What to Eat and When

You know that a healthy diet has a balance of nutrients. But when you eat is also important. In fact, the timing of your meals has an impact on everything from weight loss to insomnia.

Here are five tips that will help you make the most of your meals.

1. For more energy, have a protein-packed breakfast.

Maintaining steady blood sugar levels all day is crucial to avoiding energy slumps. Sweet foods — muffins or sugary cereals — may give you a quick energy spike, but the following drop in blood sugar can leave you feeling wiped out.

Instead, eat protein as part of the morning meal. In a University of Missouri study, people with Type 2 diabetes who ate a 500-calorie breakfast with 35 percent protein had fewer glucose spikes than those who consumed less protein and more carbohydrates. Also, "protein stimulates hormones that increase fullness while inhibiting hormones that stimulate hunger," says study author Heather J. Leidy, an assistant professor of nutrition at Missouri.

2. To refuel after a workout, try a carb-protein combo.

Research shows that a snack containing both carbohydrates and protein is best for recovery after exercise. Carbs help boost flagging energy levels, while protein builds muscle mass. Stuart Phillips, director of the McMaster Centre for Nutrition, Exercise and Health Research at McMaster University in Hamilton, Ontario, says that for maximum effect, eat a post-workout snack within an hour of exercising that emphasizes the three R's: water to rehydrate, carbohydrates to refuel and protein to repair muscles.
People need more protein as muscle mass declines with age, Phillips says. Yet a recent AARP-Abbott survey found that just 17 percent of respondents knew how much protein they needed — 46 grams a day for women and 56 grams for men. Active older adults may need more.

3. For weight loss, load up at lunchtime.

Eating your biggest meal earlier in the day may help with weight loss. In a 2013 study published in the *International Journal of Obesity*, researchers found that overweight and obese adults who ate their biggest meal earlier in the day lost more weight than those who ate their main meal later, despite similar activity levels and calories. Your body burns twice as many calories after an earlier meal than a later one, says Frank Scheer, director of the Medical Chronobiology Program at Brigham and Women's Hospital in Boston.

4. For an afternoon brain boost, grab a handful of nuts.

Not only are nuts good for heart health, but a 2015 Spanish study found that older adults who ate a handful of nuts daily improved their memory over four years. Lead author Emilio Ros, M.D., a researcher at the Hospital Clinic of Barcelona, said eating nuts may help prevent cognitive decline in older people — especially when they're combined with a healthy Mediterranean diet. In addition, "eating nuts also reduces the brain responses that typically stimulate food consumption," Leidy says, so snacking on nuts can help with weight loss as well.

5. For better sleep, fill up on fiber.

A 2016 study published in the *Journal of Clinical Sleep Medicine* found that eating a meal high in fiber and low in saturated fat and sugar helped subjects fall asleep in less than 20 minutes, compared with 30 minutes for those who ate more fat and sugar than fiber. A high-fiber dinner was also associated with more time in slow-wave deep sleep, which is essential for immune function, says study author Marie-Pierre St-Onge, assistant professor at Columbia University Medical Center in New York. Steering clear of the refrigerator after supper can also improve sleep, as snacking signals to the body that it's time to be awake and active, according to a 2014 study published in *Current Obesity Reports*. 
EXERCISE, NOT DIET, CHANGED GUT MICROBES IN RATS

Metabolism and gut microbes are considered key players in the fight against obesity. However, there is an ongoing debate about whether exercise or diet is better at promoting metabolism and healthy shifts in gut microbes, the microscopic organisms in our intestines that break down food and contribute to decreased obesity.

“Some have claimed that exercise may not play a significant role in weight loss, as exercise can increase appetite resulting in greater food intake and potentially reduce activity throughout the day,” says Vicki Vieira-Potter, assistant professor of nutrition and exercise physiology at the University of Missouri.

“The purpose of this study was to look at exercise independently from weight loss and to determine other metabolic benefits associated with physical activity. Our team aimed to tease out what effects on adipose, or fat tissue, were due to weight loss from diet, and what could be attributed to exercise.”

Researchers divided young rats prone to obesity into three groups to study the impact of exercise on their metabolic function and fat tissue. All three of the rat groups were fed a high-fat diet. Two of the groups were sedentary while the third group was able to exercise using running wheels.

Of the two sedentary groups, one was allowed to eat as much of the high-fat food as they wanted, while the other group were fed controlled portions of the food in order to match the weight reduction caused by exercise. The exercising rats were allowed to eat as much as they wanted.
Several weeks later, all the rats were moved to specialized cages where researchers could measure their metabolism and physical activity. The rats with unlimited food access were obese, unlike the sedentary rats fed a reduced amount of the same diet and the rats that exercised, which was expected.

But, researchers also found that the exercising rats were metabolically healthier than both of the sedentary groups, and they developed different gut microbes than the other groups, despite eating the exact same amount of food as the sedentary group with unlimited food access.

The findings are published in the journal *Medicine and Science in Sports and Exercise*.

“Overall, the exercising rats had higher metabolic rates, were more active even when not running on their wheels, and experienced shifts in their gut microbes, perhaps putting them in a better position to avoid future weight gain compared to the other groups,” Vieira-Potter says.

“These findings confirm that exercise is an important component of overall health and is critically important in the fight against obesity, especially during the juvenile period.”

**THE CHRONICLE OF HIGHER EDUCATION**

**The Week: What You Need to Know About the Past Seven Days**

**Bathroom Brawl**

Chances are pretty good that if you’re reading this, you may be a regular user of bathrooms on a college campus. Even so, they may not be a topic you’ve spent much time thinking about. You go in, do what you need to do, wash your hands, leave. Unless someone in another stall takes a cellphone call — which can be hard to ignore — you’re probably not focused on who else is in there at the same time you are.
So you, too, may be mystified by all the fuss in North Carolina and elsewhere over public bathrooms and who is allowed to use which of them. Let’s face it — until quite recently, that wasn’t the kind of issue that had ever prompted a state legislature to convene in special session and pass an emergency law. But transgender people — and which bathrooms and locker rooms they use — are suddenly the focus of an enormous amount of attention.

After the U.S. Justice Department warned that the state measure, known as HB2, violated federal anti-discrimination laws and that it could cost the state’s public colleges their access to federal funds, the state sued, the federal government countersued, and the University of North Carolina called an emergency session of its Board of Governors to try to steer a course between what appear to be contradictory laws. The back-and-forth was followed by a much-publicized joint letter from the Justice and Education Departments reminding elementary and secondary schools nationwide not to discriminate against transgender students.

To judge by Facebook memes predicting that all this will bring about the collapse of our democracy, who can and cannot use which bathroom has become a monumental issue.

Supporters of HB2 insist that privacy and safety justify requiring people to use only the public bathrooms marked for the gender they were born with. Opponents counter that the law is, at best, a solution in search of a problem. It’s worth remembering, after all, that for several decades plenty of colleges have had gender-neutral multistall bathrooms in older dormitories, and that most of the students in those buildings have had no difficulty with them. Those bathrooms weren’t meant as social-engineering experiments — it was just too expensive to rebuild them when dorms that had been single-sex became coed. Nonetheless, they demonstrated that people, or at
least young people in liberal-arts colleges, could easily accustom themselves to nontraditional bathroom-sharing arrangements.

That said, politicians and advocacy groups on both sides have a lot riding on the bathroom debate, and it clearly resonates with the public. It’s a good bet we’ll be hearing a lot more about it, at least until the elections in November.

**Neither a Borrower Nor ...**

Last week Burlington College, in Vermont, threw in the towel. With enrollment down in the vicinity of 200 and its lender unwilling to extend its credit, the college said it would close at the end of May.

The liberal-arts institution traces its history to 1972, when a group of what the college calls "nonmainstream" students — among them, Vietnam War veterans and single parents — began meeting in the living room of Steward LaCasce, who became the first president (and spoke at the final commencement). Eventually, it established itself as a small but going concern. But in 2010 — while Jane O’Meara Sanders, wife of Sen. Bernie Sanders, was president — the college acquired a new campus and, with it, debt that the closing announcement described as "crushing."

Yves Bradley, chair of the Board of Trustees, said that the college had attempted to merge with another institution (he declined to say which one) and that the lender, People’s United Bank, had worked closely with the college for some time. But, he said, "I think the lender lost faith that we’d get to where we said we were going. They said, ‘We don’t believe it anymore.’"

Also last week, an annual survey by the National Association of College and University Business Officers found that private colleges’ average discount rate reached another all-time high in the 2015-16 academic year. The discount rate —
essentially, the difference between the "sticker price" of tuition and what the average student pays after receiving grants — climbed to **48.6 percent for full-time freshmen**, up from 47.1 percent in the previous year, with 88 percent of freshmen receiving discounts. The discount rate was 42.5 percent for all undergraduates.

**Thanks, Grandma**

To hear President Obama tell it, a three-year campaign by Rutgers University administrators to lure him as the 2016 graduation speaker didn’t really pay off until the student-government president’s grandmother sent her third message asking him to come.

Letters from the university’s president, videos about Rutgers’s 250th anniversary, and an online petition had brought no response, so the university announced in early April that it had invited the television journalist **Bill Moyers** to be the graduation speaker. A few days later, though, the White House called to say Mr. Obama would speak — in addition to Mr. Moyers, as it turned out. When the president’s turn came, he took care to mention getting "three notes from the grandmother of your student-body president."

"I have to say that really sealed the deal," Mr. Obama told some 50,000 people gathered in a university stadium. "That was smart because I have a soft spot for grandmas." The grandmother with the magic touch, Dianne Totten, was on hand to watch Mr. Obama congratulate her grandson, Matthew Panconi, on his own speech to the crowd.

**Click (Cont.)**

An investigation by the American Association of University Professors concluded last week that the **University of Missouri had violated Melissa Click’s due-process rights when it fired her**, without a faculty hearing, in response to videos showing her
shouting at a student journalist during protests last fall on the university’s Columbia campus. The findings could help set the stage for an AAUP vote to censure the university’s Board of Curators.

The board, meanwhile, responded to the findings with a point-by-point rebuttal and said it stood by its decision to fire Ms. Click, who was an assistant professor of communication. "The university, like many other institutions, faces challenges related to diversity and inclusion," the board said, but those don’t excuse Ms. Click "from the responsibility to conduct herself in a professional manner befitting a faculty member."

**Wait! There’s More!**

The Kentucky Community and Technical College System has laid off 45 faculty members and 125 other employees in the face of a $26-million budget shortfall. A state judge, meanwhile, ruled that Gov. Matthew G. Bevin can cut public colleges’ budgets without approval from the legislature. … George Washington University laid off more than half of the faculty members of its Corcoran School of the Arts and Design last week, with the school’s director citing enrollment projections and a changing curriculum. The university took over the art school in 2014. … Virginia’s State Council of Higher Education decided that it has no authority over whether George Mason University renames its law school in honor of Justice Antonin Scalia, since the school’s mission remains unchanged by either the new name or the two donations that prompted it: $10 million from the Charles Koch Foundation and $20 million given anonymously. … Michael Vaudreuil, a 54-year-old Worcester Polytechnic Institute custodian, earned his bachelor’s degree in mechanical engineering — and a round of applause at graduation this month — after nearly a decade of attending classes before his 3-p.m.-to-11-p.m. shift.