

APR 14 2011

# TIME

## The Dangers of Sitting at Work — and Standing

By [Bryan Walsh](#) Wednesday, April 13, 2011 | [18 comments](#)

Standing desks are in. Once the province of a few dynamic individuals like Winston Churchill, Ernest Hemingway and Donald Rumsfeld (O.K., two out of three ain't bad), the stand-up desk is spreading to the world of corporate drones. And for good reason — there's a growing body of medical evidence that hours of uninterrupted sitting can be surprisingly bad for your health.

- A 2010 editorial in the *British Journal of Sports Medicine* found that those who sit for prolonged periods have a higher risk of disease than those who move a muscle every now and then in a non-exercise manner, such as walking up the stairs to grab a cup of coffee.
- Researchers at the American Cancer Society found that even if you exercise nearly every day, those health benefits can be undone if you spend the rest of your time on your keister.
- **Scientists at the University of Missouri have found that the act of sitting seems to shut off the circulation of a fat-absorbing enzyme called lipase.**
- A study published by the American Journal of Epidemiology showed that sitting for long stretches, more than six hours a day, can make someone at least 18% more likely to die from diabetes, heart disease and obesity than those sitting less than three hours a day.
- Scientists at the Pennington Biomedical Research Center in Louisiana analyzed the lifestyles of more than 17,000 men and women over about 13 years, and found that people who sit for most of the day are 54% more likely to die of heart attacks.

Fifty-four percent! That's an attention-getting stat, and it's helped push corporate drones and coders into using standing desks, or — for the truly ambitious — treadmill desks that allow you to walk very slowly while you work. (TIME's Belinda Luscombe did a typically hilarious piece on trying out a treadmill desk in 2008.)

It's easy enough to buy a new standing desk — see a selection here — or you can try to convert an existing desk. Switching to a standing desk can take a little adjustment, especially for your feet, but many of those who've tried it say they'll never go back to sitting down.

Like many health trends, however, standing desks can cause problems if they're taken too far. For one thing, not every researcher has found that stand-up desks are a cure-all. Scientists in the

*American Journal of Preventive Medicine* examined 17 studies on occupational sitting and cancer, and found little to no connection. And some experts in occupational health worry that hours of uninterrupted standing could be bad for your body.

Alan Hedge, who directs the Human Factors and Ergonomics research and teaching programs at Cornell University, told me that switching to a standup desk can be risky, especially if it's done incorrectly:

Standing to work has long known to be problematic, it is more tiring, it dramatically increases the risks of carotid atherosclerosis (ninefold) because of the additional load on the circulatory system, and it also increases the risks of varicose veins, so standing all day is unhealthy.

The performance of many fine motor skills also is less good when people stand rather than sit. We have tested computer use when sitting and standing in different ways. The problem with standing is that when you raise desk height for keyboard/mouse use you need to also raise screen height above the desk or you get neck flexion.

Also, for standing computer work, the computer fixes the person's posture, there is greater wrist extension and pretty soon people end up leaning which also compromises their wrist posture, thereby increasing the risks of a musculoskeletal disorder like carpal tunnel syndrome.

In field studies of so-called sit-stand workstations, Hedges has found little evidence of widespread benefits for users — and that's only for very short periods of actual standing. He also notes that the use of stand-up desks tends to rapidly decline after about a month — most likely because people don't actually want to be standing all day.

Hedge does acknowledge that sitting for hours at a time, uninterrupted, is not good for you. So he advocates a middle way — use a sitting desk with proper ergonomic posture, but make sure that about every 20 minutes you stand up and move around for a brief period of time:

Research shows that you don't need to do vigorous exercise (e.g., jumping jacks) to get the benefits; just walking around is sufficient. So build in a pattern of creating greater movement variety in the workplace (e.g., walk to a printer, water fountain, stand for a meeting, take the stairs, walk around the floor, park a bit farther away from the building each day).

It may not be as sexy as a stand-up desk, but Hedge's advice is probably better for your body. Besides, does anyone really want to stand up all day at work? Ask a waiter how that works out.



## Can fake chicken feed the world?

By *Adriene Hill* Marketplace Morning Report, *Thursday, April 14, 2011*

With growing global demand for meat and its significant environmental concerns, fake soy "chicken" may be better than the real bird.

A food extruder spitting out long, thick ribbons of fake chicken. It's made from a dry soy powder. (Angela Kim / Marketplace)

**Jeremy Hobson:** There's a big meeting about meat going on in Chicago today. It's the international meat, poultry and seafood convention and the story so far is that consumers are buying more meat now that the recovery is underway.

But the return of carnivorousness is putting pressure on food and water supplies and that's leading some to the new and improved world of fake meat.

From the Marketplace Sustainability desk, Adriene Hill reports.

**Adriene Hill:** Chicken can be tasty.

**Harold Huff:** I love it.

**Just ask Harold Huff, a researcher at the University of Missouri.**

**Huff: Flavor, feel, versatility. It's great in casseroles.**

The problem is, to make that chicken casserole, well you've got to have a live chicken -- and that chicken needs water and grain to eat and a place to live. And it'll have to be killed.

Or, maybe you don't.

In a laboratory at the University of Missouri, a food extruder spits out long, thick ribbons of fake chicken. It's made from a dry soy powder.

**Huff:** From dry feed in to product out, once it's up running and stable can vary as little as 15 seconds.

A whole lot faster than growing a real chicken. Huff and Dr. Fu-Hung Hsieh have been working on making passable fake chicken for a decade and a half.

**Huff:** If it doesn't feel right when a person chews it, if it doesn't look right on the plate, people are turned off by that.

And so Huff and Hsieh had to figure out how to make their soy chicken not just taste like chicken but have the texture of real chicken and look like chicken, instead of a big gray blob. So they extruded and extruded and extruded, until they came up with a better analog chicken strip.

Now, more than 15 years later:

**Ethan Brown:** I just need another bowl of some sort?

Ethan Brown is cooking the mock chicken strips up with tomatoes, onions and spices to make fajitas. He and his company have partnered with the university to get Dr. Hsieh's chicken to market. Brown thinks the demand for better fake meat is there -- driven by health concerns, worries about how mass-farmed animals are treated, and the environment.

**Brown:** Climate change is a big issue. We had talked about, you know, the U.N. came out with a study saying 18 percent of the world's greenhouse gas emissions are due to livestock.

Greenhouse gases are responsible for rising global temperatures. Brown serves up his fake-chicken fajitas that taste a whole lot like real chicken fajitas. Appetizing? Your call. But it points to a future with a whole lot less clucking.

I'm Adriene Hill for Marketplace.



## UM not lowering tuition based on budget tweaks

By Rudi Keller and Janese Silvey

Wednesday, April 13, 2011

University of Missouri tuition and fees will go up as planned this coming school year even if state lawmakers provide more funding to higher education than originally expected.

The Senate Appropriations Committee yesterday approved a plan that distributes another \$20 million to colleges and universities. That essentially equates to a 4.8 percent cut to higher education instead of the 7 percent cut Gov. Jay Nixon proposed in his budget.

Sen. Kurt Schaefer, R-Columbia, proposed the funding increase in exchange for a pledge from universities to keep costs down for students.

The plan has several hurdles to cross before landing on Nixon's desk. If it is approved, the UM System can expect to see a \$9.4 million boost.

"Clearly, it was unexpected," said Nikki Krawitz, vice president of finance for the system. "We've been working with our board on the 7 percent reduction. Of course, we always know it's not over until it's over, and it's not over until the governor signs the budget bills. It still has a ways to go."

If the money materializes, Krawitz said, part of it could be used to increase financial aid to students who need it because of income or to offset financial aid cuts at the federal level. Some of the funds could go to maintenance and repair of campus facilities, she said.

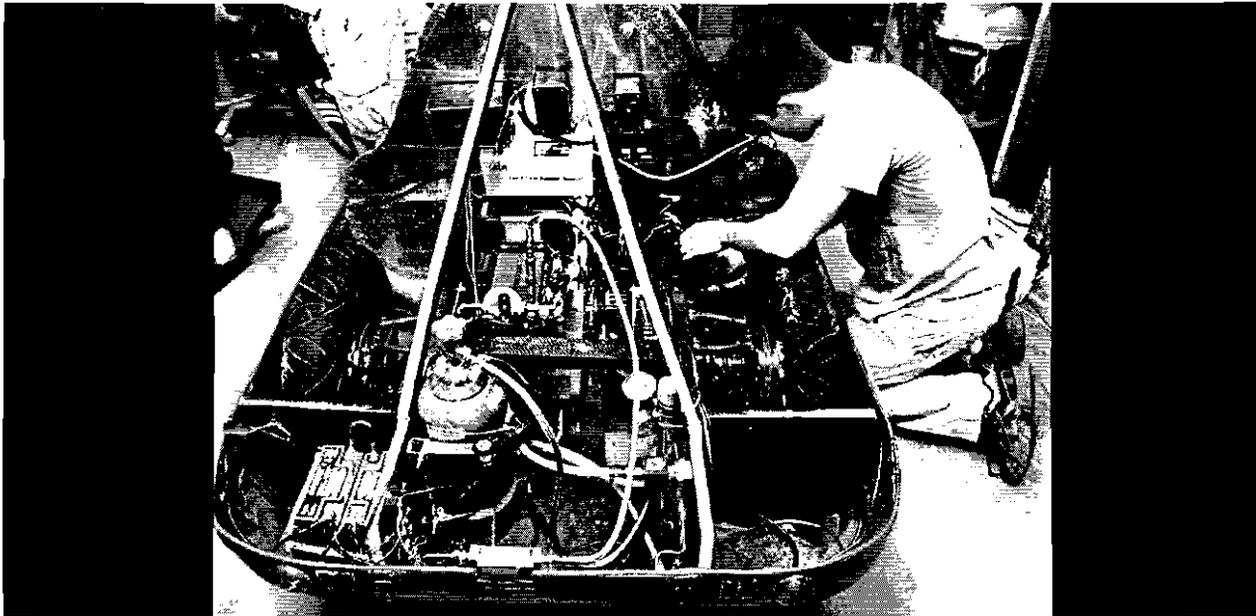
"Whenever you have funds to fund anything in the operation budget — whether it be financial aid or maintenance and repair or salaries — in the long run that reduces the cost to students," she said. "In the short run, what we're trying to do next year is to make sure that we're helping support access and affordability for our students."

The UM Board of Curators earlier this year approved an average 5.5 percent increase in tuition and fees across the four campuses. At MU, tuition and fees are expected to go up 5.8 percent.

That won't change, Krawitz said: Campuses already have begun billing students at those rates for the summer semester.

## Hydrogen car ready to roll

Students gear up for racecourse.



*Photo by Don Shrubshell*

Tim Laidlaw, a freshman electrical engineering student at the MU College of Engineering, works on Tigergen II in preparation for the Shell Eco-Marathon challenge, which starts Tuesday.

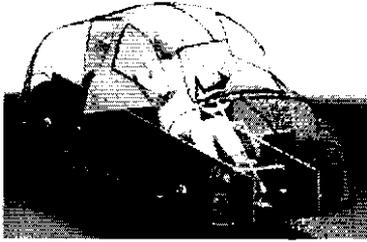
**By JANESE SILVEY**

After a couple of technical hiccups that kept the car off the racecourse for most of last year's Shell Eco-Marathon, Tigergen II is ready to try again.

**The University of Missouri's Hydrogen Car Team** has been fixing up its hydrogen-powered vehicle since members brought it home from its first competition last year.

More than 40 students have been working on the vehicle all year, 15 of whom are leaving today for Houston, where the annual Shell Eco-Marathon challenge starts tomorrow. The three-day event judges vehicles powered by alternative fuels for efficiency on a 6-mile course.

Tigergen II competes in the Urban Concept category, which requires entries to have traditional car parts, including doors, headlights, taillights and turn signals.



*University of Missouri*

*The University of Missouri's Hydrogen Car Team already is working on Tigergen III using new software that allows the team to test out designs and weights before building the vehicle.*

This go-around, MU's vehicle has added gears, different suspension and lighter batteries, said Victoria Hezel, who heads sponsor and media relations for the team.

The team — under the College of Engineering — has received about \$60,000 in cash donations, parts and labor to build and upgrade the roughly 350-pound car.

Last year, the vehicle averaged about 20 miles per hour and recorded the equivalent of 480 miles per gallon, said Jennifer Claybrooks, a senior who will be the primary driver for the second year.

A couple of leaks in the system and some other problems with the car prevented Tigergen from racing the first two days of the three-day competition in 2010. MU ultimately took home a "Perseverance in the Face of Adversity" award for pulling together and getting the car back in shape for the final day of races.

The vehicle's problems likely were rooted in its initial design, though, said Nathan Park, a sophomore and senior designer this year. Tigergen II was created on a number of different software programs that weren't necessarily compatible.

"It was basically engineering on the fly," Park said.

With the assistance of a much more advanced software program, Tigergen III shouldn't have the same sorts of problems. Park is in the process of designing it now in time for next year's race. The new software, SolidWorks, allows him to test out various geometrical designs and weights to analyze the car's performance in various scenarios before team members actually build it.

Rob Margherio, head mechanic, hopes the third-generation hydrogen vehicle is a little friendlier to taller drivers. He has driven Tigergen II once, but the tiny door, low steering wheel and lack of headroom caused some problems.

When Tigergen III is finished, its predecessor will be used as a training and demonstration model for younger team members, much like the team used Tigergen I before it went into storage.

This week, though, the second-generation hydrogen car has one more chance in the spotlight. Team leaders are optimistic.

"It's in much better shape than last year," Hezel said.

Claybrooks said she's excited to race again.

"Hopefully everything will go smoothly," she said.



## Senate advances curators measure

JEFFERSON CITY — The bill to fix the issues created for **the University of Missouri Board of Curators** when Missouri loses a congressional district is one vote away from the desk of Gov. Jay Nixon.

The Missouri Senate approved the bill to allow two curators to be named from a single congressional district 33-0 after an amendment was added to make sure no current curators are removed as the state transitions to eight districts.

Current law requires no more than one curator per congressional district.

There are nine curators, but next year, the state will have only eight districts. The same rules apply to the Coordinating Board for Higher Education and the governing board of Missouri State University in Springfield.

The bill will require a final House vote to ratify the Senate changes.



**The★Star.**  
THE KANSAS CITY STAR

## **Maya Angelou to speak at MU this week**

**The Associated Press**

**COLUMBIA | St. Louis native and acclaimed poet Maya Angelou will speak at the University of Missouri on Thursday night.**

The 83-year-old author of "I Know Why the Caged Bird Sings" was raised in St. Louis and Arkansas before embarking on a 60-year career as a poet, novelist, actress, filmmaker and civil rights activist. She now teaches at Wake Forest University in North Carolina.

Angelou is scheduled to speak at 7 p.m. Thursday at Jesse Auditorium on the Columbia campus. Tickets are \$10 for students and \$15 for the general public.

## COLUMBIA MISSOURIAN

# Maya Angelou to speak at Jesse Hall

By Andrea Braxton

April 13, 2011 | 4:09 p.m. CDT

COLUMBIA — World renowned poet, author and speaker Maya Angelou will speak at 7 p.m. **Thursday in Jesse Hall.**

Angelou said courage is one of the topics she will cover because she believes it is the greatest virtue. She will also talk about her poems and the poems of other writers.

**The event is part of a group of events intended to launch MU's One Mizzou diversity initiative.**

## COLUMBIA MISSOURIAN

# Current research, issues about autism discussed at Columbia center

By The Associated Press

April 13, 2011 | 7:10 a.m. CDT

COLUMBIA — An autism research center at MU is holding a three-day conference starting Thursday for parents, teachers and scientists.

The Autism Intervention Conference is hosted by the university's Thompson Center for Autism and Neurodevelopmental Disorders. Discussion topics include insurance reform, job training, building support networks and trends in autism research.

The conference will be held at the Holiday Inn Executive Center, 2200 I-70 Drive S.W. Advance registration is required.

## **Smaller Big 12 wins bigger television agreement**

### **MU MENTION PAGE 2**

By **BLAIR KERKHOFF**

Ten months ago, last rites were being read to the Big 12 Conference. Two schools had bolted. Five others were considering an exit. Those remaining, including Missouri, Kansas and Kansas State, weighed league membership options, none of which was appealing.

But if the Big 12 stayed together, commissioner Dan Beebe said then, a payoff would soon come.

On Wednesday, it did.

The Big 12 and Fox Media Network announced a 13-year agreement for the conference's cable television football rights beginning in 2012.

Financial terms weren't disclosed, but Sports Business Daily reported the total value at \$1.17 billion.

"This really validates why our media partners conveyed to us and encouraged us to stay together and stay committed to what we were doing," said University of Oklahoma athletic director Joe Castiglione. "We will be funded at the highest levels in college athletics."

The amount will be added to the \$60 million the Big 12 receives annually from its agreement with ABC/ESPN, primarily for network football and basketball broadcasts. That contract expires after the 2015-16 school year and the Big 12 figures to again cash in when it negotiates that deal.

But even now, the Big 12 becomes one of the more flush conferences in the country, and the annual income for its members will rival the \$20 million or so that's distributed to schools of the Big Ten and Southeastern Conferences.

Last year, the Big 12 distributed \$139 million in revenue, mostly from media contracts, bowl revenue, NCAA basketball tournament income and licensing and merchandising. Starting in 2012, that figure should approach about \$200 million.

Paying sports conferences in the billions - the NCAA Tournament just completed the first year of a \$10.8 billion contract - may seem out of whack, but it's not, said Randy Freer, president of Fox Sports Networks.

"Sports, and college sports in particular, have been undervalued comparatively to other content in the marketplace," Freer said.

The deal is so good, the smaller-budget schools won't have to fork over any money to keep Texas A&M University happy.

In last year's chaos, a provision for staying together was a revenue guarantee of \$20 million to Texas, Oklahoma and Texas A&M from the Big 12's smaller-budget schools, even if that meant reducing their own income. Texas and Oklahoma said they wouldn't participate in that shakedown, but A&M said it would.

With the new windfall, Beebe said Wednesday, that won't be necessary.

"As much as we can project with the revenue coming in, it looks like it will make that issue moot in 2012 and beyond," Beebe said.

**Brady Deaton, University of Missouri chancellor and Big 12 board of directors chairman, called the pact with Fox "a landmark deal." It also is a conference-saving deal.**

Last June, as the Big 12 meetings in Kansas City were breaking up, Colorado announced it was leaving for the Pac-10. The next day, Nebraska announced it was joining the Big Ten.

What followed was a weekend of frightening uncertainty for the conference, its members and Kansas City, which estimates a \$14 million economic impact from the annual Big 12 basketball tournaments each March.

But the conference agreed to continue with 10 members, largely on the promise of the television agreement that was announced Wednesday. The negotiating couldn't begin until early this year, but Fox assured the Big 12 in June that the money would be there.

"The stability and the revenue that Fox was willing to provide for us was a big part of this," Beebe said.

The Fox deal means that every Big 12 football game will be televised beginning in 2012. That year, at least 40 games will be viewed on one of the Fox platforms, Fox, FX, FSN and Fox College Sports.

The deal also provides 25 exposures for women's basketball and the rights to every Big 12 championship except men's basketball, which is televised by ESPN.

Up to three football games will be played on Thursday nights, one on Labor Day Sunday and the Friday after Thanksgiving.

Another component of the agreement allows schools to seek revenue for games that aren't part of the agreement. Each school will have the option to televise a home football game on its own network. Texas launches the Longhorn Network on ESPN in August.

Oklahoma has explored its own network. The Sooners also could be part of an arrangement involving the other Big 12 schools, which could bundle their rights and create a Big 12 Network. "Each of us is able to monetize our remaining rights through the distribution platforms that are available to us," Castiglione said, "whether it's a school forming its own network or a group of schools combining their inventory to structure a network."

Would Fox be interested in such a network, which would allow schools to showcase other sports? It has an outlet in Fox College Sports.

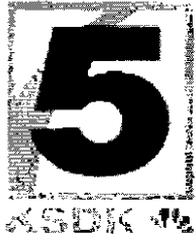
"Fox will continue to have conversations with those institutions about what they're going to do with those rights," said Randy Freer, president of Fox Sports Networks.

Beebe said expansion beyond 10 teams isn't in the Big 12 plans.

"In the long term, we're going to be in the situation we're in right now," Beebe said. "I don't see an interest to expand."

Almost a year ago, returning to a 12-team conference after losing Nebraska and Colorado seemed like the league's best chance at survival. But Beebe, after speaking with television partners last year, always believed the conference would continue in some form.

"There were those in the public space who didn't believe our words no matter how many times we said them," Beebe said. "This agreement is a demonstration of what was started last summer."



## Seasonal allergies could seem worse than ever

7:10 PM, Apr 13, 2011 | [4 comments](#)

By [Ashley Yarchin](#)

**St. Louis (KSDK)** - Sneezing, coughing, itchy eyes and congestion; does that sound like a spring day for you or your child? According to experts, this allergy season is expected to seem worse than others.

Once the snow days subside, the golf shoes go on, and Blaine Leonard takes to the driving range, but he said Wednesday it's not just the golf balls he's been hitting lately.

"The spring never bothered me before but now, I mean, I'm hitting the Afrin every day so I'm pretty stuffed," he said. "Right now I'm not, though, 'cause I did my two shots."

**Like Leonard, between March and May, many of us become basket cases when it comes to allergy symptoms. In fact, a medical expert at the University of Missouri is warning people to prepare for an especially bad spring allergy season because the heavy winter snowfall increased moisture in the soil - leading to more pollen and mold.**

"This time of the year, acupuncture's ever popular for seasonal allergies, as well as other year round allergies that somebody might be plagued by," said Dr. Christina Faccin, a chiropractor and acupuncturist.

Faccin explained that it only takes one to three \$40 sessions at her Wood River practice, which may include needles, lasers or magnets, to help folks fight seasonal allergy symptoms.

"Most all of my allergies were gone within one treatment and I can't say enough about what they've done for me here," said Marlene Clouatre, one of Dr. Faccin's patients.

Leonard added that he'll stick to his current techniques for now, but would certainly test the alternatives if allergies ever start to affect his game.

"It'd be nice if my allergies would die down but I'll take this weather and hit the medicine," he went on to say. "It's better than winter." Of course, you should always check with your doctor when it comes to the best way to treat your allergies.

## COLUMBIA MISSOURIAN

# Adult obesity often goes undiagnosed by primary care physicians

## MU Mention on Pg. 3 & 4

By Christina Honan

April 13, 2011 | 8:22 p.m. CDT

COLUMBIA — Melinda Bobbitt was surprised when a friend who weighed less than she did suddenly was ordered by her doctor to lose weight; she was shocked to find out they had the same doctor.

Bobbitt's doctor had never talked to her about her weight — more than 200 pounds at the time — qualifying her as obese, according to the Body Mass Index (BMI) guidelines outlined by the Centers for Disease Control and Prevention. Bobbitt remembers thinking that her friend didn't look obese. And she wasn't; she was overweight. It was her friend's dangerously high cholesterol that prompted the doctor to discuss the benefits of weight loss with her.

"I thought it was weird that I was so grossly overweight and it was never addressed," Bobbitt said.

The situation Bobbitt found herself in is common. Doctors generally do not diagnose obesity or discuss weight loss if a patient has no related medical conditions. According to research done at George Washington University that's included in a study called Improving Obesity Management in Adult Primary Care, 70 percent of clinically obese patients do not receive a diagnosis of obesity and 63 percent do not receive any counseling from a physician on the issue. Because Bobbitt's blood pressure and cholesterol were within a healthy range, her doctor never discussed weight loss with her or diagnosed her as obese. She decided to take initiative and ask her doctor if he recommended any pill or diet supplement to promote weight loss.

He told her to give Weight Watchers a try. Instead, she employed a team approach that involved weekly weigh-ins, cooking healthy meals and watching "The Biggest Loser" with her friends. It's proved to be a fun and successful way to reshape her life and her body. Still, she couldn't help but wonder if a doctor's advice could have motivated her sooner.

## **An awkward situation**

Kevin Suttmoeller, a physician and certified bariatritian at Missouri Bariatric Services, acknowledged the value of a physician-initiated conversation about weight.

"Anytime a doctor brings something up to their patients ... it's beneficial," he said.

The problem is doctors want to please people and make their patients — basically, their customers — happy, he said. Weight is something people might view as a personal flaw, making it uncomfortable for both the patient and the doctor to discuss.

"How do you say that somebody is fat in a sensitive way?" said Justin DeLap. DeLap, manager of Missouri Bariatric Services, has had his own struggles with weight loss. Having that conversation "is a tough thing to sometimes do, but it is a reality of the world we live in," he said.

Doctors often wait until the patient has a "co-morbid" condition — a disorder or disease that occurs in addition to or because of a primary health issue — to address weight loss and manage obesity. In obese patients, such co-existing conditions include diabetes, high cholesterol and hypertension, to name a few.

"I always actually treated obesity through treating existing problems like diabetes," Suttmoeller said of broaching the subject of weight when he worked in private practice.

When he offered his patients treatment options that didn't require medication, they were generally eager to get started, especially to avoid further complications or having to take medication. This approach seemed to help people see their obesity as a medical condition requiring treatment, not necessarily a personal flaw, Suttmoeller said.

## **Barriers to effective treatment**

The sensitive nature of the subject matter is not the only thing that makes it tough for doctors to talk to patients about obesity. Doctors often lack the tools they need to effectively help their largest patients; studies show that almost half of practicing physicians don't feel qualified to treat obesity. Suttmoeller explained that in years past, medical schools just glossed over obesity. For example, when he was in school, students were not taught to calculate BMI, now a widely used measure of one's weight-to-height ratio. BMI provides a general indicator of body fatness and weight categories that could lead to health problems.

"For many doctors, the extent of their knowledge or training is just: eat less, exercise more," Suttmoeller said. Both Suttmoeller and DeLap noted that a recommendation like that for an obese patient is worthless. In fact, DeLap said, it's discouraging.

It takes a team approach — requiring the expertise of many different types of doctors, such as dietitians and bariatric specialists — to come up with an effective diet and exercise plan based on each individual's situation, the doctors said. Primary care physicians often have only 15 to 20 minutes to see each patient for a general checkup, Suttmoeller added. That time constraint makes effectively approaching such a complex topic unrealistic.

Doctors and patients also encounter problems with getting insurance companies to cover necessary services for those diagnosed with obesity. Suttmoeller said he doesn't know of any insurance companies that pay for treatment if no co-condition is also diagnosed; at Missouri Bariatric Services, insurance companies can only pay staff dietitians if a patient has diabetes or kidney failure.

In the U.S., patients have to be morbidly obese before they can be considered for treatment such as bariatric surgery. And while insurance companies will generally cover the surgery that a patient needs, they typically require six months' supervised weight loss with a doctor prior to the operation. The weight loss program, whatever it might be, is not covered for patients without co-existing conditions like diabetes.

### **Addressing the growing problem**

During the past 20 years, there has been a dramatic increase in obesity in the U.S. In 2009, more than 20 percent of the adult populations in all states except Colorado and the District of Columbia were obese, according to an obesity trend report from the CDC; in nine states — including Missouri — that rate was more than 30 percent. Doctors are recognizing that treatment approaches must respond to changes in the nation's health to be most effective for their patients.

**Jill Bosanquet, a family physician at University Hospital, discussed this issue's importance with fellow doctors at her Feb. 23 seminar on "Managing Obesity in Primary Care."**

**Patients view their doctors as experts, she told the group of about 25 physicians. Primary care physicians are a person's first point of contact with the medical community, which gives doctors the opportunity to be an important first step down the road to effective treatment and proper care. Bosanquet discussed**

**research showing that patients with a diagnosis and support from their doctors are more likely to try to lose weight on their own than those without.** People often need an authoritative figure — like a doctor — to talk to them before they realize they have a problem or become motivated enough to address it.

"The big challenge is getting people to shift the way they think about this problem," DeLap said of both doctors and patients. Obesity can no longer be thought of as the unfortunate result of a personal choice that can be simply undone by eating less and exercising more, DeLap said; it is a product of the environment we live in.

Medical schools have responded to this need for a shift in thinking by changing curricula.

**At MU, for example, medical students learn about obesity from more than just a scientific standpoint; they also receive feedback on simulations they do interacting with patients struggling with weight.**

Students spend their first two years of medical school in "Introduction to Patient Care," taught by assistant professor Carla Dyer. The course teaches students how to be patient-centered in their interactions with all patients; since many future patients might be obese, how to treat and talk about the diagnosis is now a fixture of the course.

Suttmoeller regularly lectures medical students — and practicing physicians — on methods for talking to patients and treating their obesity-related health concerns. His lectures include discussions of the effectiveness of medications, weight-loss plans, behavior modification and surgical options.

Changes in training programs for both future and current physicians reflect an acknowledgment of the ever-growing number of obese patients they'll treat in coming years — a number which shows no sign of slowing.

Obesity trends are expected to continue their dramatic increase with an estimated 1.35 to 2.16 billion obese adults worldwide by 2030, according to studies done by the U.S. National Library of Medicine; another study concluded that programs for prevention and treatment of obesity must become a public health priority.

"Physicians are keenly interested in how to help their patients right now," Suttmoeller said. "Especially regarding weight loss."