCOS. Each woman’s treatment is different and needs to be specific to each woman’s needs. You will be in a better position to understand that this condition can be changed and may even be reversed to some extent with a more positive attitude and adhering to your physician’s advice.

Many researchers have shown the use of the anti-insulin agent metformin can improve menstrual cycles and decrease the tendency toward craving. In a number of women they are able to start losing weight with metformin and improve their chance of delaying or preventing diabetes. Often, mood disorders lessen with the drug as the dose approaches optimal levels of 2 grams a day. These findings are important since depression and anxiety can worsen risk factors. Also, most antidepressants make it difficult to lose weight by increasing insulin resistance.

Your doctor will tell you that treatment is necessary for risk factors with medication, in addition to the lifestyle changes, to provide you with major protection against future risks as you get older.

HERE IS A LIST OF RISK FACTORS AND TREATMENT:

<table>
<thead>
<tr>
<th>RISK FACTOR</th>
<th>TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol abnormalities</td>
<td>Statins</td>
</tr>
<tr>
<td>Triglyceride elevation</td>
<td>Fish oils, medication if severe</td>
</tr>
<tr>
<td>Insulin elevation</td>
<td>Metformin</td>
</tr>
<tr>
<td>Hypertension</td>
<td>Antihypertensive medication</td>
</tr>
<tr>
<td>Smoking and excessive alcohol use</td>
<td>Must stop, and minimize the alcohol</td>
</tr>
<tr>
<td>Blood sugar greater than 100 mg%</td>
<td>Metformin</td>
</tr>
<tr>
<td>Birth control pills, if necessary</td>
<td>Low-dose estrogen and a small aspirin tablet</td>
</tr>
</tbody>
</table>

Bones are amazing structures. Think about it: they help us to move, support and protect our bodies, make blood cells, and store important minerals. Unfortunately, as people get older, their bones start to become weaker.

Osteoporosis [ah-stee-oh-pore-oh-sis] is caused by a lower bone density, which leads to loss of bone strength and a higher risk of fracture (broken bone), especially of the hip and spine. When most people think about osteoporosis, they often think it is a disease of aging women.

But believe it or not, osteoporosis affects many men too! As a matter of fact, almost 40% of all new fractures from osteoporosis happen in men.

An even scarier thought is that men are more likely than women to die from or have complications from their fractures caused by osteoporosis.

Many men are not aware of their risk for osteoporosis. It is a “silent” disease: it happens slowly over time without the person feeling or looking any different until it may be too late.

WHY DO MEN LOSE BONE?

In men, osteoporosis happens because of changes to the skeleton caused by older age or from other things that speed up bone loss, or sometimes even both.

WHAT effect does aging have on men’s bones?

• Bone is constantly changing and growing
• As men get older, the cellular changes that cause bone to break down occur faster than the changes that build bones.
• Getting old can cause the bones to become thin, and this can cause weak, fragile bones that easily break.

WHAT are other causes of osteoporosis that men should know about?

• Drinking too much alcohol: 18 ounces or more of beer or 7 ounces or more of wine or 2 ounces or more of hard liquor each day is considered too much
• Smoking
• Having low calcium or vitamin D levels measured in the blood
• Using steroids long term
• Having a low testosterone [tes-TOS-tuh-rone] level: this is an important hormone in men
• Not getting enough exercise
• Being overweight or having an eating disorder that leads to low weight
• Having other hormone disorders: Cushing’s syndrome, hyperthyroidism [hie-per-THIGH-roid-ism], type 1 or type 2 diabetes, hyperparathyroidism [hie-per-pah-ruh-THIGH-roid-is-m]

HOW DO MEN GET EVALUATED FOR OSTEOPOROSIS?

Osteoporosis is diagnosed by a test called a DXA scan, which is a special x-ray that measures a person’s bone strength, or bone mineral density (BMD). The test comes up with a score, called a T-score, which doctors use to decide if someone has weak bones.

Continued from page 19

BY JESSICA K. LAMBERT, MD

Guy University School of Medicine. She is board certified in Internal Medicine. Afterwards, she completed her residency training in Internal Medicine at New York University School of Medicine. She is board certified in Internal Medicine.
Experts say that all men aged 70 or older should get a DXA scan to make sure they do not have osteoporosis. Men younger than 70 years old who get broken bones very easily, or who take steroid pills regularly, or who have low testosterone should also get a DXA scan.

WHICH MEN SHOULD BE TREATED FOR OSTEOPOROSIS AND HOW?

Men who have a low bone density on their DXA scan (a T-score lower than -2.5), men who already have a fracture from weak bones, or men whose ten-year fracture risk (FRAX) is worse than 20% overall or 3% in the hip, should talk to their doctors about treatment. Your doctor can calculate this for you.

The first step is to stop any habits that might be making bones weaker—like drinking too much alcohol, smoking, or not getting enough exercise.

Men can also take calcium and vitamin D pills to keep bones strong.

Some men with low testosterone may need testosterone replacement therapy. This is not safe for all men, especially with older age. Doctors and patients need to talk about the pros and cons very carefully.

Another special case is men getting hormone treatment for prostate cancer. They should talk to their doctor about preventing osteoporosis, which might mean taking a drug to keep bones strong.

The good news is there are drugs to treat osteoporosis: these medications can slow down the disease or even help to build new bone faster. Most of the drugs were studied in older women, so there is not much information about how well they work in men with osteoporosis. But so far it looks promising!

Some of the best drugs for men with osteoporosis are in a group called bisphosphonates [bis-FOS-fuh-nates]. Examples are alendronate [uh-LEN-dro-nate] or risedronate [rih-SEH-druh-nate]. These drugs are pills taken every day or sometimes once a week.

If these drugs don’t work or cause side effects, there are other medications that can be tried instead, like teriparatide [teh-rih-PAH-ruh-tide].

WHAT THE FUTURE HOLDS:

The number of people with osteoporosis is on the rise! Doctors and patients need to pay more attention to this problem. Because men are at risk for getting this disease too, they should learn about what puts them at risk and what they can do to keep their bones strong.

References:
YOUR DOCTOR RECOMMENDED THYROID SURGERY - NOW WHAT?

BY MARTHA A. ZEIGER, MD, FACS, FACE, AND HELINA SOMERVELL, MSN, CRNP

WHY SURGERY?
Thyroid surgery is done for many thyroid conditions, including thyroid cancer and sometimes non-cancerous thyroid conditions such as nodules, cysts, goiter (large thyroid glands), and overactive thyroid glands. The purpose of thyroid surgery is to remove part or all of your thyroid gland. Your surgeon will explain your operation and why he or she recommends it.

WHAT ARE MY POTENTIAL RISKS OF SURGERY?
Any surgery has risks. With thyroid surgery, there is a small risk of bleeding, infection, and injury to the vocal cords. Injury to these nerves could affect your voice. Other risks include damage or accidental removal of the parathyroid (para-THIGH-roid) glands, which can result in a drop in blood calcium levels. A small risk is also associated with anesthesia. You should carefully discuss the risks and benefits of the surgery with your health care team.

HOW DO I PREPARE FOR SURGERY?
Once you have decided to proceed with surgery, you will be scheduled for a pre-operative evaluation. The pre-op evaluation will include a complete medical exam. This can be done at your doctor's office or at the hospital. Specific instructions regarding your medications and anesthesia risks should be discussed at this visit. If you take aspirin, blood thinners or non-steroidal anti-inflammatory agents, you should stop taking these at least one week before surgery in consultation with your doctor. The night before surgery, do not have anything to eat or drink after midnight. Get a good night's sleep.

WHAT WILL HAPPEN IN SURGERY?
You will be asleep from the general anesthesia. Your neck is tilted back, a 2-4-inch incision (cut) is made at the base of the neck, and part or all of the thyroid gland is taken out. The operation generally lasts from two to three hours. After surgery you will stay in the recovery room for several hours where you will be watched closely as you come out of the anesthesia.

CAN I GO HOME AFTER SURGERY?
Depending on the exact type of surgery you have, you will either be discharged home on the same day of the operation or you will stay in the hospital for one night.

WHAT SHOULD I BE ON THE LOOKOUT FOR AFTER SURGERY?
A mild sore throat and some pain when swallowing is common for up to 7 days. The surgical tape will be removed at your post operative visit around 1-2 weeks. It is rare to get an infection. If you notice any redness or drainage from the incision, contact your surgeon. To make the scar less noticeable protect it with sun screen that has a sun protection factor (SPF) of 30 for a full year. During the year, your scar might become raised or red but it will likely fade into a thin line which will be less noticeable.

I HAVE BEEN HEARING ABOUT NEW SURGICAL TECHNIQUES FOR THE THYROID. WHAT IS THIS ALL ABOUT?
A new technique called robotic thyroidectomy (thigh-roid-EK-tuh-mee) is accomplished through an incision under the arm so there will be no neck scar. Patients who have only one small thyroid nodule on one side of the thyroid gland, and no evidence of cancer that has spread to the lymph nodes. The potential complications are the same as the thyroid operation that is performed through a neck incision. If the other half of the thyroid has to be removed, the same procedure is done under the other arm.

DO I NEED TO TAKE ANY MEDICATIONS ON A LONG-TERM BASIS?
You will need to be on partial or full thyroid hormone replacement, and in most cases this treatment is for life. You need a periodic blood test to adjust the dose of your therapy. Most endocrinologists [en-doh-ri-NA-lo-jists] believe that staying on the brand version, not generic, of thyroid hormone is best.

WHAT ABOUT PARATHYROID SURGERY? IS THIS DIFFERENT FROM THYROID SURGERY?
The parathyroid glands make parathyroid hormone (PTH), which helps keep the calcium level normal. This is important for bone and other organs. There are usually four parathyroid glands, which are located next to the thyroid gland in the neck. Sometimes one or more parathyroid glands may be in a different part of the neck or in the upper chest. And rarely there may be a fifth or sixth gland.

Hyperparathyroidism [hi-per-pa-ruh-THIGH-roid-is-m] occurs when the parathyroid gland(s) enlarge and make too much parathyroid hormone. This leads to calcium levels in the blood that are higher than normal. This can lead to other problems such as kidney stone or bone loss.

The purpose of parathyroid surgery is to locate and remove the abnormal parathyroid gland(s). When an experienced endocrine surgeon does the operation, up to 95% of hyperparathyroid patients can be cured. These surgeries are usually done as an outpatient, but some patients might have to stay in the hospital overnight.

ARE RISKS FOR THIS SURGERY THE SAME AS FOR THE THYROID?
The complications are similar to that of thyroid surgery. Rarely, all four parathyroid glands need to be removed and sometimes, a portion of one is transplanted into the forearm. Your surgeon will explain your specific surgery and why it is recommended in your case.

There is also the possibility that the abnormal glands could not be located or that your symptoms may recur over time. Occasionally, hypoparathyroidism [hi-poh-pa-ruh-THIGH-roid-is-m] (low blood calcium levels) may result after surgery. You may experience numbness or tingling around your mouth or in your fingertips (usually within 24-72 hours). You will have to take calcium supplements as recommended by your surgeon for these symptoms until the symptoms resolve.

WHAT SHOULD I EXPECT AFTER SURGERY?
The recovery and the care of the incision, and restrictions are similar to that of the thyroid surgery. Let your surgeon know about any changes you notice. At your follow-up visit, your surgeon will check how you are healing, and your calcium and intact parathyroid hormone levels will be checked through blood work. If these levels are stable, you will be followed up by your referring doctor. It is recommended that you have these tests repeated in about six months to verify that you are cured.
in between, each has responsibility for students with diabetes. The “Actions for School Personnel, Parents and Students” chapter includes copier-ready checklists so everyone knows their roles and responsibilities.

The guide’s “school health team” approach encourages students, parents and school staff to work together to meet each child’s needs. “Nobody knows your child’s day-to-day needs and how to respond to a diabetes emergency better than you,” said Dr. Rodgers. “That’s why it is so important for you to be part of the school health team and keep open the lines of communication.”

To prepare school staff for their responsibilities, the guide recommends different levels of diabetes training. Training should provide a basic understanding of diabetes, the needs of students with diabetes, and how to take action at the first signs of a diabetes emergency. Also, a few staff members at every school should be trained to perform student-specific routine care to help younger, less experienced students and to help all students with a diabetes emergency.

The manual spells out the schools’ obligations to students with diabetes under Federal laws (check with the school for the state laws that apply). The guide outlines typical items that should be addressed when school staff prepares education plans that may be required to meet your child’s needs.

**GETTING YOUR CHILD READY FOR SCHOOL**

The school guide includes action plans for you and your child to help you prepare for managing diabetes care at school. Go over these checklists so both of you can be active members of the school health team.

Be sure to keep the school principal and school nurse up-to-date on information about your child’s diabetes care. Ask your child’s diabetes care team to write a “Diabetes Medical Management Plan” (or medical orders) that the school nurse can use to develop a school health care plan and Emergency Diabetes Care Plan for your child. Samples are in the guide.

Health privacy laws prevent your doctor from supplying this information without written permission. Give your okay so the school health team can provide care at school.

Parents are responsible for providing the school with glucose-monitoring equipment and all the other supplies needed to manage your child’s diabetes. Make sure to pack enough supplies to last 72 hours in case there is an emergency at school. Supplies should include glucose tablets, juice or other sugar foods for the treatment of hypoglycemia [hi-po-h-gly-SEEM-ee-ah], and medications such as insulin and syringes or insulin pens, as well as ketone strips. Schools may be different in where they might ask that some of these be kept. Discuss with the school nurse or other staff responsible for your child’s well being what their policy is, and work with your child’s school to make sure that you, as well as the school’s personnel, are completely comfortable in managing your child’s diabetes.

The guide helps school personnel understand not only the physical aspects of diabetes care, but also the emotional issues that your child might face. Some students can feel isolated, resentful, and rebellious. Well-trained guidance staff can spot the warning signs, work with families, and help students feel better, safer, and ready for every opportunity the school provides. Special circumstances might need to be discussed and planned for ahead of time, such as overnight school trips or preparing for physical education activities such as swimming and what to do with an insulin pump.

Check the NDEP website (www.YourDiabetesInfo.org) for materials to help teens cope with diabetes and for resources for parents on planning your child’s transition to adult health care.
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