

Research Roundup

FDA sets date for trans fat ban



Nutrient	Amount	% Daily Value
Total Fat	2g	5%
Saturated Fat	2g	29%
Trans Fat	1g	6%
Cholesterol	15mg	4%
Sodium	700mg	
Total Carbohydrate	19g	
Dietary Fiber	1g	
Vitamin		
Iron	4%	

The U.S. Food and Drug Administration (FDA) recently took action to virtually eliminate partially hydrogenated oils (PHOs) from the food supply. PHOs are the major source of artificial trans fatty acids (IP-TFA) and considered by most physicians and qualified experts to be the worst type of fat you can eat. According to the FDA, there is no longer a consensus that PHOs are generally recognized as safe (GRAS) under any condition for use in any human food. As a result, the FDA set a final compliance date of June 18, 2018. This will allow companies to either reformulate products without

PHOs and/or petition the FDA to permit specific uses of the fat.

The FDA's decision came two years after a partial ban, the submission of additional scientific information, and more than 6,000 comments from consumers, industry and trade associations, advocacy groups, health professionals and state and local governments. The ruling does not affect naturally occurring trans fats found in small amounts in meat, dairy products, or in other refined edible oils as unintentional byproducts of their manufacturing process.

Trans fat also raises the level of low-density lipoprotein (LDL or bad cholesterol) which has been found to increase the risk of developing cardiovascular disease. According to the FDA, cardiovascular disease is the leading cause of death in the United States. To reduce the levels of trans fat in your diet, check the product's food ingredient list and nutrition label to determine whether it contains PHOs.

More bad news about energy drinks

For the past three years, OTRF has been following and reporting on the controversial addition of caffeine to energy drinks and food. A new study recently presented by Mayo Clinic researchers at the American College of Cardiology's Annual Scientific Session found young, caffeine-naïve participants experienced a marked increase in their resting blood pressure after drinking a commercially available energy drink containing caffeine when compared to a placebo drink.

According to lead researcher, Dr. Anna Svatikova, the link between caffeinated energy drinks and an increase in blood pressure has been studied and documented. In the new Mayo Clinic study, Dr. Svatikova said they looked at the difference of giving 25 healthy adults ages 19 to 40 a caffeinated energy drink, or a placebo. Blood pressure and heart rates were recorded before and 30 minutes after consumption. They also compared caffeine-naïve research participants who consumed less than 160 mg of caffeine per day and those that consume more than 160 mg of caffeine per day to understand the results better.



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“In the caffeine-naïve group, their blood pressure was more than double compared to the caffeine-free placebo raising concerns that caffeinated energy drinks may contribute to an increased risk of cardiac events,” said Dr. Svatikova. “Based on our findings, consumers should use caution when using energy drinks because they may increase the risk of cardiovascular disease problems, even among young people.”

For comparison, an 8-ounce brewed cup of coffee contains 95mg to 200 mg of caffeine. A Starbucks brewed Grande coffee contains 330 mg of caffeine and 12-ounce soft drinks approximately 34 to 72 mg of caffeine. An 8-ounce energy drink can contain between 76 mg to 280 mg of caffeine. The American Academy of Pediatrics recommends adolescents consume no more than 100 mg of caffeine a day, and younger children avoid caffeinated beverages. Yet, the American College of Medical Toxicology reports popular energy drinks are regularly consumed by 31 percent of 12-to 17-year-olds and by 34 percent of 18- to 24-year-olds.

According to Dr. Steven Chudik, this new research reinforces concerns about adolescents consuming energy drinks with caffeine and raises additional questions about the long term affects of caffeine consumption when started at a young age. “Additional research is need to see if and at what age the elevated blood pressure over time become a factor in contributing to strokes, heart attacks and other diseases,” Dr. Chudik said. “Clearly we need to know more, but what we know now should be a red flag to parents.”

AMA adopts concussion policy

The American Medical Association (AMA) in June adopted concussion policies for youth sports that immediately removes young athletes from competition if a head injury is suspected and returned to play only with a doctor’s written approval.

According to Dr. Jack Resneck, Jr., an AMA board member, even mild cases of traumatic brain injury may have serious and prolonged consequences, so it is essential that athletes tell their coach, trainer, physician or parent if they get any type of head injury. “By raising awareness of the serious risks associated with concussions and ensuring the appropriate guidelines are in place, we can reduce the number of young athletes who may return to the game too soon, which can put their health at further risk,” Dr. Resneck said.

The AMA joins the growing list of organizations with concussion policies including Illinois High School Association, USA Football, Center for Disease Control and Prevention, all of the professional sports—NFL, NHL, MLB, NBA and MLS—as well as colleges, and other youth organizations such as Pop Warner and various state legislative actions.



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The most recent sports injury data available from the Centers for Disease Control and Prevention shows between 1.6 million and 3.8 million sports- and recreation-related traumatic brain injuries, including concussions and other head injuries, occur in the United States every year. Of those, 59 percent of middle school female soccer players reported playing with concussion symptoms, with less than one-half evaluated by a physician or other qualified health professional. A study of high school athletes with concussions also found 15 percent returned to play prematurely and nearly 16 percent of football players who sustained a concussion that resulted in loss-of-consciousness returned to play in less than one day.

“Concussions are serious brain injuries that need to be respected and managed appropriately,” cautioned Dr. Steven Chudik, orthopaedic sports medicine specialist and team physician for several Chicago-area high school football and club soccer teams.

Long commutes negatively affect your health, social life



Research published in the *American Journal of Preventative Medicine* found an association between commuting distance and an increase in blood pressure and obesity, and surprisingly stress, sleep and dissatisfaction with their lives.

The study followed 4,297 adults between 2000 and 2007 and tracked commute time and distance. “Those with long commutes—greater than 20 miles—had greater rates of high blood pressure and high blood sugar than those with short commutes—zero to five miles,” explained Dr. Christine Hoehner, lead researcher on the study with Barnes Jewish Hospital. “Upon deeper probing, the research showed

that the sedentary act of sitting a long time in the car wasn’t making people fat, but rather that people lost their willpower to exercise at home,” she said. “We also saw it affect the amount of time people slept and the time they had to prepare food at home. They were much more likely to buy takeout or fast food,” she added. Furthermore, Hoehner found that even if participants exercised, there was evidence long commutes increased blood pressure.

Possible solutions include the obvious of moving closer to shorten the commute, or change how you commute to walking, biking, or taking public transportation. In fact, a recent study in the *British Medical Journal* revealed commuters taking any form of transportation besides driving alone had one to two percent less body fat, on average, and lower instance of obesity.

However, if none of those options is feasible, consider carpooling. Although it has declined in the past 40 years, carpooling has been proven to improve commuters’ satisfaction with their lives and return a part of their lives long commutes impact the most—socialization. According British transportation researcher, Daniel Newman, “Research shows the longer you spend commuting, the less time you have to socialize and make friends, or spend time with loved ones.”

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There's an APP for that

If you are an app devotee, but find yourself frequently disappointed with them because they fail to deliver, or are difficult to use, you might consider the following recommendations from dietitians for apps that can help keep you healthy and fit.

Sworkit

Perfect for people who sit for long times at their jobs, Sworkit (derived from simply work it) can help you build your own from a growing video library of more than 170 exercises. Personal trainers demonstrate each exercise to help ensure you perform them properly and safely. Using Sworkit during a five-minute break every hour will help keep you refreshed, focused and well on your way to adding 40 minutes of exercise every day without even breaking a sweat. Sworkit Lite is free, Sworkit Pro is \$3.99. Both apps are available for Apple iPhones, iPads and Android devices.



Charity Miles

Available for Apple iPhones and most Android devices, Charity Miles is a free app that turns your mundane daily workout into a sponsored event that earns money from corporate sponsorships. Regardless if you walk, run, bike, skip, hop, roll or skate outdoors, or run or walk indoors, every mile covered earns money for your chosen charity. Walkers and runners earn up to 25 cents per mile; bikers earn up to 10 cents per mile. The app uses your phone's GPS and accelerometer to measure your distance. Instructions for downloading and setting up the program are provided in order to allow the program to access your phone's geolocation services. Charity Miles is sponsored by a growing list of businesses that include Humana, Johnson & Johnson, Timex Sports and Kenneth Cole. For more information, visit the Charity Miles website, charitymiles.org/.

Meal Makeovers

Created by two dietitians, the Meal Makeovers app is ideal for busy families who want to prepare healthy meals without searching through countless recipes that everyone will eat. Meal Makeovers includes more than 80 made-over version of classic recipes families love such as spaghetti, tacos and even chocolate pudding. Each recipe provides a description of the dish, a list of ingredients and step-by-step preparation instructions. Detailed nutrition information, searchable tags, color photos and a shopping list feature also are included. Currently available only for the iPhone, iPad, or iPod Touch, the app can be purchased in the iTunes store for \$1.99.



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CThru Nutrition

Another dietitian-created app, CThru Nutrition, is a unique and easy-to-use, all-inclusive tool that scans food, beverage and snack choices using QR barcodes to help you make healthful choices. Using your mobile device, simply load the free CThru Nutrition app available from the Apple App Store, Google Play Store, or online at cthrunutrition.com and start navigating your way to make purchases at grocery stores, restaurants and even farmer's markets. Backed by food producers who care about their customers and want to make sure they have information about their products, CThru Nutrition lets you compare brands, customize your options based on diet restrictions, religion or personal preferences. Whether you want to lose weight, build muscle, lower blood sugar and blood pressure, or eat for athletic performance, this app will help since you have access to more than 70,000 grocery and food items in the continually growing database.



Skipping meals can cause abdominal weight gain, health risks



Researchers at Ohio State University recently reported that skipping meals triggers metabolic changes in the body that can result in abdominal weight gain. The study, conducted with two groups of mice: one group ate all of their food as a single meal and fasted the rest of the day and the other group was given unlimited access to food. For three days, the mice on the once-a-day diet ate half of the calories of the mice on the unlimited diet. The mice on the restricted diet initially lost weight, but regained the lost weight when calories were added. By the end of the study, both groups

of mice weighed about the same, but the mice in the restricted diet group had gained more weight around their midsection. They also were found to have become insulin resistant and at risk for type 2 diabetes.

"This does support the notion that small meals throughout the day can be helpful for weight loss, though that may not be practical for many people," said Martha Belury, professor of human nutrition at Ohio State University, in a statement. "But you definitely don't want to skip meals to save calories because it sets your body up for larger fluctuations in insulin and glucose and could be setting you up for more fat gain instead of fat loss," she added. According to Belury, the mice don't have type 2 diabetes yet, but they're not responding to insulin anymore and that state of insulin resistance is referred to as prediabetes."

This information, added to studies published in the *American Journal of Clinical Nutrition* and in the *Journal of the American College of Cardiology* in 2013 that found belly fat also causes an increased risk of developing heart disease and even cancer, should make you reconsider skipping any more meals.

