Special diabetes issue 2014

# Smart Healthy

YOUR HEALTH YOUR LIFE YOUR TIME

## First year

Author explores year after diabetes diagnosis

## Guess what?

Dessert is still on the menu

#### 5 myths Debunking diabetes

Debunking diabetes misconceptions



Diabetics learn to find balance and health

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# Creating powerful documents that express your healthcare decisions

earn from a legal expert how to create powerful documents to make sure that you get the treatment you would want for yourself if you couldn't communicate your wishes. Also, hear from a medical expert about end-of-life myths that often complicate decision-making as you are creating a health care power of attorney or living will for yourself. Copies of these legal documents will be available to you at the event. This lecture is recommended for adults of all ages.

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Doreen Zokvic, Clinical Nurse Specialist, Banner Baywood Medical Center

Robbin Coulon, Director of Legal Services, Area Agency on Aging Thursday, Oct. 2, 2:30 to 4 pm Mountain View Sun City Recreation Center Auditorium 9749 N. 107th Avenue, Sun City, 85351

Dr. Stacie Pinderhughes, Banner Good Samaritan Medical Center

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For thousands of Type 2 diabetics, adjusting to day-to-day challenges of their condition can be daunting. But it doesn't have to be. For Chandler resident Julie Christianson, it means being realistic.

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## **CUSTOM**PUBLISHING

CREATED BY REPUBLIC MEDIA CUSTOM PUBLISHING A division of The Arizona Republic 200 E. Van Buren St., Phoenix AZ 85004 General Manager: CAMI KAISER Manager Creative Development: ISAAC MOYA Editor: JIM WILLIAMS Editorial Coordinator: NICK KOSTENKO Managing Art Director: TRACEY PHALEN Design: RACHEL TULLIO Cover Photography: RICK DELIA



#### **YOU** HEALTH / Smart & Healthy

# 5 MYTHS DEBUNKED

## Misinformation contributes to harmful stereotypes, habits for diabetics

#### By Gremlyn Bradley-Waddell

he notion that diabetes could be contagious sounds laughable, right? But just decades ago, that was actually a prevailing belief, according to Margaret O'Brien, a certified diabetes educator and registered dietitian with Banner Health in Mesa. Nowadays, it's understood that diabetes is linked to genetics and lifestyle factors, but there still are lots of other myths associated with the condition. Here, O'Brien sets the record straight on several lingering misunderstandings, as determined by the American Diabetes Association (for even more information, click on "Diabetes Myths" under the Diabetes Basics heading at diabetes.org).

#### DID YOU KNOW...

- 25.8 million children and adults in the United States — 8.3 percent of the population — have diabetes, according to data from the 2011 National Diabetes Fact Sheet?
- Only 5 percent of people with diabetes have the Type 1 form of the disease?
- Type 2 diabetes runs in families? In part, this tendency is due to children learning bad habits
  — eating a poor diet, not exercising — from their parents.
- Diabetes is the leading cause of new cases of blindness among adults aged 20-74 years?
- Diabetes is the leading cause of kidney failure, accounting for 44 percent of new cases in 2008?

Source: American Diabetes Association, diabetes.org



Diabetes is not that serious of a disease. O'Brien says she hears that a lot, and the truth is that diabetes — whether you have Type 1 or Type 2 — is indeed a serious disease that, when not controlled properly, can be debilitating and even deadly. With proper attention to lifestyle, however, "you can prevent and probably delay complications and live a long, happy and active life," she says.

**2** Eating too much sugar causes diabetes. Not true, O'Brien says, noting, "People with diabetes can eat sugar, and people with diabetes do eat sugar." Diabetics don't need to focus on the sugar in their diets as much as they do the carbohydrates they take in.

## **3** People with diabetes should eat special diabetic foods.

Hardly, she said. A healthy diet — whether you have diabetes or not — includes fruits and vegetables, whole grains, lean meats and moderate amounts of sugar and salt. "There's not any benefit to 'dietetic' or



'diabetic' foods," she says. "They're more expensive, can still raise your blood sugar, contain sugar substitutes that can have a laxative-like effect, and they still contain calories and carbohydrates." Even when it comes to candy bars and treats like chocolate chip cookies, O'Brien advises patients to partake of the non-dietetic treats — in moderation, of course. "I'm not encouraging people to eat candy or chocolate chip cookies on a regular basis, but doing so occasionally is workable. It's about making wise choices."

## **Fruit is a healthy food, therefore, it is okay to eat as much of it as you wish.** Sure, fruit is healthy and full of fiber, vitamins and minerals, O'Brien says. But it also contains carbohydrates, and those

need to be accounted for in a meal plan, so, no, you can't eat unlimited amounts. The other myth that surrounds fruit is that because fruit contains sugar, it's bad for those with diabetes. Well, that's not true either, she said. Fruit is full of healthful nutrients, after all, and remember that folks with diabetes can and do eat sugar. You just have to count those carbohydrates.

#### **5** If you have Type 2 diabetes and your doctor says you need to start using insulin, it means you're failing to take care of your diabetes properly.

This is not a sign of failure at all; it's pretty common, in fact. Type 2 diabetes is a progressive disease and, over time, it's only natural that you may need insulin or oral medications, O'Brien says. "People have this misconception that taking insulin is something of a last-ditch effort or a bad thing. It's not."

## **Healthy 'App'etites**

It's true you don't need an app to stay on top of your diabetes — pencil and paper work just fine, for keeping a blood sugar log — but using a bit of technology can help you stay organized and with analyzing personal health data, O'Brien said. Apps can, for example, line up data so you can clearly see what trends or patterns are occurring in your daily routine. For instance, you might be amazed at how your blood sugar spikes after each visit to your favorite restaurant.

While there are a multitude of apps that can do any number of operations, these are a few standouts that O'Brien said seem to have wide appeal:



#### GlucoseBuddy

(iPhone and Android) — This free app lets you log your medications, food and exercise and also gives you

constant reminders to check your blood glucose. (glucosebuddy.com)



#### Glooko

(iPhone) — Nix the manual logbook and sync your blood glucose readings with whatever mobile

device you have via this free app. (glooko.com)



#### dLife Diabetes Companion

(iPhone) — Track your blood glucose levels, find answers to your questions about diabetes and learn more by TV videos. (dlife.com)

viewing dLifeTV videos. (dlife.com)



#### Calorie King

(iPhone) — Although this app isn't specifically for those with diabetes, O'Brien likes it because it contains

a lot of current food and restaurant information, which is always helpful to folks counting carbohydrates and trying to watch their weight. (calorieking.com)

## 'Have your cake, and eat it too'

Dessert is still on the menu if you plan ahead

#### By Dolores Tropiano

diagnosis of diabetes can create a real dilemma for people with a life-long devotion to desserts. But dietitian Margaret O'Brien believes that with planning and creativity, patients can have their low-carb cake and eat it too.

"You can have dessert, but that means planning ahead and making adjustments to other carbo-



hydrate choices for the day," says O'Brien, a registered dietitian and certified diabetes educator with Banner Health Network.

This is a significant shift in

#### Author offers 'first-hand' advice for diabetics

Gretchen Becker turned a disease into a writing career. When the former biologist and medical writer was diagnosed with Type 2 diabetes, she studied science journals and the Internet to absorb information and share her findings. The result was "The First Year: Type 2 Diabetes," a comprehensive and clearly written guide for people diagnosed with the chronic condition.

Becker's first book breaks down the physical, mental and emotional aspects of her initial diagnosis and the adjustment period she experienced



during the first year.

But it is diet, said the author, which is the most important part of dealing with diabetes. For her, that meant weaning herself from wheat and other carbs and getting her A1c (blood sugar) to a normal level. But Becker is not a big fan of one-sizefits-all approaches to diet.

"The important thing is to find a diet that you can stick to long term," says Becker, from her home in Vermont. "You may have a great diet, but if you can't stick to it more than three weeks, there is no point." strategies for people with diabetes and for dietitians like O'Brien, who has worked in the field for 30 years. She has discovered that any diet that is not realistic is often doomed to failure.

"In the past, people with diabetes were told to completely avoid sugar," O'Brien says. "Meal plans were much more restrictive and hard to follow."

With the increased emphasis on carbohydrate counting, meal planning is much more flexible. It is now much easier to plan for an occasional sweet treat.

O'Brien suggests recipes ranging from double chocolate brownies to devil's food ice cream pie.

"Diabetes is ongoing — it's not going to go away. But neither are the occasions for desserts," O'Brien adds. "The goal is to balance dietary choices day by day."

## Food for thought

With the increased emphasis on carbohydrate counting, meal planning is much more flexible. It is now much easier to plan for an occasional sweet treat.

#### Double Chocolate Brownies

- Nonstick cooking spray
- <sup>1</sup>/<sub>4</sub> cup butter or margarine
- 2/3 cup granulated sugar
- <sup>1</sup>/<sub>2</sub> cup cold water
- 1 tsp vanilla
- 1 cup all-purpose flour
- ¼ cup unsweetened cocoa powder
- 1 tsp baking powder
- <sup>1</sup>/<sub>4</sub> cup miniature semisweet chocolate pieces
- 2 tsps sifted powdered sugar

**Step 1:** Preheat oven to 350 degrees F. Lightly coat the bottom of a 9-by-9-by-2-inch baking pan with nonstick cooking spray, being careful not to coat sides of pan.

**Step 2:** In a medium saucepan, melt butter; remove from heat. Stir in granulated sugar, the water, and vanilla. Stir in flour, cocoa powder, and baking powder until combined. Stir in chocolate pieces. Pour batter into prepared pan.

**Step 3:** Bake for 15 to 18 minutes or until a toothpick inserted near the center comes out clean. Cool on a wire rack. Remove from pan. Cut into 16 bars. Sprinkle with the powdered sugar. *Makes 16 brownies* 

#### Devil's Food Ice Cream Pie

- 1 package (6 <sup>3</sup>/<sub>4</sub> ounce) fat-free devil's food cookie cakes (12 cookies)
- <sup>1</sup>/<sub>4</sub> cup peanut butter
- <sup>1</sup>/<sub>4</sub> cup hot water
- 1 cup sliced bananas
- 4 cups low-fat or light vanilla, chocolate or desired flavor ice cream, softened
- 3 tbs fat-free, sugarfree hot fudge ice cream topping

#### **Step 1:** Coarsely chop cookies. Place cookie pieces in the bottom of an 8-inch springform pan. Whisk together peanut butter and hot water in a small bowl until smooth. Drizzle evenly over cookies.

**Step 2:** Top with banana slices and carefully spoon ice cream evenly over all. Spread ice cream until smooth on top. Cover with plastic

wrap and freeze for eight hours or until firm.

**Step 3:** Let stand at room temperature for 10 minutes before serving. Remove the sides of the pan; cut into wedges. Drizzle fudge topping over wedges. *Makes 12 slices.* 



#### Peanut Butter Blossom Mini Cakes

- <sup>1</sup>/<sub>2</sub> cup flour
- 3 tbs ground lightly salted peanuts
- 1 tsp baking powder
- ¼ cup creamy peanut butter
- ¼ cup sugar or sugar substitute
- ¼ cup refrigerated or frozen egg product, thawed, or 1 egg
- ½ tsp vanilla
- ¼ cup fat-free milk
- 1 container chocolate frosting

**Step 1:** Preheat oven to 375 degrees F. Coat twenty 1-3/4-inch muffin cups with cooking spray or line with paper bake cups; set aside. In a small bowl combine flour, ground peanuts, and baking powder; set aside.

Step 2: In a medium bowl beat peanut butter with an electric mixer on medium speed for 30 seconds. Add sugar; beat on medium speed until well combined. Beat in egg and vanilla. Alternately add flour mixture and milk to peanut butter mixture, beating on low speed after each addition just until combined. Spoon 1 tablespoon batter into each prepared muffin cup.

Step 3: Bake for 8 to 10 minutes or until a toothpick inserted in centers comes out clean. While cakes are still warm, press the back of a measuring teaspoon into tops of cakes to flatten the tops. Cool cakes in muffin cups on wire rack for 5 minutes; remove cakes from cups. Cool completely.

**Step 4:** Place chocolate frosting in a piping bag fitted with a star tip. Pipe one large star atop each cake. *Makes 20 (1 mini cake each) servings.* 

**Diabetes** patient learns to find balance and health

VA



There's no shame in a diabetes diagnosis. In fact, according to the American Diabetes Association, nearly 1.9 million people are diagnosed with diabetes each year. And with nearly 10 percent of the U.S. population having diabetes, it's no surprise that some celebrities are also living life as diabetes patients. Here are five notables:

. . . . . . . . . . .

**Billie Jean King:** 

Even athletes get diabetes. The tennis star was diagnosed with diabetes at age 63.

Randy Jackson: The "American Idol" judge has his diabetes under control thanks to weight loss and exercise.



 ✓ Is my A1C level normal? You should have this checked at least twice a year.
✓ Is my blood sugar too low? Be aware of symptoms of hypoglycemia.
✓ Where am I in my stage of diabetes? Understand where you are in the

treatment and management process.

#### Story by Elise Riley | Photos by Emily Piraino

Julie Christianson had a great job for a retiree. She worked at a candy store, and had the privilege — she would argue it was a duty — to quality check just about every piece of candy in the store on a regular basis.

It didn't come as much of a surprise when Christianson was diagnosed with Type 2 diabetes five years ago. Now 82, Christianson credits a realistic outlook on diet, exercise, and the education she received through Banner Health Network for helping her get her diabetes under control.

Christianson isn't alone. She's one of the estimated 26 million children and adults in the U.S. who have diabetes.

"I've been in internal medicine

for a long time," says Dr. Kothandapany Shalini, physician site lead at Banner Health Center in Chandler. "At least 30 to 40 percent of my patients were diabetic in my last practice."

But, Shalini stresses, diabetes can be managed and treated if the patient has the right approach.

#### Nutrition

Christianson doesn't let diabetes get in the way of her sweet tooth. The secret, she learned from

Mike Huckabee: The former Arkansas governor was running marathons less than a decade after his diabetes diagnosis. Drew Carey: The "Price is Right" funnyman told "People" magazine that he was able to stop taking diabetes medication after shedding 80 pounds. **Tom Hanks:** The "Forrest Gump" actor revealed he had Type 2 diabetes during a taping of the "Late Show with David Letterman" in 2013. classes held at Banner Baywood Medical Center in Mesa, is moderation.

"I need to eat a meal a day with lots of vegetables," she says. "I run into problems with the potatoes and gravy, and I still like my candies."

When Christianson was initially diagnosed with diabetes, she assumed she'd be forced to eat a "diet of cardboard" for the rest of her life. Fortunately, that's not the case. Through the classes she took, Christianson learned how to sneak in a treat (or two) and still remain healthy.

"Everything is in moderation," Shalini says. "The first thing we target is carbohydrates. We talk about balance with protein and fat. The most important thing is having a balanced diet, and having a counselor is such an important part of that." >> For Julie Christianson, exercise and staying active have become a huge part of her life since being diagnosed with Type 2 diabetes five years ago.

#### Exercise

The other secret, Christianson found, was in exercise. Should she falter a bit with a bonbon, she could make up for it by being dedicated to her exercise routine.

"I exercise way, way, way more," she says. "I'm up at 4 in the morning, I walk at 5 for half an hour, and I try to get in the pool every weekday."

Brisk walking is an excellent place to start, Shalini says.

"If we ask people to start out at a gym, they won't stick with it," Shalini says. "But walking is so easy. Start out with 30 minutes every day. We have to be practical and recommend something our patients can follow."

#### Medication

While many patients are able to control their diabetes through nutrition and exercise, medication can also help significantly, depending on the patient. The critical factor, Shalini says, is the patient's A1C test, which measures blood glucose over a two- to three-month period.

"We might not have to go straight to medication, but if we decide to use medications there are many factors to consider," Shalini says. She usually starts new diabetic patients out on oral medications and moves to injectable ones if necessary.



## Signs & symptoms of diabetes

There are several common indications that someone might have diabetes. Here are some of the symptoms or signs doctors look for.



**FAMILY HISTORY:** That questionnaire about your parents', siblings' and other relatives' health gives your doctor a good indication of whether you might have a predisposition to diabetes.

**FATIGUE:** Patients who report an increase in tiredness or exhaustion, or say they're too tired to exercise, might need diagnostic testing for diabetes.





**WEIGHT:** Anyone who is overweight is at risk for developing diabetes. Doctors will pay special attention to weight gain, particularly in the torso-belly area.

**INCREASE IN URINATION:** Any signs of polyuria, or increased urination, is an indication that a doctor needs to consider whether a patient has diabetes.



Depending on whether a patient has any of these symptoms or complaints, a doctor can order an A1C blood test, which measures the level of blood glucose over the past two to three months. Because it gives a long-term view of a patient's blood sugar levels, the test helps doctors provide a definitive diabetes diagnosis. After diagnosis, doctors measure A1C approximately every six months to see if medication and/or lifestyle modifications have the diabetes under control. "We know some patients don't want to take an injection at the get-go," Shalini says. "We start with the oral ones and then monitor to see if the sugars are under control."

#### Monitoring

Christianson is on two medications, and checks her blood sugar morning and night. In addition to watching out for levels that are too high, she also looks out for hypoglycemia, which occurs when her blood sugar drops.

"I've learned a lot about nutrition and what to watch for," Christianson says. "If you get a few readings that are high, don't panic. Just try to do better. It's really not that hard. I'm trying so hard to see if I can drop the number of units of insulin I take."

Christianson is also looking forward to taking more diabetes education classes through Banner Health Network so she can better understand what's happening with her body and treatment.

One of the key points that patients learn through education is that diabetes isn't an isolated condition. It affects the heart, eyes, even a person's energy. Taking control of diabetes also improves a person's overall health.

"Diabetic education is extremely important," Shalini says. "I tell patients that it's going to take time to get comfortable with themselves and the devices. Then it's easy to monitor your progress."



Having diabetes doesn't mean you can't enjoy life, says Christianson, who counts knitting as one her many hobbies.

#### Medical alert items don't have to be boring

Medical alert bracelets, which many patients with diabetes are urged to wear, can be fun and fashionable, says Darlene Parrott, a registered nurse and educator for Banner Health. A variety of silicone (bendable material) bracelets that children and adults can wear are available online in different colors, she says.

"There is also a multitude of fashionable beaded and jeweled bracelets that women may like," Parrott says. "I have also seen a variety of charms for necklaces that resemble fine jewelry. As an example, you can get a gold teddy bear pendant with a medical alert symbol on its tummy." She says she's also seen watches with a medical alert symbol on the face and small charms that can be attached to a watchband. You can find all of these options by searching online for "medical alert jewelry."

Many drug stores sell basic medical alert bracelets very inexpensively, according to Parrott. More fashionable items can be found on the Internet in a range of

prices.

For the more technologically savvy, bracelets are available with a medical alert symbol as well as portable digital memory capability that can download and store a patient's medical history and emergency contact information from a computer. "This is new enough that I'm not sure all first responders are fully aware of these bracelets yet," Parrott says. For more information, search online for "flash drive medical alert bracelets."

The original MedicAlert service is also still available for a yearly fee, Parrott reports. This service includes a toll-free number and sometimes a website address on the ID bracelet or pendant that allows medical personnel to access the patient's medical history or electronic medical record, she says. For more information, visit medicalert.org.

#### **YOUT** LIFE / Smart & Healthy

# Let's make a game plan

Managing or preventing diabetes is a Banner Health Network commitment

#### By Debra Gelbart

Ratients with diabetes often contend with blood sugar that is out of control. But members of the Banner Pioneer Accountable Care Organization (ACO) can get lifestyle coaching, meal-planning information, weight management encouragement and help enrolling in a diabetes education class from a case manager assigned to them.

It's not uncommon for patients with diabetes to have a high A1C, a measure of the previous several weeks of blood sugar levels. But many have found that with a case manager's guidance, they can bring the number into the normal range within six months.

#### Committing to healthy lifestyle

One of the most important responsibilities of a Pioneer Accountable Care Organization is helping members stay healthy. For patients with diabetes or at risk for diabetes, the Banner Pioneer ACO is committed to helping them develop a "game plan" to keep their A1C below specific levels.

"We're helping people get healthier and stay healthier and



we're beginning to see fewer visits by diabetic patients within the Banner Health Network to the emergency room and fewer unplanned visits to the doctor," said Edward Kowaleski, M.D., the medical director of Banner Health Network's Arizona West division.

"We have many outreach programs to help educate ACO members, particularly those touched by diabetes," he said. "These include home visits by nurses or case managers, regular phone contact to encourage members to continue living a healthy lifestyle and educational opportunities."

#### Understanding risk factors

Dr. Kowaleski said the Banner Pioneer ACO's nurse case managers are teaching members — whether they're pre-diabetic, have been diagnosed with diabetes or have risk factors for the condition about the importance of minimizing consumption of sugar, losing weight if necessary and exercising for at least 30-40 minutes every day. "A 40-minute workout is encouraged because for the first 20 minutes, you're only burning sugar reserves," he explained. "It's after 20 minutes of working out that you begin to burn fat."

As "the health care pendulum switches from a focus on treatment to an emphasis on prevention," Dr. Kowaleski said, "the medical professionals in the Banner Health Network (which manages the Banner Pioneer ACO) are doing everything they can to help ACO members manage diabetes, ensuring that they live long, healthy lives."

# Staying active

#### By Paula Hubbs Cohen

o help understand the relationship between diabetes and exercise, we recently spoke to some Banner Health experts who were able to put a simple spin on this age-old question: How does exercise affect blood sugar levels? Here's what they had to say:

#### Start slow and steady

First, our expert's No. 1 rule is to always check with your doctor before you start any new activity.

Next, if daily activity is new, make sure to start out slow and steady, says Kelsey Wise, MS, Wellness Specialist with Banner Health. "Activities will have a different effect on each individual's blood sugar depending on their medication dosage and how active that person already is," she says.

#### Intensity and duration

Wise adds that all kinds of activities can have the potential to decrease your blood sugar level. "The effects will depend on the intensity and duration of the specific activity," she says. "The greater the intensity and longer the activity is, the more your sugars will likely decrease."

Wise notes that it's important to keep in mind that everyone with diabetes responds differently, whether that's to medication or exercise. "One safe approach would be to monitor and keep a log of your blood sugar level before and after an activity to see how it affects your blood sugar level," she says. There's definitely a connection between exercise and good diabetic health



Q&A with Margaret O'Brien, a Banner Health Registered Dietitian and Certified Diabetes Educator

### Q: How does exercise affect blood sugar?

A: Physical activity can improve the body's ability to use insulin. During exercise insulin sensitivity is increased so the cells are better able to use available insulin to take up glucose during and after activity.

## Q: Does it matter if you're an insulin-dependent diabetic or on medications?

A: No. Obviously those who take insulin are at the greatest risk of exercise-related hypoglycemia, but those with Type 2 who take medicines that help the pancreas release more insulin are also at risk. It is dependent on individual sensitivity and medications.

#### Q: How much exercise is needed to affect blood sugar?

A: This varies — some people are very sensitive to the effect of exercise on blood sugars. The effect is also dependent on the type of exercise, duration and intensity.

#### Q: Can you exercise too much and lower your blood sugar to unsafe amounts?

A: Absolutely. The glucose-lowering effect of exercise can extend for as much as 24 hours after the exercise is completed.

Q: How can you find the optimum amount of exercise to help control your blood sugar? A: Test blood sugar before, during and after to gauge the effect of exercise. Always carry quick sugar and be prepared to treat hypoglycemia.

## Questions Answers

Providing support to a loved one, genetic predispositions and new medication options

#### By Meghann Finn Sepulveda

Whether you're newly diagnosed, or have been living with diabetes for years, there are often questions about your condition that arise. Collin Udall, MD, medical director, Banner Physician Hospital Organization, provides answers to your everyday concerns.

#### How can I support my husband who was just diagnosed with diabetes?

A: Your husband needs emotional support while he navigates the complexities of the disease. It's important that you incorporate lifestyle changes, by promoting a nutritious diet, engaging in exercise and maintaining a healthy weight.

Today diabetics are able to live much healthier lives than even 20 years ago. Complications such as blindness and kidney failure, as a result of poor blood circulation and heart disease, are no longer concerns when diabetes is properly controlled.

Reassure your husband that he can live a normal and fulfilling life as a diabetic.



#### **Q**: If I have been diagnosed with Type 2 diabetes, are my children also likely to be diabetics? A: Type 2 diabetics have a predisposition to the disease

predisposition to the disease, which is caused by family history and environmental factors.

Type 2 diabetes does tend to run in families, which can be a result of eating and exercise habits learned from an early age. A child has a 1 in 7 chance of becoming a diabetic if a parent was diagnosed before age 50, and 1 in 13 if the

diagnosis was made after 50. The risk is much higher, upwards of 50 percent,



if both parents are diabetics.

#### Are there new medications that I should be aware of to control my diabetes?

A: More medications are becoming available. The most recent one reduces blood sugar levels by preventing kidneys from reabsorbing sugar as they filter blood.

Another new medication, available as a pill or shot, helps to enhance the function of a hormone produced by the intestine, alerting the pancreas when food is on the way so appropriate levels of insulin can be made.

Additionally, Actos, a well-known medication, became available in generic form and is now less expensive.

For Type 1 diabetics, various forms of insulin, both short and long acting, are available in vials and pens. Insulin pumps and continuous glucose monitoring has allowed people to gain better control of their disease. Talk to your physician to help you decide which treatment plan is right for you.

#### Ask the expert

# Keep it simple

## Avoid diabetes complications from high/low blood sugar

ife is about finding balance. For those living with diabetes, balance can be difficult to come by.

Susan Peppers, a board certified family nurse practitioner at Banner Health Center in Sun City West, stresses the importance of maintaining proper blood glucose (sugar) levels, particularly for those with diabetes or a family history of the diagaase

the disease.

"Glucose or sugar is an important fuel source for our muscles and organs," she explained.

"Our bodies require insulin, a hormone produced by the pancreas, to process sugar and carbohydrates in the foods we eat. Consistently high blood sugar can impair insulin production or reduce its effectiveness, resulting in type 2 diabetes."

Very high blood sugar may result in symptoms like chronic fatigue, dehydration, blurred vision and foot pain. If levels remain high over a period of months to years, the pancreas can become so overtaxed that it stops producing insulin altogether.

"That's when we see a person's blood sugar spike to the 340 to 500 range and that is a medical emergency," warned Peppers. "Excess blood sugar is almost like sand or sludge in our blood stream that can damage our delicate blood vessels and, in turn, the organs they supply."

While uncommon in those without diabetes, low blood sugar (blood glucose below 70 mg/dL) can be serious and may ultimately result in seizures or coma.

Fortunately, for most it can be easily fixed.

"You can get noticeable symptoms like dizziness, weakness, and Prevention estimates close to 20 million American adults have diabetes and as many as 1 in 3 adults remain undiagnosed or struggle with blood sugar imbalances that could lead to diabetes. Recognizing signs of blood sugar imbalance and taking action is imperative.

Peppers urges everyone to have routine preventive health care visits, correctly take any needed



headaches, heart palpitations, and anxiety" noted Peppers. "Blood sugar that is too low is often a result of not eating enough, going too long between meals or increased exercise, so a highprotein snack like peanut butter on whole wheat bread or a protein drink can balance things out."

The Centers for Disease Control

medications, exercise regularly, lose weight as needed, eat healthy meals and drink plenty of water or unsweetened beverages.

"Think about how food grows and try to eat it that way rather than after it's been processed at a factory," she said. "Heavily processed foods tend to be loaded with excess sugar."

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#### **VOUT** LIFE / Healthy Living Events



**BANNER CLASSES** 

Banner Health Network offers a variety of lifestyle management programs to provide participants skills and education to manage common chronic health conditions including diabetes, heart disease and COPD. In addition, healthy lifestyle classes are also taught on a regular basis. Classes are offered at Banner facilities Valley-wide. Dates and times vary by location. For information and registration, call 602-230-CARE (2273) or 480-684-5090.

All classes are free of charge.

#### Living Well with Diabetes:

This is a four-part series to learn diabetes self-management skills. Topics include monitoring, medications, nutrition and meal planning, exercise and preventing complications.

Living Well with COPD: This is a two-part series to learn about lung disease, better breathing skills, symptom management and preventing complications.

#### Living Well with Heart Disease:

This is a three-part series to learn heart-healthy lifestyle tips, how to identify warning signs of heart disease or stroke, how to manage risk factors and what to do in an emergency.

Eat Healthy, Be Active: This is a series of six interactive workshops to help people attain and maintain a healthy weight, reduce risk of chronic disease and live a healthy, active lifestyle.

#### MORE SEMINARS AND CLASSES

#### TAKING CARE OF YOUR HEART

Banner Boswell Medical Center Tuesday mornings. Call 602-230-CARE (2273) for times, rooms and monthly topics. SUCCESS OVER (HEART) FAILURE Banner Boswell Medical Center Monday/Wednesday/Friday at 10 a.m. Call 623-832-5650 for more information. COPING WITH CANCER SUPPORT GROUP Banner Thunderbird Medical Center second and fourth Wednesdays of each month, 6:30 to 8 p.m. Call 602-865-5450 for more information.

#### CANCER PREVENTION SERIES

Banner MD Anderson Cancer Center Call 602-230-CARE (2273) for times, location and topics.

#### STROKE SUPPORT GROUP

Banner Good Samaritan Medical Center First Thursday of each month at 5:30 p.m. Call 602-839-3667 for more information.

#### STROKE SUPPORT GROUP

Banner Baywood Medical Center Second Thursday of each month at 1:30 p.m. Call 480-321-3848 for more information.

#### CHARTING YOUR COURSE AGAINST DIABETES

Banner Del E. Webb Medical Center Monday, Aug. 18, 2 to 4 p.m. Banner Desert Medical Center Wednesday, Sept. 24, 6 to 8 p.m. By making some simple changes, you can help prevent diabetes or if you already have it, you can cut your risk of complications. RSVP by calling (602) 230-CARE (2273).