

Nutrition SENSE

UNIVERSITY OF MASSACHUSETTS – DINING SERVICES

OCTOBER 2009

We're on the web:
www.umassdining.com

OCTOBER

quick tip

By eating too much fat, you may be taking chances with your health.

DIETITIAN
on duty

Get free nutrition advice in the DCs at the following times!

Wednesdays from 5:30 – 7:30 pm

October 7: Hampshire DC

October 14: Franklin DC

October 21: Worcester DC
(Hillside Room)

October 28: Berkshire DC

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Be Smart. Eat Smart.



Nutrition
UMASS AMHERST DINING SERVICES



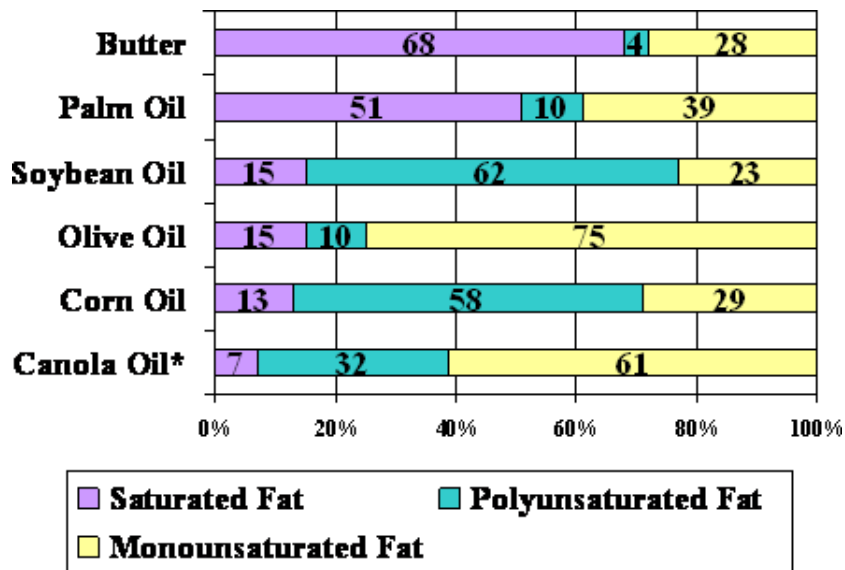
Fat Chance: Where are you getting your fat from?

What are Fats? Fats are food substances that are essential to the body and provide the following benefits:

- A concentrated source of energy (nine calories/gram of fat).
- Maintains consistent body temperature.
- Insulates and protects body organs.
- Provides fat-soluble vitamins and essential fatty acids. Essential fatty acids are needed to manufacture hormones and to keep cells healthy.
- Transports the fat-soluble vitamins throughout the body.
- Enhances the flavor of foods and makes baked products tender.

What Are the Different Types of Fat? All oils and fats contain the same amount of calories; the difference is how much of each type of fat it contains. There are three types of fats: saturated, monounsaturated and polyunsaturated fats. Trans-fatty acids and omega-3 fatty acids are polyunsaturated fats. Refer to the chart to see the comparisons.

Comparison of Dietary Fats



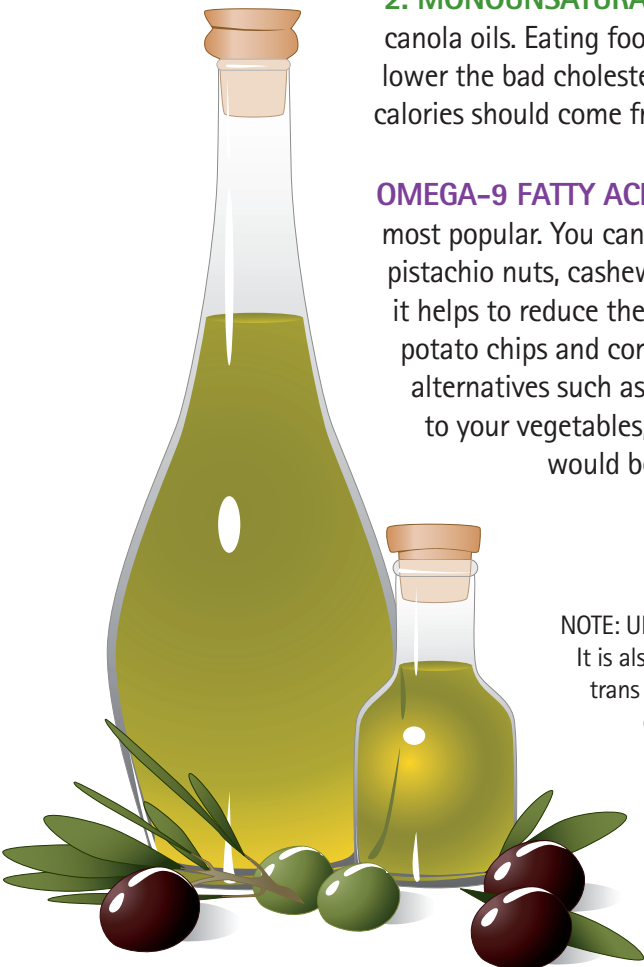
* Canola and olive oils are used in all the dining commons recipes. It has the least amount of saturated fat of all oils and more monounsaturated fat compared to soybean oil, which was previously used at UMass. Olive oil and balsamic vinegar are available daily in the condiment bar.

1. SATURATED FATS are fats that are solid at room temperature. They include fats of animal origin found in meat, poultry, whole milk, cream, butter and cheese and the tropical oils (coconut, palm kernel and palm). Eating too many foods high in saturated fat may increase total cholesterol blood levels; especially the "bad" cholesterol. High blood levels of the bad cholesterol and total cholesterol are risk factors for heart disease. Seven to ten percent of total calories should come from saturated fats.

2. MONOUNSATURATED FATS are liquid at room temperature and include olive, peanut and canola oils. Eating foods high in monounsaturated fats (avocados, nuts and seeds) may help lower the bad cholesterol levels and decrease risk of heart disease. About 10-15% of total calories should come from monounsaturated fats.

OMEGA-9 FATTY ACIDS are found in animal fats and vegetable oils, with olive oil being the most popular. You can also find them in olives, avocados, almonds, peanuts, sesame oil, pecans, pistachio nuts, cashews, etc. Omega-9 fatty acids also have many preventative qualities as it helps to reduce the risk of arteriosclerosis, cardiovascular disease and stroke. Substitute potato chips and corn chips with nuts and seeds. Try replacing margarine or butter with alternatives such as olive oil to boost your unsaturated fat intake. Instead of adding butter to your vegetables, try sprinkling flaxseeds or drizzle olive oil with a pinch of salt. You would be surprised how tasty and nutty the alternatives can be!

NOTE: UMass Dining uses a healthier fry-oil that is made with high stability canola oil. It is also one of the highest in healthy monounsaturated fats, similar to olive oil. It is trans fat-free and is naturally lower in saturated fat than alternative oils. It has a crisp, clean and is light tasting, allowing the flavor of the food to come through.

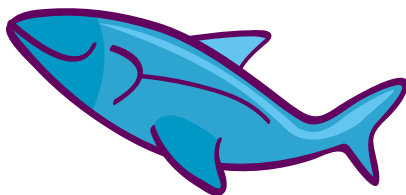


3. POLYUNSATURATED FATS are oils (liquid or soft at room temperature) from plants such as corn, sunflower, soybean, safflower and cottonseed oils. Linoleic and alpha-linoleic are essential fatty acids that can only be consumed by food we eat. They are needed for cell structure and making hormones. Eating polyunsaturated fats decreases the bad and total cholesterol levels more than the monounsaturated fats. It also lowers the good cholesterol, which is not beneficial to overall health. About 10% of calories should come from this type of fat which is found in foods such as crackers and potato chips.

TRANS FATTY ACIDS or hydrogenated fats are processed by taking liquid oil and transforming them into solid form (hydrogenation). Examples of foods that contain trans fatty acids include some margarines and vegetable shortening, and baked goods, as well as being found naturally in animal products. The major concern is the added hydrogenated fats found in many snack foods and baked goods. However, many manufacturers are changing their formulation so there may be no trans fat in the food. Be sure to check the nutrition label to be sure. Trans fatty acids act like saturated fats and raise the bad cholesterol levels. They may also lower the good cholesterol in the blood, so limit the amount of this fat in your diet. Many food products are made available without trans fat.



OMEGA-3 FATTY ACIDS can lower triglyceride levels, risk factors for heart disease and stroke, lower blood pressure and prevent cells from sticking to the walls of blood vessels and improves the health of the artery. Fish, particularly, salmon, tuna, bluefish, sea trout, are an excellent source of omega-3 fatty acids. It is recommended that at least 2-3 servings of fish be consumed each week to gain these benefits. Plant sources of omega-3 fatty acids include walnuts, flax seed, canola oil, wheat germ, soybeans and oils made from beans, seeds and nuts.



OMEGA-6 FATTY ACIDS are abundant in our food supply and can be found in vegetable cooking oils: soybean oil, sunflower oil, canola oil and corn oil (but not olive oil), so supplementation is not usually necessary. To balance the fatty acids, it is important to eat a diet that is low in processed foods with a majority of your fat intake coming from omega-3 fatty acids.

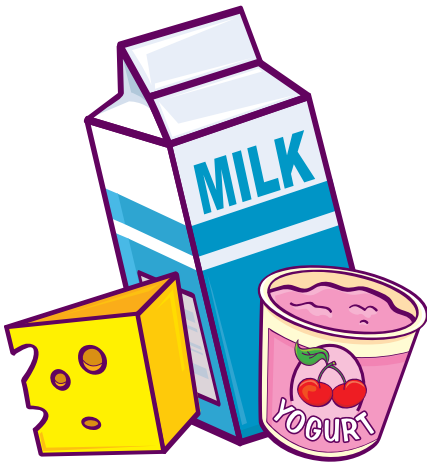
The Omega-3, -6 and -9 groups of fatty acids are all necessary for good health. All omega fatty acids are either monounsaturated or polyunsaturated fats. They are healthier than saturated fats and play many roles in the body. Omega-3 and omega-6 fatty acids are considered essential fatty acids (EFA's) because our bodies cannot make them, so we must consume them in our diets. Omega fatty acids are not essential because our bodies can make them, but we do get them from our diets as well.

Sources of Omega Fatty Acids

Omega-3 <i>polyunsaturated</i>	Omega-6 <i>polyunsaturated</i>	Omega-9 <i>monounsaturated</i>
Salmon, mackerel, anchovies, walnuts, flaxseed, oils (flaxseed, canola, walnut, wheat germ and soybean oils), green leafy vegetables, legumes, citrus fruits, melons & cherries	Cooking oils (soybean, sunflower, canola and corn oil)	Olive oil, avocado, almonds, peanuts, sesame oil, pecans, pistachio nuts, cashews, etc.

If you are interested in consuming more omega fatty acids, be sure to review the omega-3 sources and be mindful of adding these foods to your diet in moderation, just as with anything else in the diet. If you have a strong family history of heart disease, you may want to make an appointment with the dietitian at University Health Service (413-577-5101) to get your own personalized diet plan.

Tips on Eating a Low-Fat Diet in the Dining Commons



Milk Products

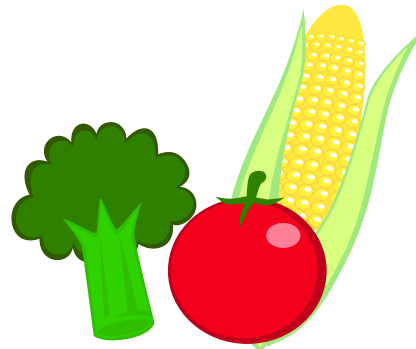
- Drink low-fat or skim milk.
- The recipes that call for milk contain 2% low-fat milk.
- All cheeses are made of whole milk except for the mozzarella cheese (part skim). Be cautious of how often you consume cheese weekly. Calories can add up quickly!
- Replace sour cream with low-fat plain yogurt; a tangy alternative.
- The cottage cheese found in the salad bar is fat-free.
- Silk Soy Milk, Rice Dream and Lactaid are lactose free, low in fat and are available in the Dining Commons.
- Ice cream (soft serve has half the fat than hard) is available daily. Consuming these daily will provide calcium but will also add more fat to your diet.
- Substitute sherbet or frozen yogurt for ice cream.
- Cream soups are made with 2% milk. Broth soups have less fat and calories, but an occasional cream soup gives you added calcium.

Grains and Starches— Eat six or more servings (preferably whole grains) every day

- Bread, cereal, rice, noodles, potatoes and grains are low in fat. Be careful how much butter or sour cream you add. This is where the fat and calories add up.
- Choose whole grains, such as brown rice, mixed grains, bulgur pilaf, orzo, barley, etc. to get the needed fiber, vitamins and minerals.
- If you eat french fries daily, cut it back to 3-4 times/week.

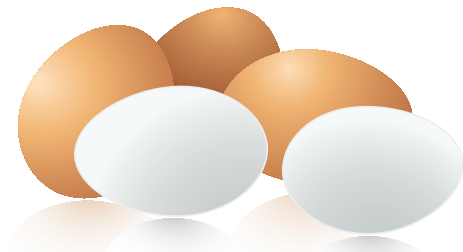
Fruits and Vegetables – Eat nine or more servings every day

- Fresh and canned fruit is offered daily.
- The majority of vegetables are steamed, grilled or roasted.
- Eat a fresh salad with your favorite vegetables. Be careful how much salad dressing you use as it is mostly fat.
- If you normally add two pats of butter on vegetables, use one or even 1/2 pat instead.



Protein

- Eggs contain fat and cholesterol. You can request Egg Beaters (which contain only egg whites) when you come in to start your day off right!
- Eat more low-fat protein sources (fish, poultry and legumes—dried peas and beans).
- Eat fish 2-3 times per week; especially tuna fish (packed in water which is available in the dining commons), salmon, clams, catfish and scallop.
- If you are a meat eater, try to eat one or two vegetarian/vegan entrees each week. Vegan entrees tend to have more fiber, vitamins, minerals and phytochemicals .
- Remove the skin from chicken and cut off fat from red meats.
- Limit red meats (including hamburgers), hot dogs and cold cuts to a total of 3 times a week.
- Breaded products are deep-fried and may contain trans fatty acids (due to manufacturing – the oils in the fryers are free of trans fatty acids)—remove the breading to reduce the fat content.
- Limit intake of peanut butter. It is a good source of protein, but a high source of fat and cholesterol.
- If you make a sandwich, use mustard (no fat) instead of mayonnaise.



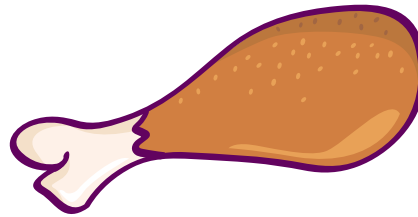
Desserts

- Most Bake Shop recipes call for canola oil, but the mixes may contain saturated fats, such as palm and/or coconut oil.
- If you eat desserts after every meal, you can save on fat and calories by having one dessert each day and choosing fresh fruit as the dessert for the other meal.
- Frosting or icing is high in fat. If you really want the dessert with frosting, scrap off most of the icing.



Fats and Oils

- Try using jelly on toast or a bagel instead of butter.
- Select entrees without gravies or sauces.
- Limit eating deep fried foods to three times a week or less.
- Use butter, and margarine sparingly on starches and grains.
- Choose tomato sauce in place of cream sauces on pasta.
- Add nuts to your salad or yogurt for an added crunch as they have more monounsaturated fats and can help lower the bad cholesterol. A variety of nuts can be seen at each meal in designated areas of the dining room. Be careful not to have too many as calories will add up!
- The deep frying oil used in the dining commons is trans fat free, but be cautious of how many fried foods (french fries, fried shrimp and scallops, spring rolls, etc.) you consume each week as the calories from fat will add up.
- If you stir-fry your own meal in the dining commons, be sure to watch how much oil you use. Olive and canola oils are available. A little goes a long way!
- The dining commons chefs and cooks only use canola oil in recipes that call for oil. Dining Services changed the soybean oil to canola oil for the Fall 2004 semester since canola oil has more omega-3 fatty acids.
- Replace the saturated fats with the healthier fats – canola and olive oil.
- Use the balsamic vinegar and olive oil mixture for salads or dipping bread. Available on the condiment bar.



The key is MODERATION! Eat a well balanced diet with a variety of foods.

Nutrient	Grams	Calories per gram
Fat	1	9
Carbohydrate	1	4
Protein	1	4

In a comparison, fat provides more than twice as much energy per gram than carbohydrates and protein (each provides 4 calories/gram). It takes your body longer to digest and absorb fat. It is healthier to use the oils that have less saturated fat, but be cautious as to how much you use because weight gain can result!

Consuming a diet with 30% calories from fat (10% from each saturated, monounsaturated and polyunsaturated fats) can assist in the prevention of heart disease and some cancers.

Very low-fat diets (less than 20% calories from fat) may not meet the minimum requirement for essential fatty acids. Choose a diet low in saturated fat and high in monounsaturated fats. Keep in mind that unsaturated fats should be eaten in moderation, but are preferred over saturated fat.

Nutrition experts recommend less than 30% of daily calories should come from fat; in other words:

Daily Calories Per Day	Recommended Fat Intake Per Day
2000	87 grams or 603 calories from fat
1800	60 grams or 540 calories from fat
1500	50 grams or 450 calories from fat
1200	40 grams or 360 calories from fat

Note: One tablespoon of any oil is approximately 120 calories. If you eat an extra two tablespoons of oil every day, that adds up to an extra 25 pounds (43,800 calories) per year. BE CAUTIOUS OF HOW MUCH YOU TAKE!

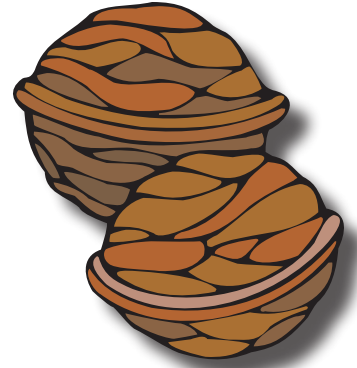
Walnuts

- 1 ½ ounces of walnuts consumed daily can improve cholesterol levels
- In March 2004, the Food and Drug Administration approved the following health claim:
"Supportive but not conclusive research shows that eating 1.5 ounces of walnuts each day, as part of a low saturated fat and low cholesterol diet, and not resulting in an increased caloric intake may reduce the risk of coronary heart disease."
- Beware: consuming too many nuts adds to your waistline.
- Eat in moderation and replace junk foods (high calorie, low nutrient foods such as cookies, cakes, fruit beverages, candy, etc.) with nuts and seeds.
- Avoid nuts that are roasted in oil and have salt.

Note: Water soluble fiber can help reduce cholesterol levels. Refer to the Fiber brochure in the Nutrition display areas or check the nutrition education on the UMass Dining Services web site: www.umass.edu/diningservices - click on Nutrition and You.

Flax Seeds

- Are very high in omega-3 fatty acids
- Ground flax seeds are better than whole as your body can digest it better. If you grind the flax seed, refrigerate in a sealed, opaque container for up to 90 days. If you leave it whole, it can be left at room temperature for up to one year.
- You can toss flaxseeds into salads, soups, stews and casseroles.



Updated, researched and revised by Michelle Smith, CSCS, UMass Dietetic Intern, Class of 2010

Winner of twelve 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, 2007, 2008, 2009

“Most Creative Nutrition Promotion”

2003, 2004, 2006, 2008



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for more specifics to improve
your eating habits

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