Back to school means packing lunches in some families. Children want their lunch to be tasty and quick to eat. Parents want to make quick, nutritious lunches. A little planning and creativity will combine these goals.

Welcome to the lunchroom
Picture a large room full of excited, hungry kids all talking, laughing and eating at once. Children are eager to talk with friends and anxious to get to recess. Research shows that having recess before lunch improves food consumption. Unfortunately, many schools cannot have recess before lunch due to scheduling and space problems. As a result, children may not eat all of their lunch because they want to go play. So when you send a lunch, make it quick and easy to eat.

What’s in your child’s lunch?
Prepackaged foods for kids’ lunches are widely available. However, that convenience is expensive and often poor in nutritional quality containing high calories, fat, sugar or salt. Preparing lunch yourself will save money and improve nutrition.

Follow the MyPlate.gov guidelines for healthy eating. MyPlate reminds us to make half of the lunch vegetables and fruits and then add a grain, protein and dairy food. These characteristics also add appeal: color, crunch, fun shapes, and enticing smell. Keep your child’s portion sizes reasonable.

Involve your children in planning and making their lunch. This way they have a say in what they eat. Teach older children and teens to prepare part or all of their lunch – either the night before or in the morning.

continued on page 2
Keep it safe
Use an insulated lunch bag to keep food cold. Add a cold pack if any of the foods require refrigeration such as yogurt or a turkey sandwich. If you send hot foods - soup or leftovers, then keep the food hot in an insulated container. Preheat the container first with hot water and then pack the food very hot, so it stays hot and safe until lunch. Tell your children if they have a hot food in their lunch and to be careful when opening the container. Young children may have trouble opening the container or spill the hot food while opening and they could burn themselves.

Add some fun
Use colorful, easy open, reusable containers. Put funny stickers on plastic bags or decorate with permanent markers. Young children love to find a note or joke from Mom, Dad or Grandma in their lunch bag. Add a colorful napkin.

Correction
The editors would like to thank Cindy Rovins for her assistance with the preparation of the cover article, 2012 Visions Volume 24 Issue 2, “Reading Writing and Radicchio: NJ Students Learn How to Grow Healthy” which was reprinted from the NJAES web spotlight launched 10.31.2011 at: http://njaes.rutgers.edu/spotlight/growhealthy.asp
Diabetes is a chronic disease that impairs the body’s ability to use food properly, resulting in higher than normal levels of sugar (glucose) in the blood. Diabetes has been increasing in prevalence in the United States over the last few decades. If uncontrolled, diabetes can lead to many other health complications, such as heart disease, stroke, kidney disease, blindness and amputations.

Is Diabetes a Problem in Youth?
Diabetes can affect people of all ages! Currently 1 in 549 youth under the age of 20 are diagnosed with diabetes. There are two types of diabetes that occur in children/adolescents, with different causes and risk factors. It’s important to understand the facts to reduce a child’s risk.

What is Type 1 Diabetes?
Type 1 diabetes (formerly called juvenile or insulin-dependent diabetes) represents more than 80% of the childhood cases diagnosed between birth and 9 years of age. It most commonly affects children and young adults under the age of 30, although it can occur later in life.

In Type 1 diabetes, the cells of the pancreas that produce insulin (the hormone needed to process food) are destroyed by the body itself. The end result is high levels of glucose in the bloodstream. Needed insulin must be replaced through daily injections or through an insulin pump. Proper diet and physical activity are also important treatment factors to help manage blood glucose levels.

What is Type 2 Diabetes?
Between 90-95% of all cases of diagnosed diabetes today are Type 2. Historically found in older adults, Type 2 diabetes is currently on the rise in youth and adults, largely due to increases in overweight/obesity which decreases insulin efficiency in the body known as insulin resistance. Type 2 diabetes may reflect from 6% to 76% of the cases diagnosed in youth between the ages of 10 and 19, depending on the population studied.

There is a strong genetic link in Type 2 diabetes, but environment also plays a role, since individuals within a family tend to have similar eating and physical activity habits. In general, if one parent has Type 2 diabetes, a child’s risk is 1 in 7. If both parents have it, the child’s risk can be as high as 1 in 2. Native Americans, African Americans, Latinos, Asian Americans, and Pacific Islanders have a greater risk. Treatment for Type 2 diabetes includes following a healthy lifestyle including a healthy diet, physical activity, and medications, if needed.

How is Diabetes Diagnosed in Children?
Symptoms of diabetes may vary among individuals and circumstances. Type 1 diabetes is typically diagnosed when insulin production has dropped to a critically low level in the pancreas, resulting in high blood glucose levels. These classic symptoms include excessive hunger and thirst, frequent urination, unintentional weight loss, blurred vision, and fatigue.

Symptoms of Type 2 diabetes/pre-diabetes may be more subtle than in Type 1, or absent completely. With this in mind, the American Diabetes Association has established screening guidelines for high risk youth as follows:

If the child is overweight or obese, plus any 2 of the following risk factors:
• Family history of Type 2 diabetes including being within a high risk race/ethnicity group

continued on page 8
Dementia is the loss of cognitive functioning—thinking, remembering, and reasoning—and behavioral abilities to such an extent that it interferes with a person’s daily life and activities. It ranges in severity from the mildest stage, when it is just beginning to affect a person’s functioning, to the most severe stage, when the person must depend completely on others for basic activities of daily living. Many conditions and diseases can cause dementia, one of which is Alzheimer’s disease.

According to the Alzheimer’s Association, there are about 5.4 million people in the United States suffering from Alzheimer’s disease, with reported cases developing every 69 seconds. The cost of this disease as of 2010 was $202.6 billion. Trends of this disease are expected to climb to 16 million people by 2050. However, with growing research Americans may be able to decrease its incidence. Nutrition plays a role in dementia prevention and recent findings show the importance of a healthy diet.

One of the most significant recommendations for improving brain function is consuming a high intake of omega-3 fatty acids due to its role in dilating the blood vessels and decreasing inflammation. The healthier choice is to avoid high intakes of saturated or trans fats and consume polyunsaturated or monounsaturated fats instead. In order to achieve this goal, it is suggested mature adults consume two to three fish meals per week. Some vegetable oils, walnuts, and seeds are also high in omega-3 fatty acids.

In a newly published study in the Journal of Neurology, researchers showed that people whose diets contained the most omega-3 had the lowest blood levels of a protein known as beta-amyloid. Beta-amyloid deposits are often found in the brains of people with Alzheimer’s disease on autopsy. Older people with no evidence of age-related memory loss were questioned about the foods they ate to determine their intake of key nutrients like vitamins B12, C, D, and E, beta-carotene, and various fatty acids. Blood tests conducted an average of a year after the dietary survey revealed that people who ate the most omega-3 fatty acids had lower beta-amyloid levels. Two dietary omega-3 fatty acids known as alpha-linolenic acid (ALA) which is abundant in soybean oil, canola oil, walnuts, and flaxseed; and docosahexaenoic acid (DHA), found in salmon, sardines, tuna, and other fatty fish made a difference. Even a small increase in omega-3 fatty acids over the daily average was associated with lower beta-amyloid levels. This association was not seen with other nutrients. It is possible that diet may help to protect the brain as well as the heart.

A 2010 study also suggested a link between the omega-3-rich Mediterranean diet and protection against Alzheimer’s disease. The Mediterranean diet includes plenty of fruits, vegetables, nuts, and fatty fish, but is low in red meat, processed meats, butter, and other high-fat dairy products. This study involving more than 2,000 older people with no evidence of memory decline, found that those whose diets most closely followed the Mediterranean model, were the least likely to develop Alzheimer’s disease over four years of follow-up. Eating a healthy, well-balanced diet seems to be the best recommendation for staying healthy for the body and brain.

In the vitamin D study of 858 adults aged 65 and older, those with the lowest blood levels of vitamin D -- less than 25 nanomoles per liter of blood -- were 60% more likely to show signs of general cognitive decline during the six-year study and 31% more likely to show declines in their ability to plan, organize, and prioritize than their counterparts who had sufficient blood levels of vitamin D. These findings appeared in the Archives of Internal Medicine.

Experts, including the study researchers, caution that it is still too early to make any blanket recommendations about what individuals should eat and what supplements they should take to reduce their risks for age-related cognitive decline and dementia. The age old prescription of eating a variety of fresh, healthy foods daily can go a long way in promoting health, preventing disease and contributing to a healthy life.

For more information:
How to Become a Seasonal Eater

Domenica A Caporusso, Dietetics Student, Indiana University of Pennsylvania
Luanne J. Hughes, MS, RD, FCHS Educator, Gloucester County

More and more, consumers are making the choice to “eat seasonally,” allowing Mother Nature to dictate what they select to eat. “Eating seasonally” means eating a variety of local foods that are in season and at peak flavor during that particular time of the year; making locally grown foods the foundation of your daily meals; and making a conscious decision to support local farmers and growers by choosing as many foods as possible from your local state or region.

Along with new flavors and great-tasting opportunities, buying locally grown, “in-season” produce offers many benefits – to you, your community and even the local economy. Not only is seasonal eating good for your health because it adds variety, freshness, quality, and food safety to your diet, but it also supports local farmers by increasing their sales, helps maintain jobs within the community, and protects the environment.

For many consumers eating seasonally is a frame of mind, a conscious decision to support local farmers, preserve our agricultural heritage and help the environment while eating fresh, healthy fruits and vegetables. Use these tips to help take a more seasonal approach to eating:

• Make Use of Labels and Signs – Since 2009, stores are required to use Country of Origin Labels (C.O.O.L.) on their produce. These labels can help you learn where your produce was grown.

• Learn What’s In Season – To help find locally grown, in-season fruits and vegetables, learn about the area’s growing season. The NJ Department of Agriculture’s “Seasonal Produce Availability Chart” is a great resource: www.state.nj.us/jerseyfresh/inseason.htm.

• Think Hot And Cool – While fresh New Jersey produce may be most abundant and widely available during summer, learn about locally grown cool-weather crops, as well. Potatoes, winter squash, carrots, lettuces, cabbage, onions, beets, turnips, apples and pears are widely available in spring, autumn and winter.

• Pick Your Own – There are a variety of “pick your own” farms throughout New Jersey, which allow families to spend time together picking apples, peas, peaches, cherries, pumpkins, berries, potatoes and more. Not only is it a fun day out with the family, it’s also a way to save money on your food. Picking your own produce is often less expensive than buying already picked produce, too.

• Not Just Fresh – Drying, freezing and canning fruits and vegetables when they’re “in season” are excellent ways to make summer produce last throughout the year, whether you do it yourself or purchase them at the store or farm.

• Seasonal Links – Check out these websites to find local farms, farmers’ markets, recipes, farm stands and more:
  • Jersey Fresh/NJ Department of Agriculture: www.state.nj.us/jerseyfresh
  • Guide to Gloucester County Farm Products: www.gcfofguide.com
  • Jersey Fresh You-Pick Guide: http://www.state.nj.us/jerseyfresh/searches/pyo.htm
  • Pick Your Own.Org: http://www.pickyourown.org/NJ.htm

Every three months we adapt to the new seasons heading our way. Fortunately, for us, each new season brings with it an abundance of fresh, new seasonal produce that boasts a variety of new flavors and tastes to savor, making seasonal eating delicious as well as beneficial.
When it comes down to your health, what comes to mind if someone said: “butter”? How about “margarine”? You may be thinking, “cholesterol” or “heart disease.” Is one better than the other for your health? Are you confused about all the varieties of butter and margarine? How do you pick one? Let’s take a look at both to make it easy.

Of course, butter and margarine come from different sources. Butter is made from milk fat, and margarine is made from vegetable oils, but does this make one better than the other? Not necessarily. Butter has saturated fatty acids (or saturated fat), which makes it solid. Margarine is hardened vegetable oils and trans fats are formed during this hardening process. Both saturated and trans fats are linked to high cholesterol and heart disease.

Take a look at the table below to compare the saturated fat and trans fat contents of various butters, margarines, and oils.

<table>
<thead>
<tr>
<th>In a tablespoon of….</th>
<th>Saturated Fat (grams)</th>
<th>Trans Fat (grams)</th>
<th>Total Fat (grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarified butter (tub)</td>
<td>8</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Stick butter</td>
<td>7</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Stick margarine</td>
<td>2.5</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Butter blend (60% margarine, 40% butter, tub)</td>
<td>4</td>
<td>2.5</td>
<td>11</td>
</tr>
<tr>
<td>Tub margarine</td>
<td>3</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Spread (not whipped, tub)</td>
<td>2.5</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Spread (whipped, tub)</td>
<td>2</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Olive oil (regular or extra virgin)</td>
<td>2</td>
<td>0</td>
<td>14</td>
</tr>
</tbody>
</table>

Does this mean you cannot eat any butter or margarine at all? Absolutely not! Like most things in life, where too much of anything can be bad, too much of butter or margarine would most likely affect your health because of the saturated fat and trans fat content. As you can see in the table, whipped spreads and oils have less and thus, healthier amounts of saturated and trans fats.

Nutrition experts recommend limiting saturated fats to less than 10% of daily calories, and keeping trans fats as low as possible. For an average person consuming 2,000 calories in a day, this means about a total of 20 grams of saturated fats.

The easiest way to find the information about the fat content of foods when you shop is to look at the Nutrition Facts panel (also known as the food label) on the package. For example, the food label here shows the fat content per 1 tablespoon of stick butter.

In addition to using the Nutrition Facts panel to make informed decisions when you shop, here are some other suggestions to eat fat-smart:

- Use plant oils such as olive, canola, sunflower, soy, or corn oils instead of butter or margarine.
- For a flavorful salad dressing, try extra virgin olive oil, a little bit of your favorite fruit juice, and sprinkle of herbs like oregano or mint.
- For cooking, switch to regular olive oil or other plant oils because, when heated, extra virgin olive oil burns quicker than regular olive oil.
- Use a spray bottle instead of pouring oil on your vegetables, salad, or pasta in order to cut down on the amount of oil, while enjoying your food.
- You can even bake without butter (or margarine) by replacing it with applesauce! Don’t worry; there will not be an overpowering apple flavor. You can start with replacing only a portion of the butter with applesauce because the texture of the baked product may change. Then, gradually increase the amount until most or all of the butter is replaced.
In this tough economy with high unemployment rates, flat wages, and rising prices for many household expenses, many people are looking for “deals.” Frugality is “in” and people at all income levels are seeking ways to lower their expenses so they can save more and/or repay debt. A good way to save money is to “step down” by finding ways to buy things inexpensively to get more for your money.

Like the smoking cessation product where nicotine is reduced gradually, “stepping down” reduces household spending in gradual stages instead of eliminating spending on an item completely. To visualize stepping down, imagine a staircase with four steps. On the top step is the most expensive way to buy an item and on the floor below the bottom step is the least expensive purchasing method.

Here’s an example of buying pancakes for breakfast. The most expensive method (top step of the staircase) would be going to a “sit-down” restaurant like IHOP, Denny’s, or Friendly’s and paying about $5, excluding a tip. The next step down would be to buy pancakes at a fast food outlet for around $3.

Go down two steps on the staircase and you might pay about $1 a serving for frozen pancakes at a supermarket and maybe 25 cents for pancakes prepared with a mix. At the “floor” of the staircase would be the cheapest method still: pancakes prepared “from scratch” (i.e., dry ingredients). Bottom line: “stepping down” provides a variety of purchase options ranging from the very costly to the most frugal.

“Stepping down” can also refer to the frequency or amount of a purchase as well as where it is made. For example, you may decide to eat out two or three times a month instead of five or six. You’re not completely eliminating what is obviously a pleasurable activity. You’re simply taking steps to reduce the cost. Or you might “step down” by eliminating an appetizer, drink and/or dessert when you eat out. Again, you’re still enjoying an activity (e.g., restaurant meal), but doing so for less money (and calories!).

“Stepping down” works especially well with “discretionary” expenses. Some examples include clothing, shoes, gifts, home furnishings, toys, and housewares. Steps of spending, from top to bottom, might include shopping department stores, discount stores, factory outlets, consignment stores, and thrift shops/flea markets/garage sales. Again, the more steps one goes down, the greater the realized savings.

Fortunately, there are some great resources to practice “stepping down,” namely a wide assortment of garage sales, consignment stores, and thrift shops in many areas of the country. According to a recent article, “Save and Schmooze,” in the AAFP Bulletin, thrift stores are increasingly becoming community centers as well as great places to shop. Many thrift stores are operated by non-profit organizations as fund-raising enterprises. Donors get receipts for a tax deduction, shoppers get great bargains, and a non-profit agency gets some badly-needed cash. A real “win-win-win” for all involved.

Consignment stores are operated as both for-profit businesses and fundraisers for non-profit organizations. They split the profit on items for sale with their previous owner, thus affording people an opportunity to both make money on unneeded items and find great bargains.

The next time you need to buy something, “step down” and visit a local thrift or consignment store. You’ll not only get great deals but you’ll be helping to support a local small business or non-profit agency.
Understanding Diabetes Risk in Children - continued from page 3

- **Signs/conditions of insulin** resistance including dark, thick pigmentation on neck and armpits called acanthosis nigricans,
- **High blood pressure, high blood lipids, polycystic ovary syndrome, or “small for gestational age”** and birth weight
- **Maternal history of diabetes** called gestational diabetes

A simple blood test conducted by a healthcare professional can confirm the presence of diabetes or pre-diabetes. Screening should begin at age 10 or at the onset of puberty and every 3 years thereafter.

How Can Diabetes be Prevented?

Currently there is no known way to prevent Type 1 diabetes, and no general population screening test is recommended. There are some specialized genetic tests available to identify high risk children for Type 1.

Understanding the common types and risk factors for diabetes, and detecting it early, can result in proper treatment and prevent many complications. If you think your child is at risk, seek advice from your healthcare provider. For more information about diabetes:

**Centers for Disease Control and Prevention:**