Trained Alert Dogs Sniffing Out Hypoglycemia

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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.
A Note From the Editors

Hypoglycemia Alert Dogs Saving Lives One Sniff At A Time

There’s no doubt four-legged friends enhance our lives in many ways. Now dogs trained to detect dangerous drops in a person’s blood sugar are offering those with diabetes a newfound sense of security and independence.

Diabetes and Cancer: A Connect or Disconnect?

More and more frequently, the medical community seems to be speculating about a possible link between diabetes and an increased risk of certain types of cancer. Here we examine the issue.

Experts Gather To Discuss Link Between Diabetes, Cancer

With evidence mounting, medical thought leaders gather to share their knowledge.

Diabetes May Cause Foot Problems

One of the most common complications of diabetes mellitus is nerve damage—also known as diabetic peripheral neuropathy (DPN)—which causes pain or loss of feeling in the toes, feet, legs, hands or arms. Learn more about how to recognize the condition and protect yourself from problems that can occur.

This National Diabetes Month, Make a Change to Live Well

The National Diabetes Education Program offers tools and tips to help you reach your health goals.

Holiday Season Recipe Redo

Kick culinary temptation to the curb during the holidays with this healthy version of a fabulous fruit salad.

Is It My Thyroid?

Most people are aware that they have a thyroid, but frequently they may mistake the signs and symptoms of hypothyroidism (low thyroid hormone) for other conditions. Here we offer valuable information regarding identification of the condition, its causes and treatment.

How To Evaluate Medical Evidence

The staggering number of online and traditional media outlets offering health-related content can make it difficult to assess the quality and credibility of the information. What should you be looking for in the process of reviewing medical data? This informative article explains.

Adrenal Support – Fact versus Fiction

Despite their small size, the adrenal glands pack a powerful punch, playing a crucial role in a number of the body’s complex processes. Just ask anyone with adrenal insufficiency. Learn more about how the disorder is diagnosed and treated and the vital support needed to compensate for the condition.

COMMENTARY: Reading the Tea Leaves - The Affordable Care Act

Feedback from Our Followers
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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AACE is a professional medical organization with more than 6,000 members in the United States and more than 90 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, hypertension 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.
Dear Reader,

There is a chill in the air and the days are getting shorter - clearly fall is in the air! We focused this EmPower® Magazine issue on topics both timely and seasonal, with special attention to diabetes, as November is National Diabetes Month. You will find a feature article on whether there is a cancer and diabetes link- timely, in that AACE (American Association of Clinical Endocrinologists) hosted a conference on this very topic this past September in New York City, with national and international experts convening to discuss this link. A report on this conference is provided by our Executive Editor Dr. Bergman. Diabetic nerve disease is discussed in another article - how to recognize the symptoms, how to protect the feet from damage that can come from nerves. And from our colleagues at the NDEP (National Diabetes Education Program), updated notes on diabetes itself.

Seasonal topics include a terrific makeover of a colorful and tempting holiday treat and a commentary on the Affordable Care Act that provides insights on what has become for many a confusing topic. Reading any literature related to medicine these days is associated with much confusion: how can one day something be spectacular and the best ever and the next be absolutely the worst ever? Learn how to get the most from what you read in our “How to” article.

Also, who has not thought of a hormone problem being a possible culprit when feeling fatigued? Is it a sluggish thyroid? Is it an underactive adrenal? Read from two expert endocrinologists and their recommendations for the evaluation and management of underactive thyroid and adrenal states. Enjoy the articles and give us your feedback!

From the EmPower staff, we hope you enjoy this issue and wish you all a healthy fall and end of the year!

Sincerely,

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Dr. Dace Trence 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 CME Committee.

Dr. Jeffrey R. Garber is a member of the Beth Israel Deaconess Medical Center and Brigham and Women’s Hospitals endocrine division, in addition to serving as Harvard Vanguard Medical Associates’ endocrine division chief. He has taken an active role in promoting and reviewing AACE’s publications and positions in a number of clinical areas, most notably those pertaining to thyroid disease, in various arenas such as FDA hearings. He currently chairs the AACE/American Thyroid Association’s clinical practice guidelines committee on hypothyroidism.
Like so many dog owners, Becky Hertz’s bond with her four-and-a-half-year-old Goldcrest Labrador Retriever runs deep. But in her case, it’s a potentially life-saving covenant.

Diagnosed with type 1 diabetes when she was 14 years old, Hertz is the proud (and grateful) owner of Fuji, a hypoglycemia alert dog.

Medical service assistance animals such as guide dogs for the visually impaired, dogs that “hear” for the hearing impaired, or dogs that are trained to retrieve items for those who are wheelchair-bound have been serving their masters for decades, but dogs like Fuji are relatively new to the world of canine service companions. Hypoglycemia alert dogs are trained to sense when blood sugars are reaching an unsafe level in people with insulin-dependent diabetes and respond to their human partner with a specific alerting behavior prior to the onset of a low blood sugar episode.

Although unable to determine exactly how dogs sense low blood sugar, scientists believe they pick up on scents created by the chemical changes that occur in the person’s body using their powerful sense of smell: while humans have five to six million olfactory receptors, a dog has up to 220 million, producing a scenting skill that is a thousand times more sensitive than that of humans.

Becky had served as a puppy raiser for Canine Companions for Independence (CCI) for several...
years, so she was aware that many of its dogs and those from Guide Dogs for the Blind were retrained for diabetic alert work by Dogs 4 Diabetics® (D4D) and submitted an application to be put on its waiting list. Once accepted into the program, she says she was unprepared for the intensive, two-week classroom and field training she was required to complete as part of the placement process, despite her experience with medical service dog programs.

“I thought, ‘I’ve puppy raised, so it’s not going to be that hard on me,’ but it was a physical and emotional rollercoaster,” Hertz recalls. “You need to learn the commands that the dogs know, learn about their body language, how to make sure their behavior in public is appropriate and then pass rigorous testing. Gosh, we even had one full day of dog first aid training, because that dog is precious and you have to be able to protect the dog.”

Clients work with a variety of dogs during training to determine the most suitable match, with trainers taking into account the lifestyle, personality and abilities of each client. Matches can occur during or after completion of the training class under a trial placement agreement, and it can take up to a year or more after the dog is placed with a client for the person/dog team to graduate from the program.

Originally paired up in July 2010, Fuji and Becky officially graduated from the program in November 2011. Since then, the partnership has far exceeded expectations.

“She pretty much follows me wherever I go, sleeps next to my bed at night, and alerts me both when I am aware and unaware that my blood sugar has dropped. But what’s really cool is that she will alert me if my blood sugar drops too quickly,” Becky notes.

“Once she alerted me when my blood sugar was a 130, which is a normal range for me,” she adds. “What we’re taught is that if your dog alerts and your blood sugar is in normal or high range, that you need to recheck 10 to 15 minutes later, and if there is a 10 percent or greater drop, then it’s a valid alert. So she can also catch it while it’s dropping and before it gets too low.”

While some alert dogs may be taught to sit and stare at their handler or touch the person with their nose, Becky says D4D trains their dogs to “bringsel.” The bringsel is a small soft tab type of object that hangs off the dog’s collar, and when they alert, they’re supposed to grab their bringsel and hold it in their mouth.

Much to Becky’s amusement, Fuji “doesn’t like her bringsel,” she says. Instead, “she will put her front paws on me when she alerts, which she does at least once a week, if not more.”

Fuji shares the Hertz household with Becky’s husband Reid, son Zach and Cody, her adored eight-year-old pit bull, but it’s evident by talking to Becky that the “constant companion” has carved a special place in her heart.

“The relationship is different that with other pets,” she says. “It’s a symbiotic bond that’s difficult to define. It’s almost like a child in the sense of wanting to protect her and that everything is okay with her, because of the service she provides me. I was very, very fortunate to get her.”

(Editor’s Note: Although Dogs for Diabetics estimates the direct cost associated with breeding, raising and training its service dogs at $25,000, the non-profit organization places its dogs with clients for a minimal cost, currently at $150 for an application fee and training materials. Becky recommends that prospective alert dog owner/handlers exercise caution and do their research when trying to find a legitimate training service. She suggests Assistance Dogs International as a good starting point.)
You probably have been hearing a lot about diabetes in the headlines. Is there a link between diabetes and cancer or not? Is the link actually between cancer and insulin level, which is elevated in many people with diabetes? Or is the link related to the medications used to treat diabetes, including insulin? Where is the link, if one does exist, and what do you need to know about it?

First, both diabetes and cancer are common diseases.

Worldwide, in 2008, there were an estimated 12.4 million new cancer cases diagnosed. The most commonly diagnosed cancers are those of the lung/bronchus, breast and colon/rectum, while the most common causes of cancer deaths are from lung, stomach and liver cancer. Of the world population between the ages of 20 and 79 years, an estimated 285 million people had diabetes in 2007. In the United States, there are an estimated 1.6 million new cases reported each year. Type 2 diabetes is the most common form of diabetes, accounting for approximately 95 percent of cases. Both cancer and diabetes are common causes of death. In the United States, cancer is the second leading cause of death while diabetes is seventh, although diabetes is probably more often present than listed as a contributing medical condition.

Does having diabetes increase the risk of developing cancer?

For over 50 years, physicians have noted that cancer and diabetes occur together more frequently than would be expected by chance. Multiple studies have found that certain cancers occur almost twice as frequently in patients with type 2 diabetes: liver, pancreas and, for women, the lining of the uterus. Other cancers are also increased, although to a lesser degree (1.2 to 1.5 times higher): colon, breast and bladder cancer. Fewer studies have looked at links with type 1 diabetes, but from a Swedish report, there appears to be a higher risk of developing stomach cancer, cervical cancer and cancer of the lining of the uterus in patients with type 1 diabetes.

Is there something specific about diabetes that could explain the increased cancer risk?

It is not known whether diabetes itself directly increases the risk of cancer or whether there is an indirect link. It is known that being overweight increases the risk for developing diabetes type 2, and being overweight is also associated with the risk of developing cancer, including those cancers linked to diabetes. Others have asked whether high glucose (sugar in the blood) might be a linking factor. Cancer cells have high energy needs, and the high blood sugars seen in poorly controlled type 2 diabetes might provide the energy needed for uncontrolled growth. However, this theory has not been proven in any studies to date.

Is diabetes simply a marker of underlying factors that increase the risk of cancer? Could insulin resistance and/or elevated insulin levels (the body’s attempt to compensate for insulin resistance) contribute to the apparent increase in cancer risk? Insulin is a growth factor, a hormone that stimulates cells in the body to grow. The majority of cancer
cells have receptors for insulin, which allows them to grow and spread in response to high insulin levels. However, the recently completed ORIGIN (Outcome Reduction with Initial Glargine Intervention) study showed that insulin given by injection did not increase the risk in cancer. Over 12,500 individuals were followed for over six years, and there was no increase in cancer in those treated with insulin compared to those not treated with insulin. Thus, the possible link between diabetes and cancer remains unclear.

Are there diabetes medicines, other than insulin, that could increase risk of cancer?

The pill used most frequently throughout the world for blood sugar lowering is metformin [met-FAWR-min], which has been shown to actually be protective against the development of cancer. It can inhibit an increase in cell number, inhibit cell groups from forming and even partially stop cell growth in some cancer cell studies. Studies have suggested that metformin may add to the effectiveness of breast cancer treatment regimens. The potential effect of metformin on breast cancer cells is currently being evaluated in clinical trials, even in women without diabetes.

A small number of studies have found a trend of higher risk of cancer or cancer death among individuals with diabetes treated with sulfonylureas [sul·fo·nyl·u·re·a] (examples of these would be glyburide, glimepiride) compared with those treated with metformin or other diabetes medications. However, the majority of these studies had very few cancer cases among users of sulfonylureas, so the ability of the studies to make any definite conclusions (referred to as “power of a study”) was limited.

Pioglitazone [PYE-oh-GLI-ta-zone] has been associated with an increased risk of bladder cancer, prompting the FDA to advise against the use of this drug in those with bladder cancer or a prior history of the cancer. This was based on a 40 percent increased risk of developing bladder cancer after more than one year’s use in a review of over 190,000 patients. Another medication, liraglutide [LIR-a-GLOO-tide] (a drug that decreases appetite and inhibits glucagon, a hormone that acts against insulin) was found to increase the risk of medullary thyroid cancer in rats and mice. However, receptors (attachment points on cells for a chemical) for liraglutide are present on rat and mice thyroid cells, but are not present on monkey or human thyroid cells. This is a very important difference!

What should you take home as a message?

Although there is an association between diabetes and cancer, it is by no means clear what this link is. Both diabetes and cancer are very common in the human population, and both share common risk factors which could explain some of the apparent links between the two. In addition, the high glucose levels or high insulin levels seen in diabetes could increase the risk of cancer, but studies to date have not shown conclusively that this is the case. Some diabetes treatment drugs have been associated with increased specific cancer risk, and one has been found to decrease risk. Subcutaneous injection of insulin just recently was not found to be associated with increased risk of cancer, when started, as compared to those not starting insulin.

The link between diabetes and cancer remains unclear. What is clear is that physical activity, maintaining a stable weight and consuming a healthful diet will prevent both diabetes and cancer. Until more is known about the possible link between diabetes and cancer, the best approach we can take is to strive to follow a healthy lifestyle. The American Association of Clinical Endocrinologists hosted a conference this fall to further look into the issue of diabetes and cancer. See the accompanying article on this page for news about the conference’s proceedings.

**EXPERTS GATHER TO DISCUSS LINK BETWEEN DIABETES, CANCER**

**BY DONALD A. BERGMAN, MD, MACE**

The American Association of Clinical Endocrinologists (AACE) recently held a conference in New York where experts from around the world gathered to discuss their work and answer this question: what is the relationship between diabetes and cancer?

Several cancers were discussed, but the evidence presented was most compelling for breast cancer. The experts showed that high levels of insulin can lead to a change in the way breast cells behave and cause malignant change. High insulin levels are seen in individuals who are obese and also those who have type 2 diabetes (many of whom are overweight).

Obesity is associated with increased inflammation in breast fat and this inflammation is also associated with malignant change in the breast cells.

Research is now focused on whether losing weight, improving blood sugar control and lowering insulin levels can correct the faulty metabolism in the breast cells and prevent cancer from occurring or, if it has already occurred, then at least prevent spread of the cancer. The excess insulin-obesity-inflammation connection is being studied in other cancers as well.

Data was also presented about whether drugs can cause or can prevent certain cancers by affecting insulin levels and correcting the faulty cell metabolism that leads to certain cancers, but more evidence is needed.

Convening basic researchers and clinicians together to share information and develop new ideas is something that AACE does well. Efforts such as this conference move us one step closer to the goal of staying healthy and free of disease as we get older.
Diabetic peripheral neuropathy (DPN) is a common complication of diabetes mellitus, affecting the nerves, typically in the feet. It is seen in about 50 percent of patients with diabetes and contributes up to 27 percent of the direct medical costs associated with diabetes. Many people with diabetic neuropathy may have no obvious symptoms. However, some will develop pain requiring treatment. Estimates of painful neuropathy vary and are difficult to determine precisely because of differing definitions of neuropathy, differing diagnostic criteria for this type of neuropathy, and the specific people being included in studies defining neuropathy. Approximately 11 to 26 percent of people with diabetic neuropathy experience chronic pain.

Painful neuropathy can develop over time due to a lack of feeling or numbness that can place one at risk for burns, injuries, foot ulceration and amputations. Painful neuropathy symptoms are often described as “paresthesias” (par-uhs-thee-zhuhs) - tingling sensations similar to when you have crossed your legs and then your foot feels like it has “fallen asleep.” Painful neuropathy can also be felt as a burning-type pain usually first felt in the feet and lower extremities, progressing to the hands. People with painful neuropathy frequently experience depression, problems with sleep, and interference with activities of daily living and quality of life. Feet are particularly at risk of being affected by neuropathy, as well as being affected by circulation changes, so taking care of your feet on a daily basis by looking at them and having any persisting changes in skin appearance checked by your doctor should be a very important part of your self-care when you have diabetes.
HOW TO PREVENT FOOT PROBLEMS
You can prevent foot problems by controlling your blood sugar (glucose). High blood sugars can affect the small blood vessels leading to damage of the nerves in your feet.

HERE ARE OTHER WAYS TO PROTECT YOUR FEET:
• Wash your feet daily but do not use hot water or soak your feet because this may soften the skin and make it easier to get a tear in your skin that may lead to infection. After you wash your feet, dry them well -- especially in between the toes -- and apply lotion to areas of dry skin, but not in between your toes.
• It is best not to use a clipper or scissors to cut your toenails because you may cut yourself and get an infection. File your toenails following the shape of your toes.
• Wear good fitting shoes (no open toes), and socks, that support your feet and are comfortable from day number one.
• Do not go barefoot. For example, if you have numbness in your feet and you are walking on the beach and step on a shell, you may cut your foot and not feel it, and an infection may set in.
• Always tip your shoes over before you put them on to remove any pebbles or other objects that may be inside the shoes.
• Wear a clean pair of socks everyday that are free from seams and do not fit tightly.
• Smoking can cause decreased blood flow in your feet, so if you smoke, you should stop.
• Check feet daily and look for signs of infection which may include redness, swelling, drainage or cuts that do not heal, and notify your provider right away.
• If you have difficulty seeing your feet or reaching down to check your feet, you can use a mirror with a long handle to see the bottom of your feet or ask someone to check your feet for you.
• Take care of cuts and scratches, and call your doctor right away if you have cuts that do not heal. Protect your feet from heat, and get your blood glucose in control.

FOOT EXAM BY A PROFESSIONAL
Your doctor should do a foot exam at least once a year or more often if you have neuropathy, poor circulation, foot infections, or if you smoke. Taking your shoes and socks off in the exam room will help remind your doctor to do this exam. The foot exam includes checking the sensation (feeling) in your feet with a monofilament, which is a small piece of plastic or a tuning fork. The goal is to check that you have sensation in your feet and no signs of infection. Your doctor may want you to go to a foot doctor (podiatrist) to trim your toenails, or remove corns or calluses.

Painful diabetic peripheral neuropathy is a common complication of diabetes mellitus and can have serious consequences with a significant impact on quality of life.

WHY IS IT IMPORTANT TO GET TREATMENT FOR DIABETIC PERIPHERAL NEUROPATHY?
Painful diabetic peripheral neuropathy is a common complication of diabetes mellitus and can have serious consequences with a significant impact on quality of life. About a third of patients with long-standing diabetes have diabetic neuropathy, of which about two-thirds report it affected their quality of life. If you have numbness, tingling or pain in your extremities, it is important you discuss this with your healthcare provider and seek appropriate treatment.

Dr. Latha Dulipsingh is an endocrinologist and Medical Director of the Joslin Diabetes Center affiliate at The Hospital of Central Connecticut and Endocrine and Bone Health Center. She is a Diplomate of the American Board of Endocrinology and Metabolism and American Board of Internal Medicine and a Fellow of the American College of Physicians and the American College of Endocrinology. She also serves as Associate Professor of Medicine, University of Connecticut Health Center. Dr. Dulipsingh currently sees patients 18 years and older for endocrine disorders.

Ms. Susan Zailskas is supervisor of the Metabolic Research Center and a Certified Diabetes Educator at The Hospital of Central Connecticut Joslin affiliate. She is involved in clinical research, patient education and direct patient care.
Living with diabetes or knowing you are at risk for type 2 diabetes is not easy. It’s common to feel overwhelmed, sad or angry – especially if you struggle to make positive lifestyle changes that just don’t seem to stick for very long.

Even if you know what to do to improve your health, it is figuring out how to do it and fitting it into your daily routine that can present the biggest challenge.

This November, during National Diabetes Month, the National Diabetes Education Program (NDEP) is providing tools and resources to help people make a plan to stay healthy and take important steps to reach their health goals.

Making changes step by step – such as losing a small amount of weight and becoming more active – can go a long way toward helping you prevent or delay type 2 diabetes. Losing even 10 to 15 pounds – if you weigh 200 pounds – can make a big difference in helping you prevent type 2 diabetes. If you have diabetes, making these same types of changes can help you reach your blood sugar (glucose) and blood pressure goals to prevent diabetes-related health problems.

GETTING STARTED

So how do you get started making changes in how you care for your health? It’s a matter of trying and learning. It’s all about choosing a goal that’s right for you and working toward it. Making a plan and taking the first step, even if it’s a small step, can help you reach your goal.

NDEP offers these tips for making a plan and taking small, but important, steps to help you reach your health goal:

1. Think about what is important to you and your health.
2. What changes are you willing and able to make?
3. Choose one goal to work on first. Start this week. Pick one change you can start to make immediately.

4. Don’t give up. It’s common to run into some problems along the way. If things don’t go as planned, think about other ways to reach your goal.

Once you have your plan in place, the NDEP can provide you with a number of tools to help you meet your health goal. Whether you are looking to make healthy food choices, be more active, manage your weight, cope better with stress and emotions or stop smoking, you can find tools to help.

This November, make a change to live well at www.YourDiabetesInfo.org.
That's why we created **Cornerstones4Care™**. This FREE program gives you personalized support to help you follow the care plan your doctor prescribed. Cornerstones4Care™ is packed with tools, tips, and information about the four key parts of a diabetes care plan:

- **Healthy Eating**: Add easy-to-make, diabetes-friendly recipes to your meal plan
- **Physical Activity**: Find creative ways to get the activity you need
- **Taking Medicine**: Learn about different treatment options to discuss with your doctor
- **Diabetes Self-Management**: Stay on track with checking and recording your blood sugar

Join today at [EPCooks.Cornerstones4Care.com](http://EPCooks.Cornerstones4Care.com)

**BONUS!** Join today and get **FREE** diabetes e-books

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The holiday season is fast approaching. For those of us who are conscientious about what we eat, this can be a scary season. It all starts with Halloween candy and ends with an indulgent New Year’s Eve. The following recipe is modified from the original version. Use it throughout the holiday season with various fruit combinations to offer your guests a healthy indulgence.

Let the festivities begin!

**HOLIDAY SEASON RECIPE REDO**

**BY DORI KHAKPOUR, RD, CD, CDE**

This colorful fruit salad gets its punch from the great balance of tart fruits, lime juice and bite-size pieces of sweet pound cake.

**INGREDIENTS**

**FRUIT SALAD**
- Butter
- Fresh mint leaves
- 1 tablespoon orange zest
- 1 cup freshly squeezed orange juice (from about 3 to 4 navel oranges)
- 2 tablespoons freshly squeezed lemon juice
- 1 apple
- 1 pear
- 1 banana
- 1 peach
- 1 nectarine
- 3/4 cup melon (such as honeydew or cantaloupe)
- 1 cup pineapple chunks
- 3/4 cup seedless red or green grapes, cut in half
- 1 cup strawberries, hulled and quartered
- 1/3 cup blueberries

**HONEY-LIME DRESSING**
- 1/3 cup honey
- 1/4 cup lime juice (from about 1 lime) optional

**POUND CAKE CROUTONS**

**INSTRUCTIONS**

1. To make the fruit salad: Place the orange zest, orange juice and lemon juice in a large bowl.
2. Cut the apple, banana, pear, peach, nectarine and melon into cubes, adding the fruits to the bowl as you cut them to prevent discoloration.
3. Add the remaining fruits. Stir, coating the fruits with the juices, then cover the bowl with plastic wrap and refrigerate for at least 2 hours.
4. Mix thoroughly before serving.
5. To make the Honey Lime Dressing: In a medium bowl, whisk together the honey and lime juice until smooth.
6. To make the pound cake croutons: Heat the oven to 350º. With a long, sharp knife, slice the pound cake into cubes.
7. Place the cubes on a baking sheet and bake for 12 minutes, turning twice, until golden.
8. Melt butter in a large skillet over medium heat. Stir in fresh mint, if using, then add the toasted pound cake.
9. Sauté for 1 to 2 minutes or until golden.
10. Spoon the salad into serving bowls, drizzle it with the honey-lime dressing, and then top with pound cake croutons (these will nearly double the calories and fat). Makes about 6 cups.

**Nutritional analysis per ½ cup without variations:**
- 100 calories, 26 grams carbohydrates
Healthy Option Recipe:

This colorful salad will add sparkle to your holiday parties. It is a flavorful dessert with a lower Glycemic Index that won’t cramp your eating plan or overcharge your blood sugar.

Ingredients

FRUIT SALAD
• 1 tablespoon orange zest
• 1/2 cup freshly squeezed orange juice (from about 3 to 4 navel oranges)
• 2 tablespoons freshly squeezed lemon juice (this keeps the apples and pears from discoloring)

CHOOSE 4-6 of the following fruits but keep in mind varied colors. For example: greens and reds with some touches of berries make a nice combination. Layer the fruit and sprinkle the berries and pomegranate seeds on top to avoid mashing and discoloring the fruit.

• 1 apple green Granny Smith, which is crisp and tart, or Red Gala or Braeburn, which are consistently crisp and sweet
• 1 pear red or green
• 1 cup blueberries
• 1 cup strawberries
• 1 peach diced
• 1 orange sliced into pinwheels
• 3/4 cup pomegranate seeds
• 3/4 cup seedless red or green grapes, cut in half
• 1 cup strawberries, hulled and quartered
• 1 cup pitted cherries fresh, canned or frozen
• 1 cup low fat yogurt or soy or almond yogurt (add 15 calories and 2.5 grams carbs per tablespoon)

TOPPINGS
• POUND CAKE cubed [25 calories for ¼ oz.] (you may also use angel food or even lady fingers for savings of some fat calories about 18 calories per ¼ oz. cubes )

Instructions

1. To make the fruit salad: Place the orange zest, orange juice and lemon juice in a small bowl.

2. Cut the hard fruit apple, pear and peach into cubes, adding the fruits to a large glass serving bowl as you cut them and sprinkling the juice mix over each layer to prevent discoloration.

3. Stack the remaining fruit in layers and end with the pomegranate seeds, grapes or fresh berries. Cover the bowl with plastic wrap and refrigerate for at least 2 hours.

4. Serve with the low fat yogurt or even light whipped topping if you’re nice. For you naughty types, go ahead and combine the light whipped topping with the yogurt.

5. Cube pound cake or angel food cake or even lady fingers to serve on top of the fruit salad in individual cups or on the side.

Makes about 6-8 cups depending on number of fruits used.

If you have leftovers, simply freeze them in ice cube trays for fruit smoothies.

Nutritional analysis per ½ cup without variations: 62 calories, 16 grams carbohydrates

Ms. Dori Khakpour is the diabetes nutrition and education director at the University of Washington’s Diabetes Care Center. As a certified diabetes education, nutrition coordinator and research nutritionist she works with patients and their families as well as teaching medical and graduate students. She is also a public speaker and educator about managing diabetes through nutrition. She is a member of the American Dietetic Association, the Greater Seattle Dietetic Association and the Omicron Nu Nutrition Sciences Honor Society. She has been named the UW Medical Center’s Outstanding Patient Educator six times.
Are you wondering why you feel tired and are gaining weight? Let’s look at whether your thyroid could be the problem.

Is it putting out the amount of hormone that it should be? Or if you are on thyroid medication, should the dose be changed? After all, the symptoms of fatigue, weight gain and hair loss did get much better when you had your thyroid checked back in college and were told that it was not working like it should. In fact, you probably remember that your dry skin, a tendency to constipation and heavy menstrual periods all disappeared after you started taking your thyroid supplement. The process of making the diagnosis of low thyroid hormone, or hypothyroidism [hi-po-thi-royd-izm], involved having blood tests that showed low levels of thyroid hormone. You took the advice to take a thyroid pill every day seriously, on an empty stomach, and not at the same time as your iron or calcium supplements. And you have rarely skipped your daily dose of thyroid medication since then. Now 40 years old, your life has changed...being married, working full-time as a legal assistant in a busy law firm, with three active children and a number of volunteer activities at your children’s schools.

Over the past year, you have seen your family doctor several times to discuss your concerns of tiredness and difficulty losing weight, symptoms that you know are linked to hypothyroidism. Your doctor sent you to a specialist in hormone disorders - an endocrinologist - to help determine if the way you feel is due to your thyroid. You were asked about your thyroid history, and your medication use was reviewed. Your physical exam confirmed that you are about 15 pounds overweight, but otherwise healthy. Your thyroid blood tests, including a TSH (thyroid stimulating hormone) and fT4 (free thyroxine) [tha-hy-rok-seen] were in the middle of the normal range.

Your endocrinologist explains that your weight problem and fatigue are not due to your well-treated hypothyroid condition. Neither a higher dose of thyroid hormone nor a change in brand would be likely to safely help you lose weight and decrease fatigue. Although this news is disappointing, additional discussion continues regarding your day-to-day habits: you learn that your daily calorie intake could be significantly decreased by eliminating the four cans of regular soda that you have developed a habit of drinking daily and by changing the fast food choices you have for lunch. You also are reminded of the benefits of increasing physical activity, such as taking a brief walk during lunch, parking a few blocks away from work or taking the stairs instead of the elevator. Maybe take a walk around the sports field during your child’s soccer practice rather than sitting in the bleachers. Perhaps even dropping weekly volunteer commitments to just twice a week, so you could try out the local Y. You begin to feel energized just thinking about making changes in your life!

The lesson here is that symptoms linked to hypothyroidism are not always due to hypothyroidism. Many factors can influence how you feel. Here are some insights regarding hypothyroidism occurrence, its causes and optimal treatment.

Are you wondering why you feel tired and are gaining weight? Let’s look at whether your thyroid could be the problem.

Thyroxine pills (a commercial form of the thyroid gland hormone) are formulated usually in 12 different doses, and the dose must be carefully regulated. It is useful to remain with a consistent brand. Thyroid hormone is best absorbed when taken on an empty stomach with a glass of water. One should then wait an hour before drinking other beverages such as coffee, eating and taking other medication. Some medications and supplements...
such as iron pills, calcium, vitamins, fiber and resins interfere with absorption of thyroid hormone so they should be taken later in the day. If a hypothyroid patient must take other medication on an empty stomach early in the morning, then the thyroid hormone pill can be taken later in the day, either one hour before or four hours after a meal.

You might also be curious as to whether there is benefit to a “natural” approach in the treatment of hypothyroidism – the internet shows many testimonials for diets and supplements to treat or cure thyroid conditions! Indeed, people who live in remote regions of the world and far away from the ocean can have an iodine-deficient diet. These people often develop a goiter (enlarged thyroid) and hypothyroidism. In this unique situation, iodine replacement with iodized salt is the appropriate treatment. For most people living in the developed world, iodine deficiency is uncommon.

Endocrinologists typically advise patients to avoid dietary supplements which claim to benefit thyroid function. Dietary supplement quality is not controlled by any federal agency, so there is no guarantee that the supplements actually contain the product(s) they claim to contain. An example is extracts of animal glands for which there is no scientific evidence for effectiveness or purity.

Another frequently asked question is whether you would have more energy and lose weight more easily if you took another type of thyroid hormone replacement. After all, you have checked the internet for information on hypothyroidism and have read blogs about treatment options for hypothyroidism. Scientifically qualified, diligent medical researchers are interested in this question as well. Research by experts in the thyroid field have not shown any clear advantage for use of combination thyroid hormone preparations, either manufactured or derived from animal sources. Because there are compelling personal testimonials that can be read on internet blogs regarding a wide variety of treatments for hypothyroidism, it is important that questions regarding treatment be referred to your endocrinologist.

The most common causes of hypothyroidism are Hashimoto’s thyroiditis (antibodies formed to your own thyroid), prior treatment for hyperthyroidism (an overactive gland) and a history of thyroid surgery. Hashimoto’s thyroiditis is a commonly seen condition associated with the presence of antithyroid antibodies in the blood. Because the antibodies are directed against the thyroid cell, Hashimoto’s is

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Imagine you’re at your daughter’s soccer game and you overhear two other parents discussing a recent report they heard on TV about the dangers of a blood pressure medication for which your doctor just gave you a prescription. Should you ask the two people about what they heard? Should you still fill your prescription at the pharmacy? How do you evaluate medical information in order to help you make good medical decisions for yourself with your physician?

We are all inundated with medical information from our family, friends, acquaintances, co-workers, TV programs and advertisements, radio, newspapers, magazines, billboards, web sites, and even advertisements from lawyers seeking people who may have been injured by a certain medication. How do we decide which information is accurate and which is not? In many ways, it’s important for our health for each of us to be a Sherlock Holmes in order to privately investigate the evidence about the medical treatments we are considering for ourselves and our families.

It is important for you to get information about medical studies from reputable sources such as highly regarded newspapers, magazines or web sites such as WebMD and Medline Plus, the National Library of Medicine’s website for consumer health information. Information from people, print media or web sites which you don’t fully trust may not be providing you with accurate information. You should not discontinue

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any treatments without first consulting your physician, particularly if the information you are using is from sources which may not be reliable.

**WHERE DOES THE BEST MEDICAL INFORMATION COME FROM?**

Randomized, controlled trials are generally felt to provide the most valuable medical information. These are trials in which a group of people who all have one disease or problem are split up randomly (randomized) into two groups, one of which has a given intervention and the other of which does not receive the intervention (control group). The idea is to make the two groups as similar as possible, so the study will tell if a certain intervention is beneficial or not. For instance, if one is looking at whether a certain medication is lowering the risk of heart attacks, it would be important for the control and intervention groups to have equal proportions of smokers. If the intervention group has a higher proportion of smokers than the control group, then any possible benefit from the medication may be offset by the damage from the higher rate of smoking in the group. Randomized trials are particularly valuable if the control group is taking a placebo [pluh-see-boh] (a pill which does not contain any effective medication). In double-blind placebo controlled trials, individuals in the intervention and control groups do not know if they are taking the active treatment or placebo. However, it is not possible to do trials with a placebo if the intervention group has surgical therapy.

Other types of studies such as observational or case/control trials are felt to provide much weaker evidence as compared to randomized controlled trials. In observational studies, a large group of people are followed over time to see if certain traits are associated with more or less of a particular disease. For example, many observational studies of estrogen users before 2002 showed a strong association of estrogen use in post-menopausal women and reduced incidence of
heart attacks. However, randomized controlled trials which have been completed over the last 10 years have shown no benefit on reducing heart attacks in postmenopausal women who took hormone replacement. The apparent benefit of hormones in the prior observational studies was due to the fact that women who chose to take hormone replacement also tended to lead a healthier lifestyle. It wasn’t the estrogen therapy which prevented the heart disease in these women, but rather the healthier lifestyle choices they made.

Another type of study is called a meta-analysis. This type of study tries to combine many prior studies of a similar type. For example, the large meta-analysis of type 2 diabetes treatment drug Avandia® and heart disease risk published in the New England Journal of Medicine in 2007 combined many randomized controlled trials of Avandia® versus placebo in type 2 diabetes. Meta-analyses do not provide any original research and, as such, are generally felt to be inappropriate to use in making definitive conclusions about any medical intervention.

It is important to look at the number of subjects in any trial in order to understand its importance. The Heart Protection Study (HPS), which studied the use of statins (a medication that lowers cholesterol) and vitamin supplementation in patients at risk of cardiovascular disease and the JUPITER Study, aimed at evaluating whether statins reduce heart attacks and strokes in people with normal cholesterol levels, each contained around 20,000 participants, which makes them two of the largest trials of statin drugs. One interesting finding from these two studies was that statin users did not have more muscle symptoms than the control group members who were taking a placebo. We are all bombarded with information about the risks of statins on the muscles, yet in these two large randomized placebo-controlled studies statin users did not appear to suffer muscle pain due to the statin.

The duration of trials is important to consider. The media was full of information about the two studies published this year demonstrating the benefits of bariatric surgery on type 2 diabetes. Yet these trials were only of one-to-two-years duration. It would be important to know if the diabetes comes back three, four or more years after the surgery when people begin to regain some of the weight they have lost after bariatric surgery.

The characteristics of the study populations are important to understand in order to see if the study pertains to you. Although the HPS and JUPITER studies did not demonstrate muscle side effects from a statin, the people in the studies did not have liver or kidney disease and were not taking certain medications that may interact with statins. We know that individuals with kidney disease or those on certain medications are more likely to suffer muscle problems while on statins than are healthier individuals. Although bariatric surgery has been shown in randomized controlled trials to cause type 2 diabetes to go into remission, it will not have the same benefit for you if you have type 1 rather than type 2 diabetes.

Randomized, controlled trials are generally felt to provide the most valuable medical information.

Some studies use surrogate or “soft” endpoints, whereas others use “hard” endpoints. For example, if you are evaluating medications for cholesterol, it is important to choose one which will not only reduce your cholesterol level (a soft endpoint), but more importantly reduce your risk of having a heart attack (a hard endpoint). Many studies have shown that coronary stents open blocked arteries, but what is more important is the hard endpoint of reducing major heart attacks and death. The COURAGE Study, which examined the effectiveness of heart stents and angioplasty to drug treatment in individuals with stable coronary heart disease, demonstrated that coronary stents plus medical therapy did not prevent more hard cardiac endpoints than did medical therapy alone.

When looking at the benefits of any medical therapy in a randomized controlled trial, you should look at the difference between the intervention and the placebo group. Many diseases have a strong “placebo effect” where the group receiving a placebo demonstrates

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The adrenal glands are located above the kidneys: one on the right kidney and one on the left (“ad” meaning “by” and “renal” meaning “related to the kidney”). They are small glands that weigh approximately 7-10 grams each…but don’t be fooled by their small size! They are very important in the production of powerful hormones that help regulate blood pressure, salt and potassium levels, and glucose metabolism. They also help the body adequately respond to stress and are involved in female/male hormone production.

These glands consist of different areas, with each area secreting different hormones such as glucocorticoids [gloo-koh-kawr-ti-koids] (primarily cortisol) and mineralocorticoids [min-er-uh-loh-kawr-ti-koids] (primarily aldosterone), among others. In this article, we will focus on cortisol and aldosterone, as they are the two most affected in adrenal insufficiency – a disorder involving the lack of these vital hormones.

Cortisol [kawr-tuh-sawl] is the hormone responsible for the “fight or flight” response, also referred to as a “stress hormone.” Its secretion by the adrenal glands is regulated by the pituitary gland – a master gland located in the middle of the base of the brain that sends out messages to other glands to produce specific hormones. Think of the pituitary as the director of an orchestra: it gives signals to musicians (one of the musicians being the adrenal gland) on when and how long to play certain musical notes (or when and how much hormone to secrete and for how long). The rhythm of the pituitary is elegantly regulated in a pulsating manner, so the levels in blood fluctuate and are not always the same, varying even at different times during the day.

Much popular advice is found in various public sources, such as the internet, regarding the need for “adrenal support.” Not infrequently, cortisol levels may be found to be low, but interpretation is not always straightforward. The need for adrenal hormone support should rely on very specific testing that your medical team will order to establish the diagnosis of adrenal insufficiency and, if present, what type.

Adrenal glands can be affected by diseases that would result in underproduction or complete lack of hormones (in this case cortisol). This can occur through several mechanisms: within the adrenal glands themselves and therefore named primary adrenal insufficiency, or by mechanisms other than within the adrenal gland, for example, secondary to the pituitary gland not sending enough messages to the adrenals (in this case it will be the director of the orchestra who is not telling the adrenals to play, i.e., secrete cortisol). Adrenal insufficiency can also occur in people who took medications for other conditions, such as steroids for rheumatoid arthritis. The last two examples are classified as secondary adrenal insufficiency, because the problem is not inherent to the adrenal gland itself.

The most common cause of primary adrenal insufficiency, accounting for over 90 percent of cases, is the development of antibodies attacking our own tissue, in this case adrenal tissue, resulting in destruction of the adrenals and a lack of not only cortisol but also other hormones produced by it, such as aldosterone [al-doh-sti-rohn].
In secondary adrenal insufficiency, the ability to produce hormones that help salt and water balance (i.e., aldosterone) are not affected, nor is the ability to make female- or male-like hormones. This is because the problem here is not in the adrenal gland itself but in the message. It is important to make clear what type of adrenal insufficiency is present, as this will influence what treatments are needed. To continue the analogy, do we need to treat the director of the orchestra or the musician?

Now let’s focus on primary adrenal insufficiency, or what is also known as Addison’s disease. Symptoms vary depending on the severity and time of lack of adrenal hormones. When it is very severe, the condition can result in an adrenal or Addisonian crisis, which is a life-threatening condition. The table on page 22 details the symptoms of an adrenal crisis.

After testing confirms the diagnosis (usually done through a “stimulation test” with blood samples taken at specific time points before and after a stimulating hormone is given intravenously or intramuscularly), patients usually will be started on adrenal replacement of a corticosteroid [kawr-tuh-koh-ster-oid] (also known as a glucocorticoid). There are many forms of this medicine. Typically a dose should be taken as soon as you awake in the morning. Another, smaller dose is taken later in the day. At times even a third dose might be recommended. You should be well aware that these hormones are necessary for life; however, an excess of them also result in problems. Taking too much routinely can induce weight gain, higher blood pressure, thinning of bones and other undesirable effects, so make sure to discuss in detail with your doctor how to take the medication and how much.

When we are ill, our pituitary gland tells the adrenals to put out more stress hormone (i.e., cortisol) to help deal with illness, thus you will need to increase your corticosteroid dose for at least 1-2 days. Often a doubling of your daily dose is recommended. The dose should be decreased back to the baseline dosage as soon as your illness is improving. If you have any vomiting and are unable to keep your pills down, you must go to an emergency room to have the medication administered intravenously (see Check Points chart on page 22 for additional tips).

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Surgery is a stress to our bodies. You need to notify your surgeon, anesthesiologist and any doctor caring for you that you have adrenal insufficiency and are taking corticosteroids. They will manage the increased doses that will be required for your body undergoing surgery.

Emergencies happen…and the need for corticosteroid is critical in such situations. You might not be able to tell your caregivers that you have adrenal insufficiency. For that reason, it is highly advisable that at all times you wear an alert bracelet or necklace that states that you are on corticosteroid medication. This can truly be life saving!

Stress can be different from person to person, so discuss with your doctor situations that might require additional corticosteroid. Some people need increased doses for situations such as dental visits, but most do not. Pregnancy is another situation that will require dosage adjustment.

Lastly, in primary adrenal insufficiency, BUT NOT in secondary adrenal insufficiency, other hormone replacements may be necessary in addition to a corticosteroid, namely a mineralocorticoid. Although this is not typically increased from your routine daily prescribed dose, when you are under stress, many physicians advise increasing the dose in hot weather when you will be outdoors for prolonged periods of time and are sweating. Your medical team will help with when and how much to adjust your medication during such times. Many experts also advise that in the case of primary adrenal insufficiency, besides increasing the corticosteroid dose in stress situations, that you also take in salt and water. One way to do this is to eat a small bag of chips and drink at least eight ounces of water with the chips daily (assuming that you are not nauseated or throwing up). If you are unable to keep your oral corticosteroid down, you need to go to the closest emergency room to get help.

It is also important to take advantage of yearly flu vaccinations and a pneumovax [noo-mow-vax] vaccine to protect against the most common form of pneumonia, as prevention of illness is always better than going through an illness!

So make sure you seek the opinion of an expert in regards to your diagnosis of adrenal insufficiency and the need for adrenal support. Discuss your questions and treatment plan for daily needs as well as travel and emergencies. An endocrinologist is an expert in hormonal diseases and disorders---and a great resource for your medical needs in managing adrenal insufficiency.
You are a partner, a friend and a fighter.
And you have a chance to control your blood sugar for yourself and those who depend on you most. Reducing your blood sugar can help reduce the risk of diabetes complications such as blindness, kidney disease, nerve damage and other serious health problems. If pills, diet and exercise aren’t enough, insulin is the most effective way to reduce your blood sugar. And today insulin comes in easy-to-use pens.

Important Safety Information About Insulin:
The most common side effect of insulin is low blood sugar. Some people may experience symptoms such as shaking, sweating, fast heartbeat, and blurred vision, while some experience no symptoms at all. That’s why it’s important to check your blood sugar often.

Talk to your doctor about whether insulin is right for you.
Learn more at UnderstandControl.com or call 1.866.766.6415.
With the Supreme Court’s June 2012 decision declaring that the major pillars of the Affordable Care Act (ACA) are constitutional, America would appear to be on iron rails to government-mandated health insurance and massive healthcare reform by 2014. Like all government programs, the ACA fixes some problems and creates many others. The basic intent of the legislation is to provide some form of health insurance for a substantial percentage of the 50 million Americans who are currently uninsured by demanding that everyone pay something toward their own coverage. However, in the process of reforming the health insurance industry, Congress has crafted legislation that impacts every aspect of health care in this country – from child care to nursing homes, from hospital stays to hospital reimbursement, from drug costs to new drug approvals, and from physician training to physician compensation models. In short, the entire healthcare industry is scheduled for a complete makeover by 2017.

As if this were not enough, on January 1, 2012, physicians are facing a 27 percent reduction in pay for their work with Medicare patients due to a totally unrelated, legally mandated price-control mechanism called the Sustainable Growth Rate (SGR) formula. With all this change on the horizon, it is not surprising that many physicians who see Medicare patients are contemplating early retirement. Obviously, if physicians decide to retire from the Medicare system in large numbers, this will exacerbate the current shortages of both primary...
care physicians and certain specialists. With these issues in mind, this article attempts to outline how the implementation of the ACA will impact consumers.

The ACA document is thousands of pages long with hundreds of provisions that phase in from 2010 through 2017. It is far beyond the scope of this commentary to cover each of these provisions. I will attempt to provide insight into how our new healthcare system will look from a patient’s point of view.

The good news is that many people who have never had health insurance will have subsidized coverage by 2014. It is unclear, however, exactly how much the uninsured rolls in this country will decrease, given that recent projections by the Congressional Budget Office and others suggest the health reform law will not cover as many Americans as it was first believed. A major unknown in this equation depends on whether state governments opt to accept the massive Medicaid expansion that the federal government is proposing. Bringing health insurance to millions of previously uncovered people will create new customers for insurers and decrease the indigent care burden for emergency departments, hospitals and physicians. Under the new law, the federal government will subsidize 100 percent of the cost of covering newly eligible individuals under Medicaid for the first three years through 2016. The federal coverage for the Medicaid expansion declines slightly in subsequent years, until it reaches 90 percent of the cost in 2020, where it will remain thereafter.

To pay for this expansion, states are incentivized to expand their Medicaid contributions, Medicare money will be reallocated, and the employer tax credit for offering health insurance will be restructured. Specifically, employers will be penalized for offering “Cadillac health plans” to favored employees and “high-dollar coverage” will be downsized. In essence, Medicare money is being reallocated and high-dollar health insurance coverage for private workers is being reduced to subsidize coverage for the uninsured and unemployed. In addition, employers will have the option of paying a penalty and opting out of health insurance responsibilities to their employees, in which case employees will be funneled into state-administered insurance panels.

Coverage for preventive services like mammograms, sigmoidoscopy [sig-moi-dos-kuh-pee] and bone density scanning are mandated by the ACA, but the actual reimbursement for providing some of these services is being steadily decreased. For example, the reimbursement for bone density scanning for Medicare patients has been reduced in the doctor’s office to such a degree that many physicians can no longer afford to provide the service to the elderly patients who need it most. Thus, mandating a service does not guarantee that patients will get the service, if doctors can’t afford to provide it.

In a separate piece of legislation, Congress has encouraged the use of electronic medical records (EMRs) in the Medicare and Medicaid programs with a $47-billion-dollar subsidy to provide incentive payments for the adoption of electronic health records (EHRs), with the intention of computerizing every American medical office by 2014. Physicians who don’t adopt EHRs by that time will be penalized by Medicare and Medicaid payment reductions beginning in 2015. While this campaign should enhance the portability of medical information and create new millionaires in the medical informatics field, it also means that instead of looking at patients, in the near future doctors will spend a lot of patient care time typing and staring at computer screens.

But doctor’s office changes will go far beyond the implementation of electronic medical records. The ACA promises to change the way that doctors get paid. Rather than paying for services and tests being performed, the new healthcare system will attempt to reward and penalize doctors based on how much and what kind of

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health care their patients consume. If your healthcare needs prove to be too costly to the system, your doctor and his Accountable Care Organization (ACO) may be financially penalized for your bad fortune. Obviously, this arrangement could drastically change the underpinnings of the doctor-patient relationship. Instead of being paid to deliver care, your doctor will be paid to keep you from requiring care. In order to cope with the financial demands of outcome-based reimbursement, physicians will be driven to partner with hospitals and insurers to control risks and costs. This is already happening. The fee-for-service private practitioner in solo practice is nearly extinct. Small practices do not have the actuarial and financial resources to survive in an outcome-reimbursed health care economy. Several bad outcomes in a small practice could bankrupt the practice and the physicians. Large groups of physicians and hospitals will need to consolidate in order to limit the sometimes unpredictable expenses associated with human illness.

In addition, because physicians are not needed for many aspects of primary care, physician extenders like nurse practitioners (ARNPs) and physician assistants (PAs) will deliver routine care to most patients with common diseases like diabetes, hypertension and high cholesterol where clear-cut guidelines for management already exist. Care will be menu driven and, on the positive side, visits will be prompt and less subject to emergency interruption. On the other hand, patient requests for laboratory tests that are not clearly beneficial will not be honored, because unnecessary testing results in unnecessary expense. If the testing you desire for your illness is not listed in the care guidelines for your disease, you won’t get it.

In a positive development, the ACA law is already working to diminish the out-of-pocket drug expenses that seniors face when they reach the donut hole in their Medicare pharmaceutical plan. However, to maximize systemic cost savings, practitioners will increasingly be asked to follow strict pharmaceutical guidelines, using less expensive generic drugs until they fail before moving to newer brand name products.

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The ACA will change the face of American medicine forever.

Many desirable insurance changes mandated by the ACA are already in place. A short list of these insurance reforms include:

1. Elimination of lifetime and unreasonable annual limits on benefits
2. Prohibition insurance coverage termination when you become ill
3. Assistance if you are uninsurable because of a pre-existing illness
4. Required coverage of preventive services and immunizations
5. Extension of coverage for dependent children up to age 26
6. Development of uniform coverage documents so consumers can make comparisons
7. Capping insurance company non-medical, administrative expenses
8. Creating an effective appeals process for claim denials
9. Creating a temporary re-insurance program to provide coverage for early retirees, and
10. Facilitating administrative simplification to lower healthcare costs

There are several clear-cut oversights in the ACA, most notably the failure to address the ongoing need for meaningful malpractice reform that has been needed for at least the past three decades. How the large delivery systems (ACOs) will deal with malpractice claims as they attempt to rein in costs is anybody’s guess. In addition, while the pharmaceutical industry was able to avoid major cost controls in the bill, it is unclear how the “new healthcare” will handle spiraling drug costs and drug shortages when there is no more money to
allocate for these needs. Moreover, no solution was offered to physicians regarding the 27 percent pay reduction debacle scheduled to take place on January 1, 2013, under the SGR regulation mentioned earlier. Finally, the ACA established an unelected, Independent Payment Advisory Board (IPAB) to suggest changes in the structure of the healthcare system to maintain financial stability.

The bill gives this unelected board enormous power by entrusting it with significant – and possibly unmanageable – financial responsibility, including the determination of specific cost-cutting measures when insurance reform cost-savings predictions go awry. Patient advocacy groups and organized medicine are looking to repeal the IPAB portions of the ACA bill, but some mechanism will be needed to manage budget overruns if IPAB is eliminated. Patients must ask themselves if health care rationing like that seen in Canada is inevitable under the ACA.

In summary, the ACA will change the face of American medicine forever. Undoubtedly, some of the coming changes set in motion by the ACA are desirable, but many of the provisions threaten the economic survival of American health care professionals and health care service providers. Without healthcare providers and healthcare facilities, there will be no access to care, no matter how universal the insurance coverage. The survival of American healthcare will likely depend on the degree to which patients, practicing physicians and other health care professionals accept the changes being thrust upon them. If a substantial number of patients and health care providers elect to opt out of this system of outcome-based reimbursement and IPAB financial controls, the ACA Medicaid/Medicare program could, in a worst-case scenario, collapse under the weight of its own administrative cost. Another, less catastrophic scenario would be a two-tiered system like England’s, where the rich pay for Cadillac care and the poor and middle class settle for significantly restricted care. Only time will tell whether the Affordable Care Act of 2010 will lead to a reformed and revitalized system that successfully expands coverage to millions while preserving what is best about the culture of American health care. 

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How to Evaluate Medical Evidence
(Continued from page 25)

significant improvement. The true benefit of the intervention in the study is the difference between the results in the intervention group minus the placebo effect. For example, if people on a placebo lose 10 pounds of weight and those on a medication lose two pounds, then the benefit of the drug is only 12 minus 10 or a two-pound weight loss.

It is important for the results of any study to be replicated by other similar studies. One major study in a hospital in Belgium demonstrated that extremely tight control of blood pressure after surgery saved lives in the ICU. However, several other studies involving multiple sites demonstrated differing results.

Finally, after you have tried to investigate as carefully as possible, you should consult your own physician and discuss the question with her or him as an informed patient. This joint medical decision making will be much more productive for you because of your effort to evaluate the evidence.

Is it My Thyroid?
(Continued from page 15)

considered an “autoimmune” condition. Endocrinologists often test for the antibodies through a blood test, as a marker suggesting the possibility of Hashimoto’s thyroiditis. The antibodies may also be present in relatives of patients with Hashimoto’s thyroiditis, but they themselves have no thyroid abnormality at all.

Once hypothyroidism is suspected, it can be readily diagnosed by measuring Thyroid Stimulating Hormone (TSH). With normal aging, the symptoms of hypothyroidism can be subtle and very slowly progressive. For that reason, many physicians will check a TSH level at the time of a physical exam in people over 40.

Because thyroid hormone is necessary for normal development of the neurological system, it is important to have normal thyroid hormone levels at the time of conception and during pregnancy. Very soon after conception, a pregnant woman’s blood volume expands, and many women with treated hypothyroidism require an increase in their thyroid hormone dose. The endocrinologist asks newly pregnant patients to have a TSH measured and followed during the pregnancy so that appropriate dose adjustments can be made.

Hypothyroidism may also occur after delivery, so it should be suspected when the new mother experiences severe fatigue. This form of hypothyroidism will frequently spontaneously go away in weeks or months, only to recur with future pregnancies.

Although all types of thyroid disease occur more commonly in women, hypothyroidism can occur in men, who also may report increasing tiredness, constipation, weight gain and hair loss.

In the event you are diagnosed with the condition, endocrinologists can provide you with the latest and best information regarding safe and effective thyroid hormone replacement therapy.
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