

In Touch with Extension



Food Safety is Especially Important for Seniors

Submitted by Jean Day

The Centers for Disease Control estimates that there are 76 million foodborne illnesses in the United States each year. Senior citizens need to know they are at increased risk for contracting a foodborne illness. The good news is they can decrease their risk by avoiding some foods and taking steps to keep other foods safe.

Everyone's health is different but generally, the immune system weakens as we age increasing the risk for all types of illness including foodborne illness. Additionally, seniors often fail to drink enough fluids which can cause dehydration and increases the risk for illness.

When we suffer from a foodborne infection, bacteria has survived the process of going through the stomach and has made it to the small intestine where it grows and eventually makes us sick. Stomach acid helps protect us by destroying harmful bacteria. As we age, stomach acid decreases making it much easier for bacteria to make it to the small intestine.

Major surgeries and some chronic diseases such as diabetes, some forms of cancer and kidney disease can increase a person's risk for illness.

As we age, our sense of smell, taste and sight can decline. All of these things can have an impact on nutritional status. If nutritional status is compromised, immunity can be decreased.

The best way to prevent a foodborne illness is to handle and store food properly:

- Wash your hands often. Keeping germs off your hands helps to prevent them from getting on food.
- Always cook food, especially meat, until it is done. The best way to know if a meat is safe is if it is cooked to a proper temperature. You can use a meat thermometer to make sure that meat is cooked thoroughly.
- Make sure to thaw and store foods properly. Meat should be thawed in the refrigerator.
- When serving leftovers, the food should be thoroughly re-heated.
- Once the meal is over, food should be promptly stored in the refrigerator. A food should never sit at room temperature longer than two hours.

There are some foods that seniors should not eat because of a higher risk for illness. They include raw or unpasteurized milk or cheese made from raw milk; soft cheeses such as brie, feta, camembert, blue-veined cheeses and Mexican-style cheese; raw or lightly cooked eggs; raw or undercooked meat, poultry or fish; raw sprouted seeds and unpasteurized or untreated juice.

Tammy Roberts, MS, RD, LD, nutrition and health education specialist, Barton County, University of Missouri Extension

[Packing A Food Safe Picnic YouTube](#)

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Study Shows Agroforestry is “win win” for bees and crops

Submitted by Sarah Havens

Planting woody plant species alongside crops could double the number of insect pollinators helping farmers produce food, new research has demonstrated for the first time.

The study, led by the University of Reading and published in the journal *Agriculture, Ecosystems and Environment*, provides the first observed evidence that agroforestry increases wild insect pollinator numbers and increases pollination.

The team found agroforestry sites had double the number of solitary bees and hoverflies, and in arable agroforestry sites there were 2.4 times more bumblebees than in those with just one kind of crop. Solitary bee species richness also increased tenfold at some sites. These increases in wild insect pollinators resulted in more pollination, as potted flowers left out in the study fields had up to 4.5 times more seeds.

The findings support mooted plans to implement agroforestry in Europe in the near future, showing that agroforestry could help stop the global decline of pollinators, partly resulting from intensive farming methods.

Dr. Alexa Varah, who led the study while completing her PhD at the University of Reading and now works at the

Natural History Museum, said: “Insect pollination is globally important for ecosystems and for growing the food we need to feed rising populations.

“It is ironic that agriculture, which relies so heavily on pollinators, is actually one of the biggest contributors to their decline. Our study finally provides some proof that agroforestry is win-win for wild pollinators and for farmers growing crops that need pollinating.”

Around 35% of the crop volume produced worldwide is estimated to be dependent on insect pollination, but efforts to improve wild plant diversity on agricultural land have not stopped pollinator decline. Agroforestry has long been suggested as a solution to halt the decline of pollinators, yet observational studies in temperate climates have been virtually non-existent.

The new study measured wild pollinator numbers in fields containing a mixture of crops and woody plants and in fields with only one type of crop, and compared pollinator numbers in the two systems.

Dr Varah said: “The next step is to look at yield in these mixed systems. If yield is also higher, agroforestry could be a great way to boost crop production as well as pollinator numbers, allowing us to produce more food in a more environmentally sustainable way.”



Agroforestry example with woody plants next to crops.

The NEAT-thlete at Work

Written by Rachel Buenemann MS, RD, LD, Nutrition and Health Specialist

NEAT is the term used to describe calories expended when completing daily activities, such as grocery shopping, re-stocking the copier, or dancing to the radio. All movement which is not intentional exercise. NEAT calories account for a significant 15-30% of expended calories. Compared to intentional exercise (lasting 30 to 60 minutes), NEAT activity (lasting > 10 hours) expend more calories and have a larger impact on weight, fitness, and risk of obesity.

After the industrial revolution, in majority, work moved from the physical demands of agriculture to less active work in factories and then minimal activity at desks. Modern jobs are less physically demanding and expend less NEAT calories. Americans sit eight hours each day, on average, most taking place at work. Agricultural communities in comparison sit for five hours per day and experience lower obesity rates. Sedentary behavior, such as sitting, increases the incidence of weight gain, muscle loss, and risk for cardiovascular disease. Even in a non-physically demanding job, NEAT activities may be increased for a noticeable benefit.

Let's consider three co-workers of the same office, Sedentary Sam, Fidgeting Fallon, and Movement Mack (Fig 1.). Sam sits most of the day, getting up for bathroom breaks. Fallon converts half of their six, ½-hour meetings to walking meetings, parks a little further from the office, and takes 10-minute 'active breaks' during the workday and a brief stroll at lunchtime. Mack conducts all work meetings while walking, has a standing desk, takes a ½ hour walk at lunchtime, and bikes to work. Mack expends ~1,000 calories more each day than his co-worker Sam, despite their having the same job, eating similar lunches, and belonging to the same soccer team. Over one month, Mack and Sam could experience a weight difference of 5-7 pounds based on their NEAT work behaviors alone.

Building good NEAT behaviors takes time and reinforcement. Fallon and Mack both provide examples for increasing NEAT activities. When adopting one or more NEAT behaviors consider inviting a co-worker to join you. Health behaviors are more successful when embraced as a community and not only an individual. To talk through specific ideas to improve NEAT at work, call Rachel Buenemann at the Phelps County Extension Center, 573-458-6260.

References:

Levine J. A. (2015). Sick of sitting. *Diabetologia*, 58(8), 1751–1758. <https://doi.org/10.1007/s00125-015-3624-6>

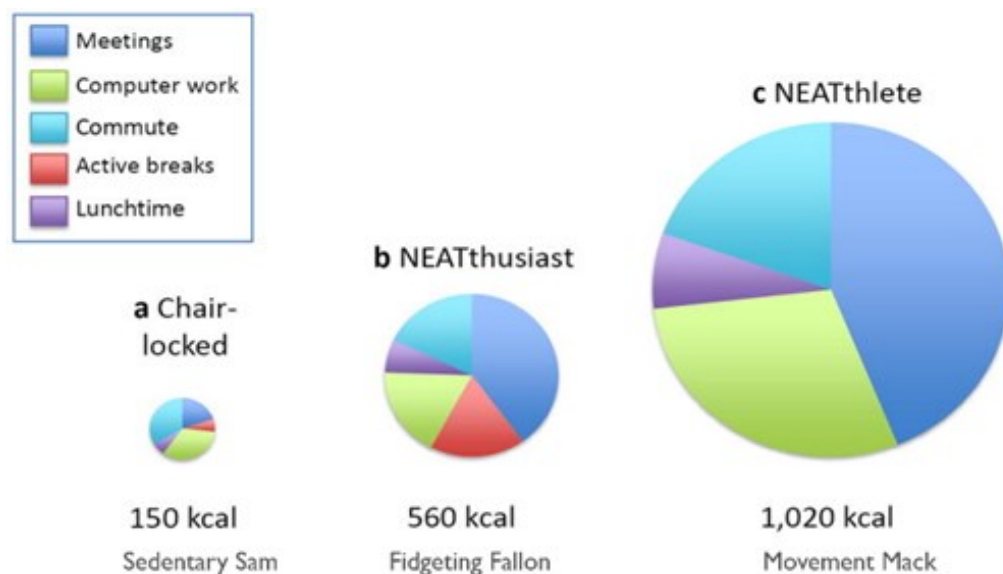


Fig. 1. (Levine, 2015)

4-H Enrollment Opens in October

By Jennifer Hancock

Enrollment for Missouri 4-H will open October 1 for the new 4-H year all across Missouri.

The 4-H program is open to any youth ages 5 to 18. Annual enrollment dues for most county 4-H programs is \$20. However, youth covered with Missouri Health Net Managed Care plans may be eligible to receive a \$20 voucher 4-H enrollment through their insurance's member services.

It is important to remember that 4-H is not limited to youth; adults are essential to making the 4-H program possible. There is no enrollment fee for registered adult volunteers.

The 4-H program is not only agriculture anymore. The 4-H program offers a wide variety of project interests such as photography, foods, shooting sports, robotics, animals and so much more.

Phelps County currently has 9 active 4-H clubs. Most every county in the state has at least one active 4-H club.

A list and description of each club can be found at the Phelps County Extension website <https://extension2.missouri.edu/counties/phelps/4-h>.

Impact and Contact

Nationally, 4-H is the largest positive youth development program in the country. According to a longitudinal research study completed by Tufts University in 2010, youth involved in 4-H are four times more likely to give back to their communities, two times more likely to make healthier choices and two times more likely to participate in STEM (science, technology, engineering, math) activities.

Missouri 4-H is University of Missouri Extension's youth development program. The 4-H program helps to create opportunities for young people to be valued, contributing members of their community. To learn how to get involved locally go to <http://mo4h.missouri.edu>.

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Extension
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"equal opportunity/ADA institution"

Meat Raffles—1/2 Beef & 1/2 Hog

Drawings will be held September 4, 2020
on Facebook Live

\$10 per ticket, only 200 tickets available for each raffle. See any staff or council member or stop by the Extension Center at 200 North Main, Suite G8 (in the back), Rolla or can be purchased online at: <https://extension2.missouri.edu/half-hog-half-beef-affle>

