

MU research takes bite out of belly fat

Plant oil could lead to help for diabetics.

By JANESE SILVEY *Staff Writer*

A University of Missouri researcher has found oil from the seeds of a tropical tree just might be the ticket to a trim tummy.

The plant oil contains fatty acids already known to suppress a bodily enzyme associated with insulin resistance, said James Perfield, associate professor of food sciences in the College of Agriculture, Food and Natural Resources.

He tested the oil on rats prone to overeating and found those given a supplement of the oil with their normal diets had less abdominal fat than rats not given the oil over a 13-week course.

With no difference in food intake, the rats also had decreased liver fat, and their tolerance to glucose improved, Perfield said.

The amount of oil given equated to about 3 grams a day for a human weighing 250 pounds — a “manageable” dose, he said.

The oil comes from seeds of the *Sterculia foetida* tree, which grows in warm areas such as India and Australia. According to the AgroForestry Tree Database, the seeds are edible and have a pleasant taste.

But it's easier to control the amount of oil and the effects of that oil if it's extracted directly from the seed, Perfield said. Blocking the enzyme too much, he warned, could have adverse effects. “Even though it's a natural product, we have to use caution,” he said. Because of its potential potency, “it should be treated more like a drug than a natural compound.”

Belly fat collects between internal organs and the torso and is composed of deposits that can trigger health problems that could induce insulin resistance. If the pancreas isn't able to produce enough insulin, over time excess sugar in the bloodstream can lead to diabetes, cardiovascular disease and other obesity-related problems.

There's a lot of interest from pharmaceutical companies for therapies to counter this problem, Perfield said.

He hopes his research will pave the way for a human nutritional supplement but warned there's more work to do before such a product hits the market.

Perfield now plans to study the long-term effects of the oil and whether it can actually reverse the effects of diabetes.

He presented his findings at the Diabetes Insulin Resistance and Metabolic Dysfunction Symposium in Keystone, Colo., in January and is preparing to submit his study for publication.

Preparing yourself to age in place

By JANE GLENN HAAS

Everybody says the best deal is to “age in place,” to never leave the confines of home for some sort of community care.

But the problems of “in place” can be horrific, starting with health care and crossing into social isolation.

At the same time, 76 million aging baby boomers will get older, and options for housing plus care are costly and require seniors to move from residential living to assisted living to nursing homes.

One study, just completed, is said to prove the financial benefit as well as the social and personal benefits to aging in place.

“Adults want to remain healthy and independent during their senior years, but traditional long-term care often diminishes seniors’ independence and quality of life,” says Marilyn Rantz, a professor at the University of Missouri-Columbia’s Sinclair School of Nursing.

“Aging in place enables most older adults to remain in the same environment and receive supportive health services as needed. With this type of care, most people wouldn’t need to relocate to nursing homes.”

Q. There is nothing new to the senior preference to stay at home rather than move to a facility. What did your study discover?

A. At Tiger Place, adjacent to the University of Missouri (which has 54 apartments), we have discovered that we can save Medicare and Medicaid dollars with nurse care coordination. We do early illness detection and coordinate with other health care providers.

Our service package increases as more care is needed and then decreases as the patient’s needs decrease.

We have successfully uncoupled the housing cost from the care cost. Putting the two together — in an assisted living home, for example — is part of the high-cost component.

Seems as if this is pretty simplistic and bound to work well. What’s new?

Intuitively, we all knew this would work. The cost of care should go up and down. But we had to prove that.

So people rent the apartment separate from the care they receive?

Yes, and about a third of them are using long-term-care insurance to pay the cost of care. As we look ahead to a larger aging population, we can expect to see more of that type of insurance used.

You are advocating apartment-style living, community meals. Is that similar to residential care?

Usage depends upon the person and their social network.

Co-housing makes a whole lot of sense with a wellness component. It's got to have a really strong independent focus. One that maintains good health and encourages functionality.

I think we all want to go to bed one night and just not wake up. We want to think we can be active until "the end" and then face a very rapid decline in health. Well, that is pretty much what we are seeing.

Aging in Place is a four-year project used at Tiger Place, an independent living community of 54 apartments that helps senior residents stay healthy and active and avoid hospitalization and relocation. Residents receive care services in their apartments. (University) researchers use sensors, computers and communication systems to discreetly monitor residents' health.

The results were published in a recent issue of Nursing Outlook.

People who age in place often depend on family. Are they still around?

We involve the family in the care process and delivery. Nothing changes. Except independence. That's the key.

(For more information, see www.agingmo.com.)



Absence emboldens burglars

Police: Precautions help thwart thieves.

By BRENNAN DAVID *Journalism 101* 1-1-11

Efforts to curb burglaries in student-populated areas of Columbia during spring break have been successful as of late, and Columbia police are hopeful to continue their streak this year.

Many students left campus yesterday, and they are leaving behind valuable electronics in neighborhoods that burglars target at this time each year, Columbia police Sgt. Candy Corman said.

After years of taking burglary reports from students after they returned from break, officers began a proactive approach around Christmas 2009, and that has decreased burglaries.

Flyers reminding students to lock up, take expensive items home with them and use timers for interior and exterior lights goes a long way toward combating burglaries, Corman said. Students also are reminded to arrange for the pickup of mail, newspapers and packages so those items don't sit in the driveway for days.

"Every year for spring break we get hit with burglaries. It's the same with Thanksgiving and Christmas. Even home football games," she said. "People know when the student population is gone and target them. They realize they are going to be gone for a week or entire night."

Corman said many students aren't aware of the indicators burglars use to target homes. If today's predicted snowfall hangs around for two or three days, she said, then burglars will know who has or has not been home since the snowfall by searching for tire tracks in driveways.

"If it snows and there are no tracks in a driveway, that means they must be gone for the break," she said. "They look for that."

The student population is so targeted by local burglars that University of Missouri football games have become problematic, Corman said. A burglar might ride around a student complex looking at who is leaving their residence in team gear on game days. That gives them at least a four-hour window of opportunity to make entry.

MU student Kylie Crowder lives on campus and left her dorm yesterday afternoon. Her residence hall does not reopen until April 3, which means her property will be locked away until then.

Burglary is less of an issue for her, but she said she has heard of incidents from friends who live off campus.

Austin Evans, 20, said he felt confident his duplex on Rolling Rock Drive would be secured throughout his weeklong stay in Eureka

"I hear of stuff being stolen all the time," he said. "Not just spring break."

Evans said his television and Xbox were packed into his small vehicle because he couldn't live without them at home, but now realizes their value to a burglar. "It's my only items of value," he said.

Officers will be patrolling student housing areas more this week, and Columbia police are considering hosting a labeling session at the start of the fall semester. A similar event was held last year where students were provided specialized equipment to label property.

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Boost comfort, productivity in your home office with a few ergonomic fixes

By CAROLINE DOHACK-MCCRARY

She has got the easiest commute in town. When Cheri Ghan, director of external relations for the University of Missouri School of Health Professions, heads to work, she really just goes down the hall to get to her office.

Ghan has been working from home since June, when the school needed to reallocate her office on campus to a new adviser. Ghan said once she got used to it, the arrangement actually made her more productive.

"I do tend to do more work just because it's there," Ghan said, explaining that when inspiration strikes suddenly, she just needs to walk a few yards to get to her desk.

If, like Ghan, you find yourself spending a good amount of time working at home, you'll want to take steps to create a comfortable space where you can be productive.

Giuli Krug, a clinical assistant professor with the Department of Occupational Therapy at the School of Health Professions, said the first thing to do is create the right ambiance.

"You have to be happy in your space. If you can't be happy in your space, you're not going to be productive," Krug said.

Ghan decorated her office with movie posters, a blown-up print of a magazine cover she was especially proud of and pictures of her husband and son.

"These are things that make me happy," Ghan said.

Good lighting also is important.

"Natural light is always optimal, but it's not always possible," Krug said.

To avoid a glare on the computer screen, Krug said to position your monitor so it's not directly under any ceiling lights, and if you use a reading lamp, position it to the side.

In addition to watching where you position your desk in relation to the light, Krug recommends keeping your work space away from any vents.

"There's a muscle response," Krug said, explaining that when our bodies are exposed to cold air, the muscles tighten up. When our bodies are exposed to hot air, the muscles relax. Either way, it becomes more difficult to maintain proper posture.

If you're looking for new furniture, a good chair might be the first thing you look for.

"When I'm on deadline, I spend nine to 10 hours in the chair. You can't spend that much time in a bad chair," Ghan said.

Krug said chairs with five wheels are best for distributing weight evenly. A wide back with lumbar support is another good thing to look for, she said. Before you buy a chair, sit in it to make sure there's 2 inches to 4 inches of space between the front of the seat and the back of your knees. This will prevent pressure on your knees.

Whether your chair has arms is a matter of personal preference, Krug said, but if you do go for arms, they need to be padded and adjustable. Adjust them so your arms just rest on them. You don't want them to be so high your shoulders are hunched up, but you don't want them to be so low you have to bend or lean to the side to use them.

When you sit in your chair with your hips all the way back, you should be able to sit with your feet flat on the floor. If the front of the seat is rounded, it will help prevent pressure on the back of the legs.

No matter how great your chair is, Krug said it's important not to spend too much time sitting in it. As a general rule, you should spend 10 minutes out of the chair and walking around for every 50 minutes you spend sitting, Krug said.

Making sure your desk is adjusted properly is generally a matter of making sure everything is at the right height.

The top of the computer screen should be right at eye level.

"Otherwise, you're setting yourself up for neck strain and eyestrain," Krug said.

You can find stands at most office supply stores if you're using a laptop.

The keyboard should be at a height that allows you to have your arms in a neutral position, meaning you're not reaching up or down for the keys, Krug said. For those who spend a lot of time typing, a split or modified QWERTY keyboard can take some of the strain off your wrists.

Your mouse also should be at a height that doesn't force you to reach for it, and you shouldn't have to work too hard to access the things you use most often.

"Everything you use frequently should be within an arm's reach," Krug said.

Similarly, you shouldn't be putting too much effort into reaching things that aren't in the immediate vicinity. To avoid twisting to get into a desk drawer or retrieve something from the printer, Krug said to give yourself room to turn your chair around so you're facing them head-on.

ST. LOUIS POST-DISPATCH

Atchison shrinks more than other Mo. counties

BY DOUG MOORE • dmoore@post-dispatch.com > 314-340-8125 | Posted: Sunday, March 27, 2011 12:35 am

TARKIO, Mo. • There's not much here. The town folk readily admit it. And the shuttered buildings along Main Street support it.

Boarded-up storefronts with "Keep Out" signs seem to contradict the street banners welcoming visitors to "a little town with a lot of heart."

Tarkio accounts for about a third of Atchison County's population, which fell 12 percent in the last decade after a 14 percent drop the decade before. Of Missouri's 115 counties, Atchison suffered the greatest population loss by percentage, based on new census figures. The county now has 5,685 residents.

"It used to be a booming town. There was a bowling alley and filling stations," said barber Frank Schupp, who has been cutting hair on Tarkio's Main Street since 1967. When he first went into business, the town had everything, he said.

Now, "it's just a bad situation," Schupp said.

Atchison County, while remote, has plenty of company in seeking to stop the population slide. Thirty counties in Missouri lost population in the last decade, two-thirds of those in northern Missouri. In Illinois, the population decline was more widespread, encompassing rural counties from almost every region in the state.

Family farms continue to give way to corporate operations. Children head to college, then on to bigger cities where more job opportunities await.

It's a trend that dates back decades as the Midwest — and the nation, for that matter — becomes more urbanized. In Missouri, the loss accelerated between 2000 and 2010, with twice as many rural counties losing residents than in the decade prior.

"What is going to happen in the next several years as the much older population in northern Missouri matures a bit more?" asked Bill Elder, director of the University of Missouri's Office of Social and Economic Data. It's highly unlikely the children or grandchildren will return to run the farm or try to manage it from afar, he said.

"It won't be easy for someone in California to manage a 260-acre farm being leased to farm soybeans," he said.

In a county as small as Atchison, community leaders don't need the Census Bureau to give them a population number. Comings and goings are easily tracked when everybody knows everybody. Nevertheless, when the official count was released last month, conversations turned to when the decline would stop. If ever. Some of the talk had a gloom-and-doom tone, said D.C. Freemyer.

"That's how the old people are looking at it," said Freemyer, president of the Kiwanis Club in Fairfax, a town of about 600. "They're saying: 'What are we going to do? We're just dwindling.'"

He looks no further than his community group, which now has 22 members. At age 65, Freemyer is one of the youngest.

A NEW DRAWING CARD

Atchison County, situated midway between Kansas City and Omaha, Neb., is proud of its agricultural heritage. It tops the state in corn production and also is a leader in soybean production. Farming remains the top job here, but it's a profession that has become more corporate, more efficient and less attractive to younger people.

For rural, remote areas, the continuing challenge is getting fresh, college-educated people back to their hometowns.

In 2003, Rock Port Telephone Co. began an information technology business. To recruit for the jobs, the company, based in the county seat of Rock Port, took an unusual approach to soliciting workers for the new company. It put help-wanted ads in the local newspapers announcing the new business and asking mothers and grandmothers: "Do you want your children to move back here?"

Raymond Henagan, CEO of the telephone company and its Midwest Data Center, said the advertising paid off. Young people who had moved to places such as Sedalia, Kansas City, even North Carolina, came back to Atchison County to work for his company, which now has 46 employees.

"On the data center side, I think the oldest person working there is about 35," Henagan said.

It's those types of efforts that the county hopes to replicate over and over.

For about 25 years, the Atchison County Development Corporation worked as a volunteer group to promote new business. But by the mid-1990s, it became clear to the board that full-time, professional attention was needed to make the efforts a success. County voters approved a quarter-cent sales tax to fund the corporation, including hiring an executive director.

Incentives such as tax increment financing and enterprise zones were offered to lure a restaurant, a truck repair shop and a new grocery store that specializes in hand-cut meats.

Story Continues
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ST. LOUIS POST-DISPATCH

Letter to the Editor: Dysfunctional

March 27, 2011

There is something dysfunctional in a higher education system, and society altogether, when a basketball coach is worth more than \$2 million per year yet professors' salaries are frozen, class sizes are growing and tuition is rising beyond the means of working people ("Arkansas pulls MU's Anderson back in," March 24).

With priorities like this, it's little wonder that our nation is falling behind intellectually and economically.

Richard Eagan

Manchester