

# Nutrition SENSE

UNIVERSITY OF MASSACHUSETTS – DINING SERVICES

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We're on the web:  
[www.aux.umass.edu/diningservices](http://www.aux.umass.edu/diningservices)

APRIL/MAY  
*quick tip*

Keep hot foods hot!  
Keep cold foods cold!  
When in doubt, throw it out!

DIETITIAN  
*on duty*

5:30–7:30 PM

Wednesday, April 4  
at Hampshire DC

Wednesday, April 11  
at Franklin DC

Wednesday, April 25  
at Berkshire DC

Wednesday, May 2  
at Worcester DC–Hillside Room

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Be Smart. Eat Smart.



**Nutrition**  
UMASS AMHERST DINING SERVICES



Keep hot  
foods **HOT!**  
Keep cold  
foods **COLD!**

*Food safety is important in your health and well-being. There are many factors to take into account when you purchase and prepare foods to keep the food safe. Here are some guidelines to assist you at school, at home or when you move out on your own.*

## FOOD SAFETY IN THE RESIDENCE HALLS

### WHEN PURCHASING FOOD:

- Check the expiration dates of the food, such as meats, milk or yogurt. Do not purchase any products if it is past the expiration date.
- When buying meats, if there is juice from the raw meat dripping, place the package in a plastic bag located near the meat coolers to prevent dripping on other foods. Keep raw meats away from ready to eat foods such as fruits and vegetables in the cart.
- Buy hot foods, cold meats, refrigerated and frozen foods just before heading to the checkout line. Keep the hot foods away from the cold foods. **KEEP HOT FOODS HOT! KEEP COLD FOODS COLD!**
- If you purchase prepared food or take out food from a restaurant, bring home any leftovers and refrigerate immediately.

### WHEN STORING FOOD:

- Do not leave any food, especially meats, poultry, fish, hot foods, refrigerated and frozen foods in your vehicle overnight as food can

spoil quickly, especially in the warmer months.

- Refrigerate any meats, dairy, eggs and cooked vegetable protein immediately upon returning to your room/apartment.
- Check the expiration dates and eat foods that will expire soon first, especially if it is refrigerated.
- Throw out any foods that have gone past the expiration date. **When in doubt, throw it out!**
- Store products that do not need to be refrigerated on a shelf or in a cupboard, never on the floor, as this may attract insects.
- Keep food sealed or covered tightly to prevent the attraction of insects and the possibility of cross-contamination.
- Try to keep your “food storage areas” clean and dry to avoid insects.

### WHEN COOKING:

- Before cooking, wash down the counter tops with warm water and soap.
- Wash your hands thoroughly before cooking.
- Do not touch foods that are ready to eat if you are handling raw meats.

- Wash your hands, work surfaces, cooking utensils, bowls and pans thoroughly, especially after working with raw meats.
- Purchase a food thermometer at a grocery store. Remember to calibrate it in ice water weekly (place thermometer in ice water and use pliers to move the needle to 32°F).
- Cook foods to proper cooking temperature (refer to cooking chart) to destroy microorganisms that can make you ill. Microorganisms grow best between the temperatures of 41°F and 135°F. This temperature zone is known as the “Danger Zone.”
- When thawing meats, put the meat on a plate or pan and let it thaw in the refrigerator on the bottom shelf for 1–3 days. **DO NOT THAW MEATS AT ROOM TEMPERATURE!** Thawing food at room temperature is the ideal environment for microorganisms to grow. E. coli can double their population in less than 20 minutes.

#### WHEN YOU EAT, BE AWARE:

- If soups or chili are purchased hot, either eat it right away or refrigerate within two hours of purchase (one hour if the air temperature is over 90°F).
- **Potentially Hazardous Foods:** These are foods that spoil easily and should be handled properly to prevent food borne illness.

#### Potentially Hazardous Foods

Milk/Milk Products  
 Meat (Beef, Pork, Lamb)  
 Eggs  
 Raw Sprouts/Sprout Seeds  
 Shellfish/Crustaceans (Lobsters)  
 Cooked Rice  
 Cooked Beans  
 Cooked Vegetables  
 Fish  
 Sliced Melons  
 Poultry  
 Tofu/Other Soy Protein  
 Untreated Garlic-and-Oil Mixtures  
 Baked Potatoes

FOOD ITEM	PROPER COOKING TEMPERATURE
Poultry and Stuffed Meats/Fish	165°F
Reheating Leftovers	165°F
Ground Meats or Fish	155°F
Whole Beef, Steaks, Pork Chops	145°F
Baked Fish	145°F
Holding Temperature of Hot Foods	140°F

- Refrigerate any cooked foods within 30–60 minutes after finishing a meal.
- **Eat hot foods immediately.** Keep hot foods at 140°F or higher while eating.
- **Eat cold foods immediately.** If saving cold foods to be eaten later, refrigerate the food immediately and keep it at 41°F or less or purchase a thermal bag and ice unit to take with you to class/work. **This includes the Grab n’Go meals at UMass!**
- If you have friends over and you are serving a cold buffet, put potentially hazardous foods on ice (bowl of food on top of bowl of ice) to keep it cold and safe.
- Check expiration dates and discard products that have expired.

**KEEP HOT FOODS HOT!**  
**KEEP COLD FOODS COLD!**

#### LEFTOVERS:

- Discard any foods that have been left out for more than 2 hours (one hour if the air temperature is 90°F or higher).
- Any foods that contain protein (meat, dairy, vegetable protein) should be consumed within 3–5 days.
- Always reheat food until it is bubbling hot (165°F or higher) before eating. Do not eat the food if it is lukewarm as microorganisms may still be alive and can make you ill.
- **WHEN IN DOUBT, THROW IT OUT!**

#### WASH YOUR HANDS

- Wash for 20 seconds (sing the “Happy Birthday” song)
- Use soap and warm/hot water
- Use a clean paper towel or a clean hand towel before cooking/eating



#### WHEN TO WASH YOUR HANDS

- After handling money
- Using the restroom
- After smoking
- Before eating a meal or snack
- After coughing and sneezing
- After handling raw food
- After touching your face or hair

Foods stored, cooked and eaten at the proper temperatures, along with clean hands, help prevent the spread of food borne illness. Limit the amount of time the foods you prepare, store and eat are in the danger zone (41°F to 140 °F).



# What is FOOD BORNE ILLNESS and FOOD POISONING?

**Food borne illness or disease** is caused by consuming a food or beverage that is contaminated by a type of bacteria, virus or parasite that grew due to one of the following preventable handling mistakes:

- Food not cooked to the proper temperature to destroy the microorganisms. For example, chicken needs to be cooked to an internal cooking temperature of 165°F to destroy salmonella.
- Improper package processing by manufacturers, such as salmonella in the Peter Pan Peanut Butter in the winter of 2007 or the E.Coli outbreak in packaged spinach in the fall of 2006.
- Cross-contamination – when germs from raw or unclean foods contaminate food that is ready to eat. Contamination can be spread by hands, utensils or equipment that is contaminated by microorganisms. For example, by handling raw chicken (may contain salmonella) and then preparing a salad without washing hands, will cause cross-contamination of the salad from handling the raw chicken. Be sure to wash hands, utensils, pans and surfaces thoroughly after they touch raw meats. Do not touch ready-to-eat foods until after everything has been cleaned thoroughly, or prepare the salad first before handling the chicken.

**Symptoms** of food borne illness usually occur anywhere from 12 – 72 hours after ingestion of a contaminated food. If one gets food borne illness within an hour after eating a food, the culprit of the illness is most likely not the food recently eaten, but something that was eaten possibly the day before or even days before.

**Food poisoning** occurs when eating toxin-contaminated food. Food poisoning includes ingestion of red tide (algae in clams create the toxin), metals (copper toxin in a food) or chemicals (cleaners inadvertently put into a food). Symptoms (vomiting, nausea and diarrhea) can occur one to six hours after consumption of the toxins.

According to the Center for Disease Control, in 2005 food borne illness was responsible for:

- 76 million illnesses
  - 325,000 hospitalizations
  - 5,000 deaths
- Salmonella, Listeria and E. Coli alone accounted for 14 million illnesses and 1500 deaths.

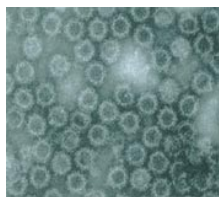
## Common Types of Food Borne Illness



**Campylobacter:** A bacteria found in the intestines of healthy poultry. It is the most common bacterial cause of diarrhea. Most contamination occurs from eating undercooked chicken or cross-contamination of raw juice drippings from poultry. Symptoms of infections include: fever, diarrhea and stomach cramping.



**Salmonella:** This bacteria is also found in the intestines of healthy birds and mammals and their feces. Illness can result from cross-contamination and from unwashed fruits or vegetables that may have grown with fertilizer. Symptoms of infection are similar to campylobacter: fever, diarrhea and stomach cramping. If symptoms are left untreated or if infection happens in someone with a weakened immune system, the infection can be life-threatening.



**Norwalk virus or Calicivirus:** This type of infection is very common and is usually spread person-to-person. If an infected person is preparing food they can potentially contaminate that food. A symptom includes excessive vomiting and usually resolves on its own within a couple of days.



**E. Coli:** This bacteria is transmitted from cattle and cattle feces. Microscopic amounts can cause infection. Symptoms of E.coli infection include severe diarrhea and painful stomach cramps. These symptoms are usually absent of a fever.

### BE AWARE OF PEOPLE WHO ARE AT HIGH RISK FOR FOOD BORNE ILLNESS

1. Children under 4 years of age have not built up an adequate immune system to fight off any unknown bacteria
2. Pregnant women
3. Elderly people—immune system has weakened with age
4. People taking medications, like antibiotics and immunosuppressants
5. People who are seriously ill—major surgery, organ-transplant recipients or those who have pre-existing or chronic illnesses

# Health inspections on campus

## TIPS ON YOUR REFRIGERATOR

- Set your refrigerator to a proper temperature of 39°F or lower. You can purchase an inexpensive refrigerator thermometer at a local grocery store to monitor the temperature.
- Try not to overload your refrigerator space. This will decrease the efficiency of your refrigerator.
- Do not keep your refrigerator door open for extended periods of time.
- Be sure to cover food in your refrigerator. This can prevent cross-contamination among foods and prevents the absorption of odors from other foods.
- Do not place hot foods in the refrigerator immediately. Allow the hot foods to cool first. Hot foods will raise the inside temperature of your refrigerator and cause other foods to warm, which can cause food to spoil.
- Refrigerate any perishable foods within two hours after purchase or delivery. If it is over 90°F, refrigerate foods within one hour.
- Put foods in the following order in the refrigerator to protect them from cross-contamination so you don't get sick:

Top shelf – ready-to-eat food

Second shelf – whole raw fish

Third shelf – whole raw meat

Fourth shelf – raw, ground meat

Bottom shelf – raw poultry

The dining commons are proud to state they have never had an outbreak of food borne illness or poisoning. If one individual states he has contracted food borne illness in the dining commons, the individual may have the flu or another health condition and not a food borne illness or poisoning. If there was a food borne illness outbreak, there would be hundreds of students with the same symptoms at University Health Services, not just one individual. A full investigation would follow by a UMass health inspector.

## HEALTH INSPECTIONS ON CAMPUS

Larry Davis ([ldavis@ehs.umass.edu](mailto:ldavis@ehs.umass.edu)) is the UMass Health Inspector who works for Environmental Health and Safety. He inspects each dining common and retail operation (Bluewall, Hatch, Southwest Café, Whitmore Café, Earthfoods, Sweets n'More, etc.) one or more times per semester to ensure that safe food handling practices are followed. If there is a problem, he visits the location unannounced to make sure the problem has been resolved. Students who work for the dining commons or retail operations also must take a course to understand the importance of food safety and sanitation.

The Dining Service's staff is certified in food safety and sanitation and get recertified every five years. We ensure that:

- Food is cooked to proper temperatures to destroy microorganisms and prevent food borne illness.

- Food preparation practices prevent cross contamination, especially with regard to food allergies.
- Staff wear clean and appropriate uniforms for sanitary purposes and to prevent contamination of the food.
- Staff do not work when they are ill to prevent food contamination.

UMass Dining Services take the proper measures to provide you with safe food. You also have a responsibility to keep food in your room or apartment safe as well.

## What to do if you think you may have food borne illness

- Go to University Health Services (UHS) immediately. Symptoms usually first appear 2-12 hours after consuming a food that may be the culprit.
- Let the doctor/nurse know what you recently ate.
- UHS will do a test to see if it is positive for food borne illness. Never assume that you have it unless you get tested for it. It may just be the flu or another illness.
- If you have a sample of food that you think is the cause, save it.
- If you test positive for food borne illness, a full investigation will result to uncover the source of the problem.

Researched and compiled by Amy Lombardi, UMass Dietetic Intern, and Mistelle Warren, Nutrition Major, Class of 2007

A special thank you to Larry Davis, UMass Health Inspector and Jeff Sautter, UMass Dietetic Intern, for their input



**Winner of ten national awards from National Association of College and University Food Services:**

“Outstanding College and University Menu for Residential Dining”  
in 2000, 2001, 2002, 2004, 2005, 2006



“Most Creative Nutrition Promotion”  
2003 “Do You Want to be a Meal-lionaire?”  
2004 “Nutrition Jeopardy”  
2006 “Step Up to Nutrition and Health”

*The nutrition information in this newsletter is for educational purposes only. Information in this newsletter shall not be construed as medical, nutritional, fitness or other professional advice nor is it intended to provide medical treatment or legal advice. We recommend you meet with the appropriate professional advisors regarding any individual conditions.*