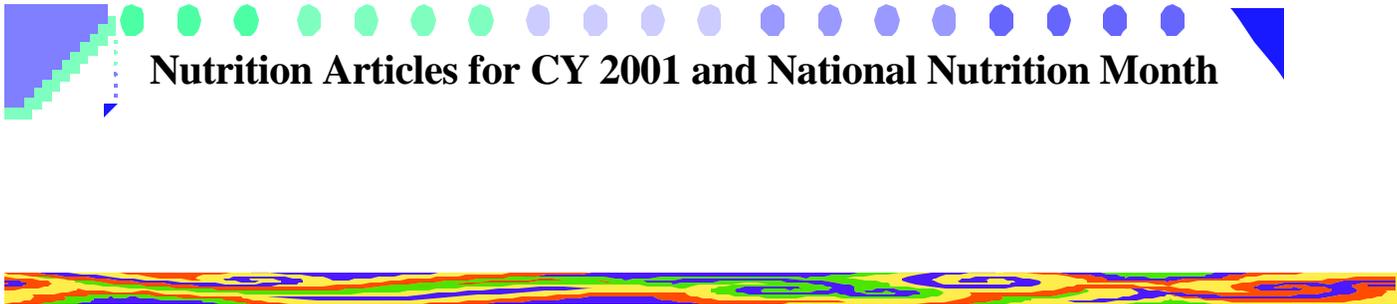


Section D

Articles for Publication



"FOOD & FITNESS: Build a Healthy Lifestyle"
Eat Right America[®]



Nutrition Articles for CY 2001 and National Nutrition Month

Helpful Hints for Weight Control CPT Lori Hennessy, Registered Dietitian

What you must know to lose weight:

1. Diets don't work. If you have ever been on a diet, you know that dieting does not work. Eventually, dieting and denial lead to overeating and often, binge eating.
2. Calories do count. If you eat more calories than what you are burning off through exercise and daily activities, you will gain weight. On the other hand, eating fewer calories than what your body requires will result in weight loss. Reducing the fat in your diet will help reduce total caloric intake, but only if you consume appropriate portion sizes and reduce your caloric intake. Just because you're eating fat-free cookies doesn't mean that you're entitled to the whole box in 2 days. Calories add up whether they're calories from protein, carbohydrates, or fat.

The following are 10 tips for successful weight reduction as outlined in Nancy Clark's [Sports Nutrition Guidebook](#):

1. Write down what and when you eat or drink in a day and why. Keeping accurate food records of every bite you take can help identify why you are eating (happy, sad, hungry, bored). Plus, it's amazing to find out how the little snacks add up during the day. A few handfuls of peanuts or M&Ms can easily contribute 500 to 800 extra calories.
2. Become aware of meal timing. You may eat lightly during the day, but devour dinner and snacks throughout the evening. Experiment by eating a considerable breakfast and lunch and eating lightly for dinner. Usually, people are most active during the day, so it only makes sense to consume the bulk of our calories during this time. Some people aren't hungry for breakfast because they consume too many calories in the evening.
3. Learn your calorie budget. Know how much you can eat to lose weight and still maintain your energy. To estimate your daily calorie requirement:

#1 Multiply your desired or goal weight by 10 to find your resting metabolic rate (RMR). This is the number of calories you burn at rest.

Example: Your goal weight is 170#: $170 \times 10 = 1700$ calories

#2 Multiply RMR by your daily activity level.

Sedentary 20-30%

Moderately active 40-60%

Very active 70-80%

Example: you are moderately active.

$1700 \times .4 = 680$ calories burned through physical activity.

#3 Add Steps #1 and #2 to determine daily calorie requirements.

$1700 + 680 = 2380$ calories per day to maintain weight.

#4 To lose weight, subtract 500.

$2384 - 500 = 1884$ calories per day to lose about 1 pound a week.

4. Divide your calorie budget into at least 3 parts of the day. If you are eating 1800 calories a day to lose weight, divide your calories into three parts of the day:

Breakfast/snack 600 calories

Lunch/snack 600 calories

Dinner/snack 600 calories

You may even want to eat 4 to 6 mini-meals throughout the day. You will not gain weight from eating breakfast and lunch as long as you don't consume more calories than what you need. If anything, you will be less hungry at the end of the day, which will help eliminate or reduce overeating in the evening.

5. Read food labels. Be aware of how many calories are in a serving and, more importantly, how many servings are in a container! Your bowl of cereal in the morning may actually be 3 or 4 servings of cereal. A single muffin may contain 2 to 3 servings, which means you could be consuming 400 – 500 calories and 50 grams of fat.... just from one muffin!

6. Eat slowly. The brain needs about 20 minutes to receive a signal that you're full; it doesn't matter how much food you've consumed during this time. Try to pace your eating by putting the fork down between bites, chewing slowly, and enjoying your food.

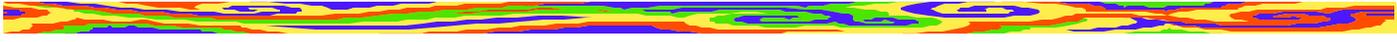
7. Eat your favorite foods regularly. Believe it or not, you can still eat your much-loved potato chips and lose weight. If you deny yourself permission to eat your favorite foods, you are much more likely to binge. A handful of potato chips once or twice a week is much better than devouring a whole bag in 30 minutes after days of denial!

8. Stay away from foods that tempt you. Out of sight, out of mind, and out of mouth. Storing cookies and other fattening snacks in see-through containers on the counter will more than likely tempt you every time you walk by. Store them in areas out of sight. Better yet, keep tempting foods out of the house.

9. Exercise consistently. Exercise regularly but don't overdo it. Don't punish yourself after a day of overeating by pushing yourself twice as hard or twice as long. One day of overeating will not make you gain weight. Remember that it takes 3,500 extra calories to gain one pound of weight.

Realistically, it's almost impossible to consume this amount over your required needs to gain 1 pound in a day.

10. Think Fit and Healthy! Every day, visualize yourself as getting fitter and leaner. Be patient with yourself; you didn't gain weight over night. Changing your eating and exercise habits for life takes time. Positive self-talk is very important to your well being and will help not only with weight loss, but also with daily living.



Fiber is more than Beans and Bran

CPT Sarah Flash, ACES, Registered Dietitian

About 35% of cancer deaths each year are related to poor eating habits. How can you reduce your risk? While no single food can prevent cancer, making better food choices can reduce your risk for certain types of cancer. For example, diets high in fiber help reduce the risk of colon cancer. Fiber also helps lower risk of heart disease by reducing cholesterol levels and prevents constipation and diverticulosis. Diverticulosis is a disease where pockets form in the large intestine. When food gets caught in these pockets, they become irritated and inflamed. These abnormal pockets usually form because of a diet that is too low in fiber.

Found only in plants, fiber is the part of the plant that can not be digested by the body. There are several different types of fiber, but they are commonly separated into two major classes, soluble and insoluble, both of which should be eaten daily. Soluble fiber is believed to aid the performance of several body functions. Several studies have found that when combined with a lowfat diet, consuming soluble fiber may help lower cholesterol, and therefore, prevent heart disease. In addition, it may play a role in regulating blood sugar levels--important for diabetics. Insoluble fiber also has health benefits. Acting as bulk in the intestines, insoluble fiber helps keep the digestive system running smoothly, aiding or preventing constipation and other intestinal problems. Studies also indicate that diets rich in insoluble fiber may lower the risk of some types of cancer. If you are watching your waistline, high fiber foods may be helpful for weight control because they fill you up, require more chewing time, so you may eat less, and most high fiber foods are high in vitamins and minerals and low in fat which can cut calories.

Some good sources of soluble fiber include legumes (pinto beans, kidney beans, black-eyed peas, etc), various grains (rice, oats, barley, corn), and some fruits and vegetables such as apples, oranges, carrots, and potatoes. Good sources of insoluble fiber include wheat bran, whole grains and fruits or vegetables such as strawberries, pears, bananas, green beans, broccoli and peppers. All these foods may contain both soluble and insoluble fiber.

The average American consumes 10-12 grams of fiber per day. The goal for fiber intake is 20-35 grams per day. Children need fiber too! For children ages three to 18, use the child's age plus five. For example, if your child is eight years old, he would need (8+5) 13 grams of fiber per day. You can achieve that goal by including at least 5 servings of fruits and vegetables and 6-11 servings of whole grain breads, cereals, rice and pasta. Check labels for the fiber content.

When increasing fiber, start slowly. Add one high fiber food, adjust to it, then add another and always remember to drink more fluids, at least 8 cups every day, to keep the fiber moving through your digestive tract.

Fiber Boosting Tips

1. Eat a variety of foods
2. Eat more legumes such as kidney beans, navy beans, lima beans and black-eyed peas. Add to soups, salads and casseroles
3. Enjoy fruits and vegetables, preferably with its peel. Examples include apples, pears, or plums. Substitute whole fruits for fruit juices. Add fruit to cereal, yogurt, muffins, or as toppings
4. Experiment with the more unfamiliar (but easy and delicious) grains such as barley, buckwheat, couscous and quinoa
5. Use potatoes, brown or wild rice, whole wheat pastas instead of foods made with white flour
6. Use whole grain bread products and add bran to muffins, pancakes, casseroles, or cereals
7. Add seeds or nuts to salads, muffins or breads. Trail mix or popcorn is a high fiber snack

Garden Wrap

1 cup cooked brown rice

1 cup each (chopped): tomato, zucchini, yellow squash, bell pepper

½ tsp each: garlic powder, dried oregano, lime juice

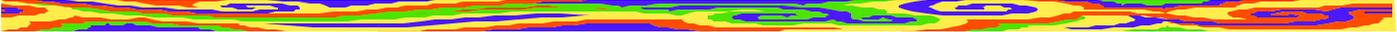
2 Tbsp balsamic vinegar

Dash hot pepper sauce

4 8-inch fat-free tortillas, warmed

Preheat broiler. Spread vegetables out on cookie tray and broil until vegetables are browned – about 12-15 minutes. Combine vegetables with rice, seasonings, vinegar, and pepper sauce. Spoon 1 cup of the filling down the center of each tortilla and roll up.

1 wrap contains about 10 grams of dietary fiber, 1 gram fat, and 180 calories



Fruit Smoothies: An Easy Way to 5-a-Day

2LT Liana M. Zacharias, Registered Dietitian

We have all heard the advice to eat at least five fruits and vegetables daily. I'm not sure about you, but for me that can be a huge challenge. Really, five? It seems like so many. I am lucky if I have five minutes to relax, let alone time to work in five servings a day. But I have found a trick to the madness, a simple way to achieve the goal of getting your fruit and all the wonderful nutrients that come along with it. And that trick is fruit smoothies. How simple! What could be easier and taste better than

a cold, smooth fruit shake? Take my word for it- nothing! Let me explain why this once fruit-neglector is now totally hooked on smoothies.

First of all, I am an aspiring dietitian. Therefore, engrained in my head is the long list of benefits of including more fruit in your diet. Fruit is packed with vitamins, including antioxidants, which are very important in maintaining health and preventing disease. It also is an excellent source of fiber, which may help prevent certain diseases and aids with staying regular. What is great about fruit smoothies, is that not only do you get the benefits of lots of fruit sources, but you get calcium as well. Calcium is crucial for strong bones and may help regulate blood pressure. So women especially, pay attention!

Second, if you want to find someone completely impaired when it comes to the kitchen, you don't have to look and further than yours truly. It is an understatement to say that I have no knack for cooking, but thankfully even I can work a blender. Making fruit smoothies is no harder than flipping a switch.

Anyone can do it, and good thing for me, there are no ingredients to burn.

Third, you can be creative! You can make fruit smoothies as exotic or as simple as you want. Try different fruit combinations, or try them with soy milk or frozen yogurt. The great thing about fruit smoothies is you can't go wrong. Indulge your taste buds, whatever fruits they desire. You are still providing a healthy way to increase the fruit sources in your diet. This aspect of fruit smoothies also makes them a great way to get kids to eat more fruit. Have your kids help pick the fruit and make the shakes, and watch them enjoy the dessert-like appearance, taste, and texture.

Last but not least, the ingredients in fruit smoothies are frozen, so they last a long time. I have a problem with buying fresh fruit because my roommate and I can't seem to eat it fast enough. It goes bad before we get to enjoy it. But fruit smoothies use frozen fruit, so you don't have to worry about buying too much at once. And once made, your smoothies can be frozen and saved for later.

So there it is, my love for fruit smoothies and the reasons why. I hope I have made believers out of all of you. With a little ingenuity, eating at least five a day is not only possible, but you won't want to stop there! Whether you eat them as a quick meal or a snack, fruit smoothies are a vitamin-packed way to a healthier you. I will leave you with my basic fruit smoothie recipe. Don't be afraid to come up with your own. Remember, fruit may be good for you, but it also tastes GOOD. Enjoy it!

Basic Fruit Smoothie

Ingredients:

2 cups plain nonfat or lowfat yogurt

½ cup skim milk

1 medium-size banana

1 cup unsweetened frozen berries;

(or 1 cup rinsed and hulled fresh berries and ½ cup crushed ice)

1 teaspoon vanilla

honey or sugar substitute to taste

Instructions:

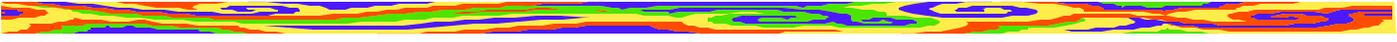
In a blender, combine yogurt, milk, banana, berries, and vanilla;

Whirl until smooth and frothy. Sweeten to taste with honey; then whirl again. Pour into glasses.

Yield: Makes 4 servings (about 1 cup each)

Nutrition Information:

Per serving: 121 calories, 8 g protein, 10 g carbohydrate,
1 g total fat, (0.6 g saturated fat), 5 mg cholesterol,
102 mg sodium.



Food and Fitness: Health for a Lifetime

LTC Joan M.G. Lyon, MS, RD, LD

Nutrition Staff Officer, USACHPPM

It's March, Spring is on its way, National Nutrition Month is here, and it's time to celebrate! What's there to celebrate? Good health for your lifetime! Have you already discovered that good nutrition and increased physical activity are a dynamic duo that can help you "be all you can be?" If you haven't, read on for enlightenment.

Here are just some of the ways in which healthy food choices and regular physical activity help you to achieve your mental, physical, and emotional best. They:

- ?? boost your energy level, strength, and endurance
- ?? help build and maintain healthy bones, muscles and joints
- ?? improve your physical performance
- ?? strengthen your mental stamina
- ?? improve your mood and attitude
- ?? enhance your appearance
- ?? reduce your risk of chronic disease

For soldiers, nutrition and fitness should be a part of personal preventive maintenance checks and services (PMCS). They are essential components of individual readiness.

How have we come to understand the power of nutrition and physical fitness? In August 1999, the American College of Sports Medicine, The American Dietetic Association, and the International Food Information Council jointly published the results of a collaborative research survey about healthy lifestyles. The survey results revealed a powerful consensus, and caused nutrition and physical activity professionals to agree that balanced nutrition and regular physical activity are essential for a healthy lifestyle. A quick look at your local magazine stand will confirm that nutrition and fitness information is a hot commodity for the American public.

Despite common knowledge that nutrition and physical activity are beneficial to health, there are still large gaps between Americans' knowledge and actual practice. Unhealthy eating behaviors and physical inactivity are serious national health problems. Annually, poor diet and lack of physical activity account for more than 300,000 deaths and cost Americans an estimated \$250 billion in medical costs and lost productivity. Surprisingly, more than 60% of American adults are not regularly active and 25% are not active at all. Sadly, this trend is not limited to adults. More than a third of young people aged

12-21 years do not engage in vigorous physical activity regularly. Participation in high school physical education is no longer mandatory and, in fact, has dropped over the past decade from 42% in 1991 to 27% in 1997. With regard to nutrition, the statistics are equally grim. Only 27% of adult women, 19% of adult men, and 30% of young people eat the recommended five or more servings of fruits and vegetables per day. The known benefits of eating five servings per day include reduced risk of developing heart disease, cancer, stroke, hypertension, and cataracts. Additionally, on a daily basis, we learn new information about the antioxidant and phytochemical properties of fruits and vegetables. However, two out of three Americans are not taking advantage of this powerful preventive medicine.

Although statistics show that the percentage of calories from total fat, saturated fat and cholesterol in our diets has decreased slightly, don't be fooled. In fact, this apparent reduction is because we consume more total calories than we did a decade ago, while fat intake remains about the same. Therefore, the percentage of calories from fat has decreased.

Decreasing physical activity and increasing caloric intakes are the primary reasons for the American trend toward overweight and obesity. Obvious reductions in activity level include labor saving devices such as automobiles, mass transit, and power tools such as riding lawnmowers and dishwashers. Additionally, leisure time is often spent doing sedentary activities such as watching television, playing computer games, and surfing the web, rather than playing ball, riding bicycles, or gardening.

So what can you do to improve your own nutrition and fitness? First of all, be practical and realistic. Set your goals for small changes over time. Physical activity doesn't have to be strenuous and it doesn't have to include sweating over exercise equipment in a gym. Look for ways to be more active in your daily life. At work, take the stairs instead of the elevator. Walk down the hall instead of using the phone or e-mail. Take a walk during your morning or afternoon break. People of all ages benefit from moderate physical activity such as 30 minutes of brisk walking five or more times per week. If 30 minutes at one time won't work for you, aim for two 15-minute or even three 10-minute sessions. At home, do those indoor chores with zeal - scrub that tub or stand up to do leg stretches while you fold the clothes. Get down on the floor and play with your children. Anything that increases your activity level counts! The Dietary Guidelines Alliance It's All About You campaign encourages increased physical activity with the following message -- "Walk the dog, don't just watch the dog walk!"

There are two easy ways to improve your nutrition. Eat at least five servings of fruits and vegetables per day and drink plenty of cool clear water. First, let's talk about fruits and vegetables. This is definitely a case where more is better! When you eat at least five servings of fruits and vegetables each day, you are more likely to get essential vitamins, minerals, and fiber and less fat and calories than are those who do not meet this goal. Have a contest among friends, co-workers, or family members. Try to eat a minimum of five servings of fruits and vegetables per day over the course of a month. Be adventurous – try a variety of brightly colored fruits and vegetables. Also, be flexible, it's okay to eat three servings one day and seven the next. The key is to average out a minimum of five each day.

Now let's focus on water. Water is necessary to maintain blood circulation, body temperature, and cell function; digest and absorb nutrients; and excrete body waste. The amount you need varies by weight and activity level. Most adults need 8-12 cups of water per day for maintenance. You need more when your activity level increases and when the outdoor temperature is high. It is a good idea to get some of your requirement from cool, clear water, but juices, coffee, tea, milk and other beverages count, as well.

Nutrition and fitness are synergistic. Practiced in combination, the two are more powerful than either practiced alone. Being physically active means you can eat a wider variety and larger quantity of healthy foods. In addition, healthy eating fuels physical activity across your lifetime. Use the National Nutrition Month 2000 theme – Food and Fitness: Health for a Lifetime -- as your mantra. Challenge yourself to incorporate healthy food choices and physical activity into your daily life.

Reliable nutrition and fitness information is posted on the following websites:

Fitness and Nutrition Service, Dept. of Health Promotion and Wellness, USACHPPM <http://chppm-www.apgea.army.mil/dhpw>

Tufts Nutrition Navigator: <http://www.navigator.tufts.edu>

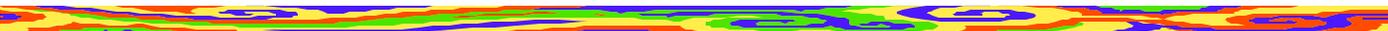
The American Dietetic Association: <http://www.eatright.org>

Department of Nutrition and Physical Activity, Centers for Disease Control and Prevention
<http://www.cdc.gov/nccdphp/dnpa>

The Physical Activity & Health Network: <http://www1.pitt.edu/~pahnet/>

To obtain professional guidance on improving your nutrition and physical activity, ask your primary care manager for a referral to a Registered Dietitian or Health Promotion Coordinator.

Soldiers who are interested in a personal exercise prescription should seek out the services of their unit's Master Fitness Trainer. If you have suffered from previous exercise-related injuries and feel that you need a program tailored to your medically-related condition, ask your primary care manager for a referral to a Registered Physical Therapist.



EASTER EGG SAFETY

2LT Suzanne Boudreau, Registered Dietitian

Easter is just around the corner. The Easter bunny comes this year on April 23, bringing with him Easter eggs with...salmonella? Luckily, this does not have to happen. Practicing safe egg handling

on Easter Sunday and everyday lowers the chance of eggs becoming contaminated with bacteria like salmonella.

The Food and Drug Administration considers eggs a “potentially hazardous” food. This does not mean you should stop eating eggs. It means you should give them special attention during refrigeration, handling, and cooking. You should handle eggs carefully like meat, poultry, fish, and milk to stop bacteria that causes food poisoning. Your chance of finding a contaminated egg is small, 1 egg in 10,000 to 14,000, but serious.

Salmonella enteritidis, or salmonella, is a common organism found in nature. It is found in the intestinal tracts of animals, insects, reptiles, fish, birds, and people. It is passed from the intestinal tract to the hands to food. Food and cooking surfaces can be contaminated with salmonella. Victims of salmonella poisoning can pass the organism to others weeks after their attack. If you develop food poisoning from salmonella, called salmonellosis, you’ll experience cramps, fever, diarrhea, headache, nausea, and vomiting. They last for 2-5 days. It is more serious in infants, pregnant women, the elderly, the ill, and people with declined immunity. It rarely causes death in otherwise healthy adults.

Salmonella need food, moisture, and the right temperatures to grow. The organism doubles every 20 minutes and one organism can become a million within 6 hours. Salmonella will not grow in temperatures below 40°F. The fastest growth occurs at temperatures between 40°F and 140°F. This is called the danger zone. Salmonella will die in temperatures above 160°F. Therefore, correct refrigeration and cooking is needed to stop salmonella growth.

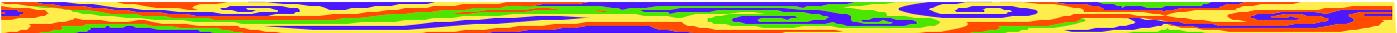
Safe egg handling starts at the grocery store. Open egg cartons before buying. Look for clean and whole eggs. Avoid cartons with cracked eggs since this may be a sign of salmonella contamination. Buy refrigerated eggs and avoid eggs kept at room temperature along the aisle. Eggs age more in one day at room temperature than in a week in cold storage. Eggs can be kept 4-5 weeks beyond the freshness date if they are kept refrigerated. Store raw eggs in their carton in the refrigerator. The eggshell has almost 17,000 small holes where the egg absorbs odors and flavors. Carton storage keeps the odors and flavors out and keeps the eggs fresh. Egg manufacturers coat the eggshell with mineral oil to close the holes to possible contamination.

Easter is an important season to practice egg safety. More eggs are handled at this time of year, and each occasion gives eggs a greater chance to be contaminated with bacteria. Always wash your hands before cooking, cooling, dyeing, hiding, and eating Easter eggs. The first step in handling Easter eggs is proper cooking. The American Egg Board recommends the following hard-cooked technique. Place a single layer of eggs in a saucepan. Cover with water at least 1 inch above the eggs. A fresh egg will sink while an older egg will stand in water. One tablespoon of vinegar added to each cup of water gives better dye coverage. Cover the saucepan and bring to a boil. Turn off the heat at 15 minutes. The eggs’ yolks and whites should now be firm, not runny, to eliminate salmonella risk. Let eggs stand, covered and in water for 15 minutes. Run cold water over the eggs until completely cooled. If the egg spins easily rather than wobbling, it is a finished product. Boiling an egg removes the mineral oil coat from its shell. Having no barrier leaves the hard-cooked egg a target once again for bacteria.

Continued proper handling will keep the egg and consumer safe. If the eggs won’t be colored immediately, place them back in the refrigerator. When hiding eggs, avoid places where eggs might be near pets, birds, reptiles, wild animals, insects, or lawn chemicals. Refrigerate eggs again after they are hidden and found. If the eggs are used as a decoration and left out for hours, do not eat them. Throw them away after use. Don’t eat cracked eggs or eggs out of cold storage for two hours or more. Hard-

cooked eggs, like all high-protein foods, shouldn't sit out at temperatures above 40°F longer than two hours. Use hard-cooked eggs in a recipe or eat them within a week. Some manufacturers sell pre-cooked Easter eggs either decorated or plain. They are coated with resin for extra protection against bacteria. They can be stored for two weeks rather than one.

Now that Easter eggs can be enjoyed and eaten, it's good to know eggs are an "egg-cellent" nutrition source. A large egg has only 75 calories and 5 grams of fat. Although they are high in cholesterol, 215 milligrams per egg, this amount is no more than an ounce of cheese. A large egg contains only 1.5 grams of saturated fat, and saturated fat increases heart disease risk more than dietary cholesterol. They have 13 essential vitamins and minerals, including vitamins A, D, and B12. Eggs are second only to mother's milk for human nutrition based on the protein they provide. A single egg gives 10% of protein needed in a day. They contain the highest quality food protein known and are used to judge other proteins. Eggs are an important part of a healthy diet, and should not be avoided due to "salmonella fear". Salmonella has little chance of causing egg contamination or food poisoning when safe egg handling is done. Practice these hints during this season and throughout the year. Don't forget to tell the Easter bunny, too!



“There’s the beef...now where’s the research?”

The scoop on high protein, low carbohydrate diets.

Jennifer M. Sherwood, Registered Dietitian

New diet fads, such as high protein, low carbohydrate diets, are all the rage. Despite the fact that they aren't actually new but began in the 70's, diets like the Atkin's diet, the Zone, Sugar Busters, and Protein Power are suddenly gaining immense popularity. Why are these diets gathering such a following? They use intelligent and knowledgeable-sounding words to entice and lure their innocent prey, such as ketones and "lose all the weight while eating anything you want." But within this pile of jargon stuffed into their books and speeches, there seems to be something missing...RESEARCH! Oh, and I almost forgot... They lack the support of most of the scientific community including the American Dietetic Association, the American Cancer Society, and the American Heart Association, just to name a few.

Why don't these diets work? High protein advocates state that carbohydrates induce weight gain, increase fat storage, and cause hunger. They also theorize that without excess carbohydrates, your body will turn to its fat stores for fuel. Unfortunately, these claims rely on unpublished, poorly controlled research. Without this, they have little respect in the scientific community.

Your body converts all calories to glucose regardless of whether those calories come from carbohydrates or protein. The calories not used for energy are stored as fat. It's your overall caloric intake, and not carbohydrates, that causes weight gain. You also need to be careful because foods high in protein, such as beef, are also high in saturated fat, which may increase your blood cholesterol levels if consumed in excess.

So why are people losing weight on these diets? The initial weight loss may be because people decrease their total calories and may become dehydrated. While many people experience weight loss, there is little research demonstrating that they keep it off long-term. In a study published in the

American Journal of Clinical Nutrition in 1997, the National Weight control Registry monitored the dietary intakes of 629 women and 155 men, who lost an average of 66 pounds and kept at least 30 pounds of it off for 5 years. The findings showed that they weren't eating a high protein diet. When distributing their intake, the participants ate an average of 19% protein, 24% fat, and 56% carbohydrates and emphasized increasing fruits, vegetables and fiber. They also reported eating less meat.

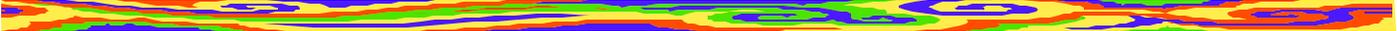
Can high protein diets cause harm? When the body relies almost entirely on stored fat for energy, large quantities of fatty acids appear in the liver, producing excess ketone bodies that the body can't break down. This leads to an unhealthy increase in acidity in the body fluids. High protein proponents claim that ketones are beneficial to the body, acting as a preferable source of energy for the brain. These claims are, however, not based on scientific research. In fact, glucose is the preferred source of energy for the brain.

Too much protein can have harmful side effects. Kidney function decreases with age, which leads to a decreased ability to handle excess protein waste products. Chronic protein overuse may contribute to this decrease in function. Your body only uses a certain amount of protein leaving the rest to waste. Our bodies can't metabolize one of the components of protein, nitrogen. Because the body disposes of nitrogen through urine, an abundance of protein stresses the kidneys, and may cause kidney stones and dehydration.

The key to victory in the weight loss war is variety and balance. It must be a life change of healthful eating and exercise. The recommendations of the scientific community for weight loss are as follows:

- ?Provide intake no lower than 1200 calories a day
- ?Eat a variety of foods to ensure no nutrient deficiency.
- ?Provide a negative caloric balance (more calories used than taken into the body) of no more than 500-1000 calories, resulting in gradual weight loss. Lose no more than 1-2 pounds per week.
- ?Use behavior modification techniques to identify and eliminate diet habits that contribute to overeating.
- ?Include an exercise program that promotes a daily caloric expenditure of 300 or more calories. For many participants, this may be best accomplished with low intensity, long duration exercise (30 minutes to an hour), such as walking or jogging.
- ?The new eating and physical activity habits should be continued for life in order to maintain the achieved lower body weight.

People not only eat to get energy, but also for emotional reasons. There is no easy way out, no magic pill, when it comes to weight loss. Losing weight and keeping it off has to do with eating a variety of foods in moderation and exercising, as well as learning to get pleasure from things other than food. Most major health organizations including the American Heart Association, the American Cancer Society, the Food and Drug Administration, and the National Cholesterol Education Program endorse a high carbohydrate diet consisting of roughly 30% fat, 10% protein, and 60% carbohydrate. Dieters need to take care to eat a variety of foods and not reduce their caloric intake to unhealthy levels. When it comes to high protein low carbohydrate diets, dieter beware. Hard work and a change in lifestyle is the only way to lose weight and keep it off. Investigate any diet that tells you otherwise before trying it. It may prevent you from making an unhealthy choice and may even save your life.



TRANS FAT: THE HIDDEN FAT

2LT Amber A. Burg, Registered Dietitian

We hear a lot of talk these days about saturated fats and unsaturated fats. But how many of you have heard about trans fats?

Food manufacturers make trans fat when they add hydrogen to vegetable oil, making the oil more solid, less likely to spoil, and less greasy tasting. Consequently, many margarines, processed foods, and fast foods contain trans fat. Small amounts of trans fat are also found naturally in some beef and dairy products.

Saturated fat, which is “saturated” with hydrogen, is found in red meat and dairy products, as well as coconut and palm oils. It raises your blood cholesterol, increasing your risk for coronary artery disease. The unsaturated fats (monounsaturated and polyunsaturated) contain less hydrogen. Olive oil and canola oil contain high levels of monounsaturated fat, while other vegetable oils and fish oils contain mostly polyunsaturated fat. These types of fat don’t seem to increase blood cholesterol and may actually lower cholesterol.

Recent studies suggest that trans fat may be as bad for your heart as saturated fat. Trans fat has been shown to not only raise your “bad” (LDL) cholesterol levels, but also lower your “good” (HDL) cholesterol levels. This fact, added to other findings, reinforces the theory that trans fat can increase a person’s risk for coronary heart disease.

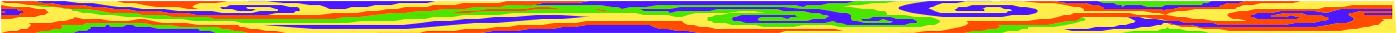
Trans fat is often called the “hidden fat” because the amount of this substance is not listed on current food labels. The Food and Drug Administration may soon require that trans fat levels be listed on all food labels. But until then, you can do something to decide which foods are high in trans fat. You can look at the ingredient lists on food products, watching for the words “hydrogenated” or “partially hydrogenated”, which are both trans fats. You won’t be able to tell how much trans fat is contained, but you will know that it is there.

Now that you are familiar with what trans fat is and how it can affect your body, here are some tips to avoid eating too much of this “hidden fat”:

- Cook with olive, canola, or other largely unsaturated vegetable oils instead of margarine or shortening.
- Choose tub or liquid margarine rather than stick margarine. Stick margarine contains more trans fat than the softer versions.
- Try trans fat free margarine, such as Promise and Smart Beat brands. Fleishmann’s trans fat free margarine is also low in saturated fat.
- Avoid processed pastries and baked goods. These items often contain hydrogenated oils. Read the food labels.
- Limit intake of commercially fried foods, such as french fries, chicken wings, and batter-dipped items. Restaurants often use hydrogenated oils to fry their food.
- Look for snack items that are trans fat free. Such products include Barbara’s Chocolate Chip Crisp Cookies and Hain Stone Ground Whole Wheat Crackers.
- Eat more fruits and vegetables and less meat and high-fat dairy products.

- Lower total fat intake to <30% of total calories. By lowering the total amount of fat you eat, you will likely lower the amount of trans fat in your diet.

All of these tips listed above are good tools to lower the amount of trans fat you eat. Trans fat has been shown to be bad for your heart and cholesterol levels, and is not always easy to identify in foods. But now, you have the power to discover these usually hidden fats in the food you eat.



Back to School: Eat to Learn
CPT Sarah Flash, Registered Dietitian
“Providers” BN Newsletter

School bells are ringing once again and kids are running out the door. Do your kids go without breakfast? What about a healthful lunch? As many as one out of six fifth-graders skip breakfast. Even more teens skip meals. The habits they start now will be with them for a lifetime. So, teach them to fuel up before starting their day.

Starting the day without breakfast is a mistake! If your kids missed breakfast today, they may find concentration is harder--shortening their attention span and impairing verbal fluency. Kids who eat breakfast are more alert, more creative, perform better in school, are tardy less often and are less likely to be overweight. Breakfast can be quick—cereal and milk along with juice, yogurt and fruit, a bagel with cheese, peanut butter and jelly sandwich, raisin toast with milk or a slice of pizza. Get your kids involved in meal planning, eat breakfast with your kids when possible and be creative!

Do your kids get tired of the same brown bag lunch? Pack lunch with a nutritious punch. Instead of the same boring sandwich everyday, try sandwiches on bagels, pitas, tortillas or other types of breads and vary the sandwich filling. For example, a pita or tortilla packed with beans, salsa, and cheese can make a nice switch. For side treats, try bite-size fruits on a kabob with marshmallow dip or vegetables with dip, such as grapes, berries, baby carrots, or pepper strips. For a sweet touch, choose lowfat granola or other cereal bars, vanilla wafers or other lowfat cookies, graham crackers with peanut butter, or pudding. A container of frozen yogurt can serve as an ice pack as well as a tasty treat.

Do not forget nutritious beverages. Although beverages like soft drinks can fit into a healthful eating plan, one study found that 25% of teens drink more than two cans of soda a day and preschool children drink an average of 9 oz of soda per day. When soda replaces more nutritious beverages like milk or 100% fruit juice, your kids may be missing out on crucial nutrients like calcium, riboflavin, Vitamins A and C and folate. Start the school year right with good habits to last a lifetime!

Quick Orange Julius

This popular breakfast drink can also serve as a delicious after school snack.

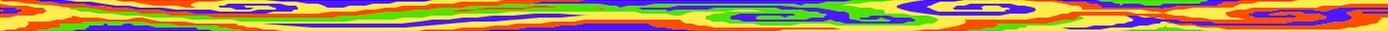
8 oz nonfat plain yogurt

1 can (6 oz) frozen orange juice concentrate

2 ½ cups skim milk

1 tsp. vanilla extract

Blend ingredients until smooth. Makes six 6-oz servings. (115 calories)



High Protein, Low Carbohydrate Diets: Thin for Life?

CPT Lori Hennessy, Registered Dietitian

Sugar Busters! Protein Power. The Zone. Dr. Atkins New Diet Revolution. Hordes of Americans are swapping cereal and milk for bacon, eggs, and steak as the latest diet craze sweeps across the country. High protein, low carbohydrate diets are in and the Food Guide Pyramid and sensible eating is out.

These diets operate on the same basic principle: carbohydrates make you fat while protein helps you lose weight. Finally—what the American public has wanted to hear for years—eat all the beef, chicken, pork, and eggs you want and lose weight! In fact, the Sugar Busters! web site entices you to “forget about the fight against fat. Break the sugar-starch habit today and enjoy steak, eggs, cheese, even wine, as you get healthy and lose weight.” The authors make losing weight sound like fun.

The diets are slightly different, but the primary claim is that carbohydrates increase insulin levels in the blood which then causes carbohydrate, or sugar calories to be stored as fat. The truth about this statement is that insulin is released into the bloodstream when carbohydrates are consumed. However, carbohydrates are only stored as fat when one eats more calories than needed, regardless of whether it is fat, protein, or carbohydrate calories.

Some people who have large waists release more insulin when simple sugars like sodas, candy, cakes, and cookies are consumed. The insulin quickly removes the excess sugars from the bloodstream, which lowers blood sugar. Eating sugary foods does not necessarily result in more fat storage, but it does tend to increase the feeling of hunger again, which can lead to overeating. Therefore, eating carbohydrates does not cause problems with insulin. Being overweight and inactive cause insulin problems.

Why do people lose weight on these diets? The recommended meal plans provide 850 to 2000 calories a day, which is significantly less than the average American consumes on a daily basis. Since carbohydrates are stored in the body with lots of water, initial weight loss results from the rapid depletion of carbohydrate stores. Subsequent weight loss occurs as the body “eats” its muscle tissue for energy since daily caloric intake is not enough to meet the body’s requirements. Eventually the body may burn some fat stores, however, body fat may actually increase as a combined result of eating more fat and the body’s ability to hold on to fat stores as it uses muscle and other major organs for energy.

When too few carbohydrates are consumed, the liver converts body fat and dietary fat into energy. This condition is called ketosis. Ketones are by-products of ketosis, and if they are not excreted in the urine, they can reach toxic levels in the bloodstream. Your liver and kidneys work harder than usual to excrete them. To reduce the risk of ketone toxicity, very low carbohydrate diets (5 to 25 grams of carbohydrates per day) should not be consumed for more than 14 consecutive days. Side effects of ketosis include nausea, weakness, dehydration, fatigue, insomnia, and “fruity” breath. A diminished appetite, considered to be a favorable side effect, is the most common. Consuming approximately 100 grams of carbohydrates per day can prevent ketosis.

High protein diets should be used with caution. Persons with known kidney disease or a family history of kidney problems should be especially cautious since these diets can potentially exacerbate or cause kidney complications.

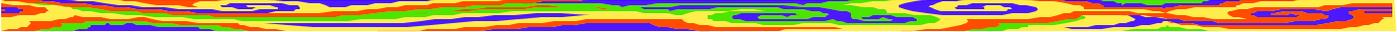
Another risk to eating high protein diets is the impact on heart disease. Many people experience a reduction in blood cholesterol levels during weight loss, regardless of the type of diet. However, high protein diets can be much higher in fat than one typically consumes. High fat diets can increase the risk for heart attacks, stroke, and some types of cancers. High protein, low carbohydrate diets may be critically low in potassium, vitamins A and C, folic acid, carotenoids, and fiber—all of which help to prevent certain cancers and heart disease. Additionally, these diets may be dangerously low in calcium, which is necessary for strong bones and the prevention of osteoporosis.

So what do you do if you want to lose weight and maximize your nutrition intake? Follow the advice of the USDA's Food Guide Pyramid for portion sizes at <http://www.nal.usda.gov:8001/py/pmap.htm> and exercise regularly. To lose weight healthfully and maintain high levels of energy throughout the day, eat at least 3 meals a day and add small snacks if you are hungry. A good rule of thumb is to eat breakfast like a king, lunch like a prince and dinner like a pauper. Unfortunately, too many Americans consume the majority of their calories at the end of the day, and not during the day when food (fuel) is needed.

Upcoming classes:

“Eat More, Weigh Less: Practical Strategies for Weight Control” on 24 October from 1145 – 1245 in Wil Washcoe Auditorium. Presented by CPT Lori Hennessy, Registered Dietitian.

“Nutrition for the Real World: Eating well when you hardly have time to breathe” on 13 November from 1145 – 1245 in Bliss Hall Auditorium. Presented by Dayle Hayes, a Registered Dietitian and author who is nationally known for her creative approach to healthful eating. Call 245-4511 for more information on the classes.



Combat Stress and Depression with Good Eating Habits

CPT Sarah Flash, Registered Dietitian

“Providers” BN Newsletter (Theme “Stress”)

Depression and stress are not caused by a poor diet, but a link between food and mood can exist. When one becomes depressed, energy level and drive are much lower than usual. Enthusiasm for most things, including meals, is lost. Healthy eating practices can suffer as a result. Carbohydrates are an important component to a healthy diet to combat depression and should comprise 50-60% of daily intake. Carbohydrates increase the brain's production of serotonin which heightens feelings of well-being and mood. Carbohydrates come from plant foods like fruits, vegetables, beans and whole grains and also are supplied in milk. When under stress or depressed, avoid alcohol. Many people think alcohol makes them feel “good”, but it is actually a depressant. Consuming alcohol can contribute to nutritional deficiencies of vitamins needed for good mental health.

Long-term stress can cause damage to the body and increase risk of becoming ill. In addition, many people respond to stress by overeating. Prolonged stress can lead to chronic health conditions like heart disease, stroke, cancer or ulcers. However, studies have shown that eating a diet with plenty of

fruits, vegetables, and whole grains is protective against the harmful effects of stress. Antioxidants and phytochemicals are substances found naturally in plant foods that can boost immune function and reduce the risk of disease. Some top sources of antioxidants include broccoli, cantaloupe, papaya, spinach, asparagus, carrots, tomatoes and peaches. Foods rich in phytochemicals include tomatoes, romaine lettuce, pink grapefruit, sweet potatoes and soy products. To get the benefits of these important nutrients, eat at least 5 fruits and vegetables every day. Getting these important stressbusting nutrients has been shown to be more effective if taken in food form rather than supplement.

When stressed;

- ☞☞ Don't binge or grab whatever is in sight. Take time for eating well
- ☞☞ Include plenty of carbohydrate foods like fruits, vegetables, and grains.
- ☞☞ Limit caffeine and alcohol.
- ☞☞ Do something other than eating. Exercise can relieve some of that stress.
- ☞☞ Try quick foods and recipes. Order in if you have to, but don't skip meals
- ☞☞ Take time out for a healthful breakfast

Sesame Spinach

Serves 4

1 teaspoon sesame oil

2 cloves garlic, minced

½ onion, chopped

1 ½ lbs fresh spinach

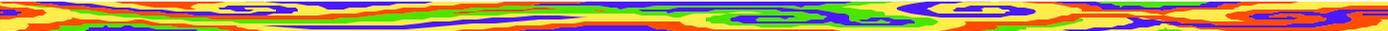
1 teaspoon soy sauce

1/8 teaspoon ginger root, peeled and minced

2 Tablespoons sliced water chestnuts, rinsed and drained

2 teaspoons toasted sesame seeds

Place oil in measuring cup with garlic and onion, and microwave on high 1 minute, until tender. Wash spinach well and cut off tough stems; place in a 4-quart casserole with just water left on leaves. Cover with vented plastic wrap and microwave on high 4-6 minutes, stirring once, until wilted. Drain spinach; mix with onion and garlic mixture. Add soy sauce, ginger root, and water chestnuts and microwave on high 1 more minute. Toss with sesame seeds and serve.



A Nutritious and Delicious Holiday Season

CPT Sarah Flash, ACES, Registered Dietitian

The holiday season brings a cornucopia of delicious cuisine and it's everywhere...family gatherings, office parties, military functions, and at home. And, you are gearing up to starve yourself so you can enjoy all your favorites. Don't fret...traditional holiday treats can fit into a healthful eating plan. The secret is to be sensible and flexible with your choices, balance what you eat with other meals, watch portion sizes and get moving. Exercise remains vital to health and fitness all year long.

Take the worry out of eating by cutting back on fat and calories without sacrificing taste. It's easy! Fat is out, flavor is in. Packing nutrient dense fruit purees into baked goods and other menu items

is one way to get more flavor and less fat. Fruit purees have many of the same properties as fat in recipes. By replacing the fat with fruit purees, the result is a moist, flavorful product which is lower in fat and calories and offers slightly more nutritional value.

Scientific facts show that fruits and vegetables offer us unique health benefits. Researchers continue to find a strong link between increased fruit and vegetable consumption and the decreased risk for chronic diseases such as cancer, heart disease and stroke. More is emerging about the positive role of fruit and vegetable consumption and reduced incidence of cataracts, diverticulosis, high blood pressure, and chronic obstructive pulmonary disease (COPD). Additionally, we can not overlook the important role fruits and vegetables play in weight management and control of diabetes.

With a variety of valuable nutrients present in autumn orange and green vegetables and fruits, the secret to healthful eating is getting your “5 A Day for Better Health”. However, do not stop at 5 servings, go for 5-10 servings! What about pumpkin, sweet potatoes, squash, carrots, spinach, cranberries, oranges, cabbage or leeks? Fall orange vegetables like sweet potatoes, pumpkin and carrots; for example, are excellent sources of beta-carotene which is an antioxidant and may protect against cancer and they add color to the plate, serving line and dining experience. Fruits and vegetables are also good sources of fiber, folic acid and potassium.

Fruit purees come commercial as in applesauce, pumpkin puree, prune puree, baby foods and other canned purees. They can also be prepared using dried or fresh fruits.

Examples of fruit puree in recipes:

- ☞☞ Replacing fat-laden sauces
- ☞☞ Berry sauces for entrees or desserts
- ☞☞ Glaze for vegetables, pork, chicken, or ham
- ☞☞ Baked goods

Cranberry Pumpkin Bread (Recipe from “Secrets of Fat-Free Baking”)

Yield: 16 slices

2 cups whole wheat pastry flour

1/3 cup light brown sugar

1 tsp baking soda

1 tsp baking powder

1 tsp pumpkin pie spice

1 cup whole berry cranberry sauce

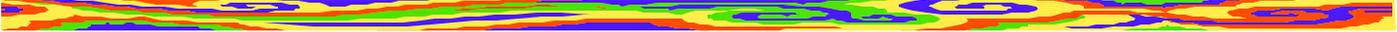
3/4 cup cooked mashed pumpkin (or commercial variety of pumpkin puree)

1/4 cup apple or orange juice

Combine flour, sugar, baking soda, baking powder, and pumpkin pie spice and stir to mix well. Add the remaining ingredients and stir just until the dry ingredients are moistened. Coat a 8x4 in loaf pan with nonstick spray. Spread the mixture evenly in the pan and bake at 350 F for about 50 minutes, or just until a wooden toothpick inserted in the center of the loaf comes out clean. Remove the bread from the oven, and let sit for 10 minutes. Invert the loaf onto a wire rack, turn right side up and cook before slicing and serving.

Nutritional Facts (per slice)

Calories:	100
Fat	0.3 grams
Fiber	2.5 grams



Exercise Away Holiday Stress

CPT Sarah Flash, ACES, Registered Dietitian

The holiday season can result in added stress due to time crunches and demanding schedules. In addition to the usual routine, now there is additional shopping, baking, and holiday parties. To make more time, you may be tempted to cut exercise from your routine. Don't make this terrible mistake! Physical activity can help relieve the stress of the holidays, not to mention exercising away all those calories in holiday goodies. Shoot for thirty minutes of aerobic activity most days of the week in addition to muscle strengthening and flexibility exercises. Use those thirty minutes to recharge your spirits and organize what you need to do. Choose physical activities that you love to do and include your family in the activities. Get your kids into the act early – and they will enjoy a lifetime of fitness and fun! How about this holiday gift idea – give a gym bag packed with exercise gear such as water bottle, clothes, videos or other pertinent items.

In addition to keeping activity in your routine, remember to stay hydrated. With the colder weather, you lose water as your body works to stay warm, so include plenty of water-based fluids – eight to twelve cups per day. Remember alcohol and caffeine-containing beverages like coffee and be dehydrating and are not as effective for hydrating.

Eating patterns are also important. During periods of stress, some people will eat less, some may eat more, and others may turn to alcohol or subsist on coffee. Each scenario can cause an imbalance of neurotransmitters resulting in mind and body that looks, feels, and reacts poorly. Timing of meals is important. Skipping meals exhausts glucose reserves leaving your brain and body with an energy deficit. Eating every 4-6 hours refuels your mind and body and replenishes those glycogen stores. Choose carbohydrate snacks like pretzels, bagels, fruits, vegetables, yogurt, crackers or cereal to meet your nutritional demands between meals.

Have you ever gotten sick while under a lot of stress? Stress reduces the ability to fight colds, infections, and disease, leaving your body vulnerable to attack. Eating a diet with plenty of fruits, vegetables, and whole grains is protective against the harmful affects of stress. Antioxidants and phytochemicals are substances found naturally in plant foods that can boost immune function and reduce the risk of disease. Some good food sources of antioxidants and phytochemicals include broccoli, tomatoes, carrots, spinach, greens, peppers, sweet potatoes, cantaloupe, pumpkin, apricots and soy. Keep fruits and vegetables readily accessible and grab some for the road!

