Nutrition Matters

An anthology of articles by students in Writing in Nutrition

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Table of Contents:

Refined Grains No More:
How to Change Your Dietary Tires and Avoid the Potholes.......................... 3

Another Slice of… Sodium?.................................................................................... 7

Investing in your Kid’s Health: Put Fruits and Veggies In, Get Life Out......... 11

“Watch That Sodium, Parents!”.................................................................14

They’re Coming!...............................................................................................18

This I Believe..................................................................................................22

Irregular Consumption of Fruits and Veggies:
Does it affect the Health of your Baby?.........................................................23

Food Safety Feature Article.................................................................27

College Students:
Making Sure the Best Times of Your Life are Not the Unhealthiest ............ 30

Why Children Need to Increase Consumption of Vegetables and Fruits........ 35

This I Believe..................................................................................................39
Refined Grains No More:  
How to Change Your Dietary Tires and Avoid the Potholes

You have just left work after a productive yet exhausting day and are heading home, where you’ll prepare a nice spaghetti dinner for your spouse and children. Unfortunately, you get a flat tire 10 minutes away from home, but luckily, you’re able to put on the spare donut tire yourself. Does the donut tire get you home? Well, yes. Does it work as well as an actual tire and should it replace the actual tire forever? Of course not!

So what’s the point of this story? A spare donut tire versus a real tire is a great analogy for refined grains versus whole grains. While you should spend most of your time driving around on real tires, you can get away with a donut spare tire every now and then. As donut tires are functional, refined grains are edible. But whole grains, like whole tires, have many more benefits than refined “spare tires” and will keep your body in better shape if you eat them more.

What’s in a grain?

Think about a tire. On the outside, it may just look like a thick hunk of rubber, but underneath the outer covering, there are several other layers that play important roles. The same is true for a seed. A whole grain is a kernel or seed with all of its layers – the bran, the germ, and the endosperm – intact. The bran, or outer-most protective layer, contains significant amounts of fiber as well as protein, iron, and B vitamins. The middle layer, the endosperm, contains mostly carbohydrate. Lastly, the germ, like the bran, contains fiber, protein, iron, and B vitamins, but it most notably also contains omega-3 and omega-6 fatty acids, or essential fatty acids (1).

A refined grain is a grain stripped of all of its layers except the endosperm. Sure, the product may have a smoother texture and may last longer on the
shelf, but it is now missing the fiber, vitamins, and fats that are present in a whole grain product. Enrichment is the process of adding iron and B vitamins back into a grain once it has been refined. Despite the fact that most of the components lost during refinery are replaced in enrichment, studies show that there are important nutrient interactions in whole grains that cannot be replicated in refined grains. Plus, two important components of a whole grain, fiber and essential fatty acids, are missing in enriched products (1).

And what exactly are fiber and essential fatty acids, and why do we need them? Fiber, sometimes referred to as “roughage,” helps regulate bowel movements, lowers blood sugar and cholesterol levels, and may even prevent colon cancer. Eating more fiber also makes you feel fuller for longer! Essential fatty acids are fats that your body cannot make, so you must get them from your diet. These fatty acids help maintain a healthy immune (or disease defense) system, maintain proper blood pressure, and control blood clotting, among other benefits (2).

**How to change your tires**

So, how many servings of whole grains should you eat, and how can you easily change a diet filled with refined grains to one rich in whole grains? First, you should know that a whole grain food is either in the form of the grain itself or it is a food that contains whole grain as an ingredient. For example, when you eat wild or brown rice, quinoa, or popcorn, you are essentially eating whole grain kernels. However, when you eat whole-grain crackers or bread, you are eating food made with whole grains as an ingredient. According to the 2010 Dietary Guidelines for Americans, or set of guidelines published by the U.S. Department of Agriculture every five years, we should make at least half our grains whole. This translates to about three ounces of whole grains per day. To put this into perspective, one medium-sized slice of bread is about one ounce (2). Here are some suggestions as to how you, the working parent, can increase whole grains in your diet and in the diet of your family:

- Eat whole-grain cereal or oatmeal for quick, easy breakfasts
- Make sandwiches with whole-wheat bread, wraps, or rolls
- Prepare those spaghetti dinners with whole-wheat pasta
- Make wild or brown rice as a side
• Bake delicious desserts with whole-wheat flour
• Snack on popcorn or whole-grain crackers

**Watch out for the potholes!**

More often than not, potholes are the main culprits for those inconvenient flat tires. Sometimes, the potholes are gapingly obvious, and they are relatively easy to avoid. Other times, they are smaller and more discreet. These sneaky potholes seem to appear out of nowhere and only a trained driver with a keen eye can spot and avoid them. The point is that when navigating the grocery store, beware of the potholes!

Companies use a variety of marketing and advertising tactics to make you believe you are purchasing a whole-grain product. If there is no mention of whole grain on the product’s packaging, you are most likely looking at a refined or enriched grain. You can easily avoid purchasing these products if you are searching for whole grains. The small, sneaky potholes, however, are the products that claim they are “made with whole grain.” This does not mean that the product is whole-grain. For a product to truly be a whole-grain product, the first ingredient listed must be the whole-grain ingredient. If the product says it is refined or enriched, it is *not* a whole-grain product. Also, multi-grain is *not* equivalent to whole-grain, and a dark-colored bread doesn’t necessarily mean it’s whole-grain either. To become a trained supermarket navigator and to ensure you are getting the whole-grain products you want, keep an eye out for the Whole Grain Stamp. Since not every whole-grain product has this stamp, look for the following common first ingredients on the whole-grain product’s box: whole grain [name of grain], whole [name of grain], whole [grain] flour, and oats (2).

**It’s ok to call Triple A!**

While changing your own tire is fine if you know what you’re doing, calling Triple A or some other such service is your best bet. They know how to properly change a tire and how to do so quickly. What’s the take home message here? Never hesitate to use the resources available to you to learn more about whole grains. Rent a nutrition
textbook from the library, do some research on the internet, or even consult a dietitian. It is all too easy to get tricked into buying what you think is a whole-grain product when in reality, it is a refined grain camouflaged as a whole grain with sneaky advertising. The truth is that getting a flat tire is not the end of the world, and neither is consuming some refined grains. But why would you drive around on a spare tire that simply does not do the job as well as your real tire does? The answer is that you wouldn’t. So the next time you’re at the grocery store, watch out for all the potholes, and make at least half your grains whole!

References:

Picture Sources:

By Corinne Ainsworth
Another Slice of… Sodium?

It’s finally that time again…Friday night, the start of the weekend. You plan to go out with some friends and have one of the best nights you’ve ever had in your life. After all, you deserve it don’t you? It’s been a long hard week and you’ve managed to get all of your work done so what’s a few drinks with a few friends at the bar? When you’ve had enough of the scene you head out and realize that you are starving. You head back to your apartment with your buddies and decide to order a pizza. When it arrives, you scarf down three pieces without even knowing it. All of a sudden you’re so thirsty so yougulp down cup after cup of water and now, well now you have a stomach ache. You then wonder why you drank so fast to make your stomach upset. You really have no idea how to explain it, you were just thirsty. Well the truth is, all of the sodium in that pizza that you ravenously shove’d down was what was making you thirsty and now, not only do you have an upset stomach, but you also have an increased risk of high blood pressure which, if gone untreated, can lead to heart disease.

The Bad News about Salt

Sodium or salt is considered to be a silent killer because too much salt in a person’s diet can lead to many different complications such as high blood pressure, strokes, heart disease, and kidney disease. It is recommended by the 2010 Dietary Guidelines to only consume about or less than 2300 milligrams of sodium daily. This number, however, does not apply to everyone. Adults over age 51 or those who have kidney disease, diabetes, and high blood pressure should reduce their intake even more to about 1500 milligrams of salt daily. This same goal applies to young children as well. It is very important to try to stay within these guidelines because they are designed for our safety. Right now, America isn’t doing a great job of sticking to these “rules.” We, as a nation eat more than double the recommended amount of salt daily.
This is risky because too much salt is dangerous for our bodies and can cause those complications described above. However, on the brighter side, research has shown that decreasing sodium intakes also causes a decrease in high blood pressure in both adults and children.

**So What Types of Foods Contain Salt?**

Unfortunately, almost every food contains at least a little bit of salt. Some of the biggest offenders however include processed foods, quick breads, pizza, chips, pasta dishes, and deli meats. You may not even realize the amount of salt that goes into certain dishes. Let's take pasta for example. After the water boils, salt is usually added. Then we use tomato or marinara sauce, which again contains salt especially if it's from a jar, to go with our pasta. And of course, we can't have pasta without meatballs. Whether meatballs are homemade or store bought they most likely contain a good amount of salt. But wait, that's not all. Most of us top off our pasta dishes with heaping spoonfuls of cheese. Cheese is also considered on the list of the biggest offenders of sodium. So once you are all done eating a nice pasta dish, you've already consumed a pretty big amount of salt. Other foods that contain a smaller amount of salt but should still be considered are certain types of salad dressings, soups, different types of grain-based desserts, eggs, and condiments such as ketchup, relish, and soy sauce.

**But I Thought that Salt was Good for You!**

Well you're not completely off the right track if you think that salt is good for you because in moderation it's excellent for our health. For example, salt is an electrolyte which is a charged mineral in our body, specifically in our blood. Other electrolytes include potassium, calcium, chloride, magnesium, and phosphorus. If any one of these chemicals becomes imbalanced in our bodies, this imbalance can lead to muscle
dysfunction and even cause us to pass out. Remember to also adjust your salt intake if you sweat a lot because sweating excretes salt through our skin. So if you’re a big athlete on campus or even just like to work out a lot, it might be a good idea to modify your sodium intake to decrease the chances of any electrolyte imbalances. Not only is salt in moderation good for our diet but it is also a great natural healer. If you have any type of wound, salt can help heal it quicker. Salt even helps to heal acne! So next time you have a cut or even a newly pierced ear, create a half salt half water solution and clean the infected area with it. The pain will be gone in no time!

Any Tips on How to Reduce my Salt Intake?

Of course! There are many different ways to help reduce your daily sodium intake. Some of these ways include…

• Learning how to read and recognize a nutrition label to see just how much salt is in a food product.
• Avoiding fast food restaurants.
• Making more meals at home so that you can easily prepare a dish using little or no salt.
• Eating more fresh foods such as fruits and vegetables.
• Avoiding processed foods.
• Watching your intake of different sports drinks such as Powerade and Gatorade.

All of these ways can definitely improve our daily sodium intake. The most important advice that I will give to you is to just be aware. We know that many foods are prepared with salt simply because it enhances the taste of foods. We also know that a college student’s diet can be designed with high levels of sodium because most convenience foods such as pizza, ramen noodles, sports drinks, and soups appeal to young people who are so busy with school work and can afford to buy these easy prep foods.
Unfortunately, we young adults are just targeted with all sorts of sodium containing foods that just might take a toll on us in future years. We, as students, need to make the right decisions when it comes to our health. So maybe another slice isn't always a great idea.

*Pictures from Center for Diseases Control and Cardio Smart: American College of Cardiology

By Jillian Saffie
Investing in your Kid’s Health:  
*Put Fruits and Veggies In, Get Life Out*

How do you imagine your children when they’re all grown up? Strong and healthy? What if I told you that the odds are against this? That they’re more likely to grow up to be overweight or obese? That this excess weight is linked not only to the top 3 causes of death in the United States, but also to many other diseases and health complications? Over two thirds of U.S. adults are overweight or obese, and almost 1.5 million Americans die each year of these top 3 causes: heart disease, cancer, and stroke. Read on to find out what you can do to steer your children away from this growing epidemic.

**What’s so special about fruits and vegetables?**  
Simply put, people who eat more fruits and vegetables (including beans and peas) live longer, healthier lives. They have a lower risk of heart disease, stroke, and cancer, the top 3 causes of death in the U.S. How can eating apples and broccoli and whatnot accomplish this enormous task? Well, they basically have a lot of nutrients (vitamins, minerals, and fiber) for very few calories, and they help to replace foods that have few nutrients for a lot of calories. The nutrients part is important because nutrients make sure your body works like it’s supposed to. The calories part is important because excess calories and weight are linked to a ton of diseases, most notably heart disease, cancer, and type 2 diabetes. Fruits and veggies also have lots of other compounds known as phytochemicals (“phyto-“ means plant) that have been shown to be beneficial.

**The how-to**  
So, just how do you get your kids to eat more fruits and vegetables and get all these benefits? There are endless ways to go about it, but here are some easy strategies that’ll make your kids cuckoo for collard greens (and most other fruits and vegetables, too).

1. **Show them how it’s done**
Parents that eat more fruits and vegetables have kids that eat more fruits and vegetables. Set a good example for your kids by eating a variety of fruits and vegetables where they can see you. Not only will it get your kids to be healthier, but you'll get all those benefits, too.

2. **Make fruits and vegetables convenient**
   It’s easier to eat more fruits and vegetables if there are more of them around. Stock up on fresh, canned, and frozen produce so you'll have the option to eat them. And make them accessible; kids won’t eat a melon if it’s not cut up.

3. **Ease off**
   Although it seems natural as a parent to command your kids to eat their vegetables, it may not help them in the long run. Using pressure may get them to eat their vegetables when they’re told to, but it may also create negative associations with those veggies (and likely other veggies, too). When they finally get to make their own food choices, they will probably avoid fruits and vegetables altogether, and their health won’t be happy about it.

4. **Make fruits and vegetables fun**
   Kids don’t care if a food is healthy or not. In fact, if they’re told a food is healthy they might even like it less! Instead of insisting they eat their vegetables because “they’re good for you,” try building positive experiences around them. Let them get their hands dirty playing with veggies or helping you in the kitchen (just watch out for knives and other sharp objects). Use brightly colored produce like bell peppers and cut veggies into fun shapes with cookie cutters to make them more visually appealing. Look up fun facts and teach your kids about fruits and vegetables while you eat or prepare them. And most importantly, be creative! You know your kids best, so you’ll know what they like.

5. **Use rewards**
   Some kids will be more willing than others to hop on the veggie train than others. If your child isn’t quite as cooperative as you’d hoped, try to use rewards to get them to try fruits and vegetables they don’t already like. Studies show that giving children tangible, nonfood rewards (i.e. stickers) for trying a vegetable is effective at getting them to like and eat more of that vegetable. By using rewards, you can
get your child to taste just a little bit of a vegetable. This has actually been shown to make kids like and eat more of that vegetable. This may take up to 10 or 15 tries, so be patient!. Try playing a tasting game with your kids; ask them to try a piece of a vegetable, and let them have a little reward, or reward them with an interactive activity. Do this regularly to expose your kids to the taste of one fruit or vegetable at a time; soon enough it may be their favorite food!

**A Good Investment**

Now you've got all the tools you need in your toolbox to build a healthy lifestyle for your child. And what’s more, using those tools can help keep you healthy, too! Just remember to set a good example for your kids, and make eating fruits and vegetables a positive experience. Do this, and soon enough you'll have a healthy, happy, veggie-loving family.

By Timothy Paradis
Watch That Sodium, Parents!

Imagine that you’re packing your child a lunch to take on a picnic with some friends. Being a caring parent, you put some thought into packing nutritious foods. You decide to make your child a ham sandwich with some lettuce, tomato, and light mayonnaise, a single serving bag of pretzels, and a V8 vegetable juice. To the best of your knowledge, this sounds like a perfectly nutritious meal, right? Well unfortunately, it’s really not. More sodium is contained in that one meal than is recommended to be consumed for an entire day. Now you may be asking, why is sodium important? What effect does high sodium intake have on your child’s health? What are some foods that are lower in sodium and a better option for packed lunches?

An Introduction to Sodium

Sodium is a nutrient that is needed by the body for proper muscle and nerve function. It is also important for controlling your blood pressure and blood volumes levels. Since sodium plays such a big role in the body it is necessary to have adequate sodium consumption however, almost all Americans consume more sodium than is necessary on a daily basis. Sodium is naturally found most foods, including cheese, yogurt, celery, cabbage, and artichokes. The reason why people often consume too much is because additional sodium is added to foods during processing to extend their shelf life in the store. Sodium is also found high levels within ingredients, such as garlic salt, bouillon cubes, and baking soda that people use regularly for food preparation. Condiments, like mayonnaise, ketchup, and soy sauce, also contain sodium and are frequently used to flavor foods. Beverages such as canned vegetable juices, milk, and sports drinks can also contain high amounts of sodium. Knowing that sodium is naturally in most foods and additional sodium is added by processing and by the addition of condiments, isn’t it easy to see why people often mistakenly consume too much every day without realizing it?

Sneaky Sodium

Too much sodium in the diet on a regular basis has been proven to increase a
person’s blood pressure. It is estimated that on average, children and adolescents 8-18 years old consume 3,387 mg per day of sodium (1). The recommended target amount of sodium is 1,500 mg per day and the highest amount that doesn’t seem to have long term effects on health is 2,300 mg per day (2). The ham sandwich, pretzel snack, and vegetable juice picnic lunch mentioned before contains approximately 2,131 mg of sodium. This means that if you happen to cook up some wheat pasta with marinara sauce for dinner that same night, your child will have consumed over 2,431 mg of sodium, quite a high amount. It’s been proven by various studies and on-going research that children who regularly consume high amounts of sodium, greater than 2,300 mg of sodium daily, are at significantly higher risks of developing pre-high blood pressure, high blood pressure, and other heart and cardiovascular diseases (1). The risk of these diseases developing increases with regular high consumption of sodium or if your child is already overweight.

**Soaring Sodium Sources**

The best way to reduce your child’s sodium intake is to be aware of what types of foods contain high amounts of sodium and to deter them from eating these foods regularly. Processed foods tend to contain the highest amounts of sodium. Examples of processed foods that contain high amounts of sodium and that should not be eaten in large quantities regularly include deli meats, snack foods like potato chips, Lunchables, frozen pizzas, canned soups, and many other foods that are packages in boxes or cans and have a long shelf life. Sodium intake throughout the day should also be monitored by looking at the nutrition facts labels located on food packages. It should also be kept in consideration that your child may have high sodium intake due to eating foods that contain moderate amounts of sodium frequently. Some examples of regularly eaten foods that aren’t particularly high in sodium but should be monitored are yeast breads, chicken and chicken mixed dishes, pizza, pasta dishes, and condiments (2). By being aware of the approximate amount of sodium being consumed by your child, you’ll be able to help them maintain a healthy diet and decrease their risk for future chronic diseases.
**Slowing Sodium Consumption**

Although almost all foods naturally contain sodium, there are many foods that have lower amounts and, even if eaten regularly, have little impact on your child’s overall sodium intake. Fresh vegetables tend to contain about 10 mg of sodium or less per serving. Examples of such vegetables include green, red, and yellow peppers, celery, spinach, broccoli, tomatoes, carrots, and mushrooms. Of course, this is if the vegetables are eaten raw or cooked without added salt. It is important to be careful of how you prepare or cook these vegetables to be sure you’re not adding condiments or salts that will add sodium to them. Fresh fruits are also extremely low in sodium. Examples of fruits that can be eaten are bananas, strawberries, peaches, kiwi, apples, and blueberries. In addition to fruits and vegetables being low in sodium, they also tend to be high in other important nutrients that your child needs to maintain good health. Another way to avoid additional sodium is to look for foods that are offered in lower sodium versions or to try and prepare foods, such as canned soups, from scratch. When you prepare a meal from scratch using fresh ingredients there is typically less sodium because the foods weren’t processed and don’t contain preservatives.

**Sodium Quite Simply**

Sodium is found in almost all foods naturally. Foods that should not be consumed regularly due to higher sodium content are the processed foods that tend to make easy packed lunches that are quick for parents to put together for their children’s busy days. Some lower sodium food examples that make great additions to any packed lunch include bananas, baby carrots, strawberries, yellow, red, or green pepper slices, and oranges. Although monitoring sodium intake is important, it must also be understood sodium is also part of a healthy diet if it totals up to 2,300 mg per day or less. The lower amounts of sodium found naturally in fresh vegetables provide an adequate amount of sodium in your child’s diet even when eaten in larger amounts and make help make any meal more nutritionally beneficial. Helping your child monitor about how much sodium they consume in a day will decrease their risk for cardiovascular diseases and high blood pressure in the future.
References:


By Barrie Lynne Sutton
They’re Coming!

They’re out there. Millions of invaders just waiting, waiting for that perfect opportunity to strike. The perfect time to infect not only you, but your loved ones as well and it is your job to ensure this does not happen. It could be a similar plot for a sci-fi novel or the perfect setting to a horror film. But where is this battle ground located? Your kitchen. But have no fear! With a few simple precautions you can keep yourself and anyone else happy and healthy with each meal you make. Food borne illnesses are not rare occurrences. In the United States alone, food borne illnesses affect 76 million individuals, resulting in 325,000 hospitalizations and 5,000 deaths. Many of these cases are due to unsanitary food preparation conditions in the home, something which can be easily avoided if you know what to do.

Where Do I Start?
You have purchased your food, now what? The 2010 Dietary Guidelines split up food safety principles into four easy categories:

1. Clean
2. Separate
3. Cook
4. Chill

But what do these mean?

Clean!
If we take a closer look at the first category, we find that the old saying “Cleanliness is next to godliness” is not too far off base. When preparing a meal it is important to wash:

- Your hands
- Any utensils you plan to use
- Cutting boards (especially in between cutting different types of foods, such as raw meats or vegetables)
Did You Know?
The USDA recommends that you do NOT rinse raw poultry, meat, or seafood before cooking it. By rinsing off the germs on the surface of the meats, you have rinsed them right into your sink where they happily survive and colonize without an issue. However, if left on the raw meat those germs would be killed in the off while cooking if the correct temperatures are reached.

Countertops
Reusable shopping bags

By doing this, you greatly reduce the risk of cross contamination of various germs from not only animal products, but also raw fruits and vegetables and even canned goods (it is important to wash the tops of cans with hot, soapy water before opening). You must wash your hands with warm, soapy water for at least 20 seconds. When is the best time to wash your hands? The list is a bit longer than you would expect:

- BEFORE you begin any food preparation
- After handling any raw food item (especially meats)
- Going to the bathroom
- Handling a pet
- Touching a person who may be ill

When washing fresh fruits and vegetables it is best to wash them under running water without soap just before eating, cutting, or cooking. It is important that you dry the produce after washing it to eliminate any remaining bacteria.

Separate!
This category involves separating foods which may be considered ready to eat and those which are raw. While preparing your foods, consider getting a different cutting board to use for raw meats, and a separate one for preparing raw vegetables. It is also important to always use a clean plate when serving cooked food, and to never use the same plate that held the raw food if it has not yet been washed.

Cook!
The cooking category is perhaps the most important. If the correct temperatures are reached for the proper length of time for all meats, poultry, seafood and eggs, nearly all germs will be killed making the food safe for consumption. Many people believe they can tell when a food is done cooking based solely its appearance, but this is not the case.
<table>
<thead>
<tr>
<th>Type of Food</th>
<th>Internal Temperature</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sea Food</td>
<td>145°F</td>
<td>Meat is opaque and flakey. Shellfish such as mussels and clams should be cooked until their shells open, any that don’t open should be discarded.</td>
</tr>
<tr>
<td>Beef, Veal, Lamb, Pork</td>
<td>160°F</td>
<td>Make sure pork is not still pink in the center!</td>
</tr>
<tr>
<td>Poultry</td>
<td>165°F</td>
<td>The inside of the meat should not be pink. When pressed, the juices should be clear.</td>
</tr>
<tr>
<td>Eggs (Frying)</td>
<td>Cook 2 to 3 minutes per side</td>
<td>White and yolk should be firm. Yes, that means sunny-side up is not recommended!</td>
</tr>
<tr>
<td>Eggs (Boiling)</td>
<td>Boil for at least 7 minutes</td>
<td>Firm yolk and white. &quot;Soft&quot; boil is not advised.</td>
</tr>
<tr>
<td>Any left overs</td>
<td>165°F</td>
<td>Safer to heat in an oven, not microwave.</td>
</tr>
<tr>
<td>Left over Gravy and Sauces</td>
<td>Boil</td>
<td>Reheat on a stove until it bubbles.</td>
</tr>
</tbody>
</table>

Microwave cooking is particularly dangerous. Although you are not using an oven or stove, the same internal temperatures must be reached. The big problem with microwaves is that they do not heat foods evenly. Often, some sections of the food get very hot, while others remain cool enough for certain bacteria to survive causing obvious problems.
Chill!

When most people finish eating a meal they find that they still have some left over. Just because proper care was taken while preparing this food, it does not mean that it is now safe to consume whenever you want it. It is important to refrigerate food within two hours of it being cooked, and within one hour if the environment where the food will be served is warmer than 90ºF. Make sure you keep your refrigerator at a temperature no warmer than 40ºF and your freezer at temperatures no warmer than 0ºF.

If these steps are followed, you should be able to prepare delicious and safe meals each and every time you enter the kitchen!

Sources


By Emily Boudreau
This I Believe

I was raised in a small community in beautiful northern California amongst the towering redwood trees. My family lived out in the countryside on a sizable plot of land which allowed us to grow some of our own fruits and vegetables. Both of my parents worked but we were still considered a low income family as there were six of us in all plus my two grandmothers. We weren’t the worst off by far, but there were occasions when we needed a little extra help. Sometimes there just wasn’t quite enough food for four growing kids and four adults. So, for a while when I was a little girl my family relied on government food stamps and goods from the local food pantry to help us through the month. These programs helped my family because they provided milk, cheese, peanut butter, and nonperishable goods which greatly helped supplement my family food situation. Without these programs my childhood would probably have been much less happy and my health may have been negatively affected. Fortunately these programs allowed my parents to raise four healthy children.

After a couple of years we no longer needed the food assistance. That is when I started volunteering at the local food pantry with my father. We still did not have much to give but we certainly had time. We would donate food when we could, serve meals, and bake and deliver pies on the holidays. My parents instilled a belief in me of being thankful for what you have and giving back to those who have helped you along the way. It was very important to my parents that I understand the value of taking care of those in need even if I didn’t have that much to give. And that is why I believe that it is essential to have local community and nationwide programs that help provide nutritious food to people who need assistance. We all need help at various times in our lives and it is such a rewarding experience to help others. My parents taught me a lesson that became a passion for me and is the reason that I still volunteer at my local food pantry today.

By Elise Taylor
Irregular Consumption of Fruits and Veggies: Does it affect the Health of your Baby?

Are you pregnant? Do you tend to eat an unbalanced diet? Or have a diet that doesn’t include a wide variety of fruits and vegetables? Continue reading if you answered “yes” to any one of these questions because your diet greatly influences the health of your baby, for better and for worse. Knowing which foods you should consume in order to achieve optimum health will be very beneficial, both to you and to your baby in the end.

Getting More “Bang For Your Buck”

When you’re pregnant, as one could guess there are a lot of changes that occur, and one of them is that your nutrient needs increase. So why not meet these needs by eating food that is naturally nutrient-rich? When you’re pregnant, all nutrients are essential to have within the body and readily available to be used. Fruits and vegetables contain a very different variety of certain key nutrients, which allow an easy way to achieve the dietary reference intake (DRIs) values. These key nutrients include iron, folic acid, vitamin C and high consumption of protein.

If you have a diet that is composed of a variety of different fruits and vegetables, this enables different vitamins and minerals to be absorbed in your body, as well. This ultimately allows your baby to be exposed to these key vitamins and minerals, too, helping it to achieve normal development and growth. For example, the nutritional components of broccoli and dried beans are very different, although they both contain key nutrients that are vital for fetal growth development. Broccoli contains choline, vitamin A, vitamin C, and calcium. Dried beans on the other hand, are a great source of protein, iron, magnesium, and folic acid. Choline and folic acid are both very important in brain development. Iron becomes more available to us when we have vitamin C around. Therefore, as you can see every fruit and vegetable has their role of importance in the human body.
One of the most important nutrients you need to increase while you are pregnant is protein. Proteins aid in development of tissue and muscle for your baby, as well as maintaining your own muscle and tissues. Since your body is building your fetus from scratch, as you could imagine, this requires a lot of extra dietary protein. This means that in order for your body to achieve healthy levels for both you and your baby, protein levels need to be met. Without sufficient amounts of protein, you could put your baby at risk of being born at a low birth weight. Contrary to popular belief, you can get your protein at a reasonable level without going into a bacon cheeseburger frenzy, there are plenty of vegetables; mainly legumes (beans and peas) that are good sources of protein. When I mention beans and peas, I mean

- Lima beans
- Black-eyed peas
- Kidney beans
- Pinto beans
- Split peas
- Lentils
- Chickpeas

What I don’t mean is string beans or green peas. Let me point out that, I would never suggest boycotting meat because every food group serves its purpose, but I want people to be aware that there are some cheaper and healthier ways of meeting your proteins needs. While bacon cheeseburgers definitely are a high source protein, they also contain high amounts of saturated fat, as well. Legumes on the other hand, contain no saturated fat, are high in fiber, and contain good amounts of iron and protein. They are also universal. For example; they fit very nicely into casseroles, salads, soups, stews and if you prepare them with brown rice, you have a perfectly balanced meal.
**Traveling Tasks of Iron**

Another advantage to consuming legumes daily, is that it also helps with supplying your daily iron needs. Iron is especially important during pregnancy because the role of iron is to help your red blood cells transport oxygen to all of your cells, including your baby’s. Not getting enough iron could result in preterm labor, lower scores for attention, gross motor and language for your baby. Also, if you aren’t consuming enough iron to supply both your needs and your baby’s needs, then your baby will end up taking whatever iron is available in your body, which puts you at risk for iron depletion and iron-deficiency anemia. Iron is an important component of our blood because it aids in oxygen delivery to all of our tissues. Iron-deficiency anemia occurs when your body doesn’t have enough iron in your blood to properly deliver oxygen; this is why one common symptom of anemia is being easily fatigued. Ultimately, having a low iron supply can put you at a higher risk of dying during childbirth, because of the loss of blood that occurs during the delivery process. Luckily, daily consumption of vitamin C can help aid in absorption of iron.

**Can I get Some “C” Please?**

Vitamin C, is another nutrient that’s important during pregnancy, you can find vitamin C in most fruits and vegetables, such as:

- Oranges, other citrus fruits
- Broccoli
- Strawberries
- Collard greens
- Tomatoes
- Peppers

The recommended daily intake of vitamin C is 85 mg/day; which is equivalent to eating one orange. The role of vitamin C doesn’t just include its partnership with iron absorption, but is also involved with the synthesis, or making of collagen (the main component of our tissues).
As I have previously stated, if you are pregnant or planning on becoming pregnant, it’s very important to consume a well-balanced diet with a wide range of different foods in order for you to maintain you and your baby’s’ needs. Iron and protein needs are especially important for the growth and development of your baby, and consumption of different legumes can help you achieve recommended intakes. Vitamin C is another great nutrient that can help increase your iron absorption and consuming oranges and tomatoes can help reach your needs. As always, if you have any further questions about your present diet ask your physician or better yet, make an appointment with a dietitian.

By Christine Ganem
Food Safety Feature Article

You start to prepare dinner for your family after a long day of driving the kids around to their different sporting events. You decided to have baked boneless skinless chicken breast with grilled asparagus and peppers and rice. You take out the chicken that was inside the refrigerator and begin to prepare it on the cutting board. Once the chicken is all prepared you start to prep the vegetables. The question is do you grab for another cutting board or continue using the one you have out to eliminate the amount of dishes you have to do afterwards? Making the right decision can help prevent you and your family from becoming infected by a food borne illness. Food borne illnesses can be prevented from the minute you choose what food you are buying at the grocery store.

Food borne illnesses are contracted when certain foods are not taken care of and cleaned up in the correct way. When these foods aren’t prepped and prepared properly this is when bacteria are able to multiply within the food. Once consumed it take a physical toll on the body and the functions within the body. E coli and Salmonella are two of the most common and well known food borne illnesses. They can lead to vomiting and diarrhea. This is just one of many different food borne illnesses that can affect you and your family however, there are steps that can be followed that can reduce you and your family’s chances of being exposed to a food borne illness.

There are many different foods that can be considered high risk for food borne illnesses. When buying your groceries for your family you should take extra caution when buying, transporting, unpacking, prepping, cooking and storing them. These foods are:

• Raw Meat and Poultry
• Raw Eggs
• Unpasteurized Milk
• Raw Shellfish
• Fruits and Vegetable

You can start practicing food safety right at the grocery store, especially with your raw foods. Your raw foods should be placed in separate plastic bags after picking them out. This step definitely should be followed for your raw meats. Plastic bags should be
placed over them and tied at the top to prevent any of the liquids from spilling out onto your other products. Designating certain areas in your shopping cart for certain food groups is also a great way to avoid food borne illness. Also making sure the raw meat is at the bottom of the cart away from the other products is a cautionary step that should be followed. At checkout you should make sure that your raw meats, raw vegetables and eggs all go into different bags for the ride home and once the car is all packed up you make your way straight home so that the food is refrigerated as soon as possible to reduce the chances of bacterial growth.

Once at home there are four steps that should be followed by you and your spouse to keep you and your family safe from any bacterial growth within the kitchen. CLEAN, is the first of the four steps. It is important to keep your hands clean and the different surfaces that food may come in contact with. If children help out in the kitchen make sure their hands are clean once they leave the room as well. Hands can transmit many different types of bacteria all over the house, so it is very important to wash your hands after you have touched any of the high risk foods before going on to do something else within in the kitchen or even in another room in the house. Washing anything that comes into contact with high risk foods is also something that should be done right after to eliminate contamination. Not cleaning is a great way for bacteria to be spread from one food to another. Finally washing your fruits and vegetables by rinsing them under the water should be done so that the bacteria can be reduced. SEPERATE, in the store and out. Once at home food should be placed in the refrigerator in groups. This can be made into a game that the whole family can help out with. Raw meats should be placed in the freezer until it is time to thaw out for dinner. When it is time for that they should be place in a container large enough from them so that if liquid is there it will stay there. It should also be placed on the bottom shelf so that if it were to leak it doesn't leak on the other foods within the refrigerator. Same would go with eggs, fruits and vegetables. They all have their designated spot within the refrigerator. When preparing food for dinner you should have separate knives and cutting boards for your different types of raw foods. This also reduces the chances of bacteria being spread to other foods.
COOK, the food to the right temperatures. This step is truly focusing on the different types of meat that you will be serving to your family. For the bacteria to be gone within your food, you have to cook it to a recommended internal temperature. This temperature is 145°F for whole meats, 160°F for ground meats, and 165°F for all poultry. Also eggs must be cooked until the yolk is hard for all bacteria to be gone.

CHILL, is one that you might forget after preparing and eating a meal with your family. However it can be the most important. Leftovers should be put in the refrigerator as soon as possible after done cooking. Two hours is the maximum amount of time that they can stay out but you don’t want to push your luck.

Food borne illnesses are a serious factor when preparing food for your family. It is something that you are unable to see with your eyes and need to take the extra precautionary steps just as a gut feeling to protect the ones you love. Clean, separate, cook and chill are the four steps that need to be done for every grocery store trip, dinner preparation and clean up afterwards.

By Amelia LaFrance
College Students: Making Sure the Best Times of Your Life are Not the Unhealthiest

You're busy and feel like you're starving so you pop into the dining hall, get a slice of pizza, some French fries and a soda, then bolt out to do more work. Sound familiar? Everyone has different variations of this at different stages of college. During these times we just want to get the foods that are easiest and taste good so we can get on with our busy college lives.

This type of grab and go eating is not generally a problem if it’s once in a while but, for many students it can become a habit. The appeal of these foods is clear, they are convenient and yes, they taste good. You probably noticed that I didn’t mention any fruits or vegetables in my example. Fruits and vegetables are essential to a healthy diet and when you don’t eat the recommended amount you miss out on essential nutrients and dietary fiber. It’s easy to think “That’s not me!” but according the Dietary Guidelines for Americans 2010 almost all Americans over the age of 2 do not get the recommended amount of vegetables a day. For fruits the same is true except for those 4 years and older.

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• 1 cup of red peppers
• 1 large baked sweet potato
• 1 large ear of corn

How hard is it to grab a few pieces of fruit, steamed vegetables, or put together a salad instead of that piece of pizza or those fries? A sweet potato with skin instead of a baked potato, a spinach salad instead of a salad with lettuce, adding kidney beans or chickpeas to a salad, throwing in different berries or fruits to yogurts and cereals are simple ways to get these healthy foods into your diet.

It has also been found that 19-30 year olds receive greater than 50 percent of their fruits from juice. What’s wrong with juice? Nothing when it’s 100% juice and it’s consumed in moderation but most of the fruits you take in should be from whole fruits because you get the dietary fiber that juices lack. If you’re someone who loves soda you might want to look into switching to 100% fruit juices. Don’t over consume them though because that can add unnecessary calories to your diet and it is not as beneficial as whole fruit. Soda does give your body any essential nutrients and instead tends to fill you up so that you do not have room for healthier foods.

There are a number of nutrients that are of concern for the American public because the foods that contain them are under consumed. These nutrients are folate, magnesium, dietary fiber, vitamin A, C, and K and fruits and vegetables are great sources of them.

**Folate**

Is extremely important in the basic processes your body needs to perform like growth and the reproduction of cells including blood cells. It’s also especially important for women who are able to become pregnant. If a woman gets pregnant with a diet that’s insufficient in folate in the first few weeks after conception her baby runs the high risk of suffering from a neural tube defect that could in some cases lead to the infant being born without a brain. By the time someone realizes they are pregnant it could already be too late to start eating more folate rich foods.

Good sources of folate:

• Whole Grain Total Cereal
• Spinach
• Chickpeas
• Broccoli

**Magnesium**
Magnesium is involved in hundreds of reactions in the body, dealing with DNA, proteins, and activities that give your body energy to function.
Sources of magnesium:
• Spinach
• Black Beans
• Potato
• Almonds, Peanuts

**Dietary Fiber**
Dietary fiber is not digested by the body. However, it is beneficial because it makes you feel full and since these food groups that are high in fiber tend to be low in calories it is great for calorie control. It is also essential to healthy bowel functions. It’s been found that dietary fiber can reduce the risk of cardiovascular disease, obesity, and type 2 diabetes.
Get your dietary fiber from:
• Fruits
  • Vegetables

**Vitamin A**
Vitamin A is essential for vision and keeping many processes in your body working normally like growth and immunity. It also keeps your bones and skin healthy.
Vitamin A rich foods include:
• Sweet potato with skin
• Carrots
• Spinach
• Cantaloupe
**Vitamin C**

Is an antioxidant that reduces damage from free radicals which are linked to certain types of cancer and chronic diseases.

Good sources of Vitamin C:

- Red Pepper
- Fruits/berries
- Broccoli

**Vitamin K**

Is important in maintaining the process that allows you to form blood clots and also helps with bone formation.

Vitamin K rich foods include:

- Spinach
- Broccoli
- Grapes

There really is no downside to consuming more fruits and vegetables. You get essential nutrients to keep your body healthy and lower your risk of chronic diseases. You may think you have no time and that for college convenience foods are the best you can do. However, think about it, if you can't put in the time to make healthy choices now do you really think you'll have much more time once you graduate and start working full time? Or even later when you might be juggling work AND family? Adult life is right around the corner and learning how to incorporate healthy habits is not only going to make you happier during college but make sure that later on in life you’re not dealing with the consequences of an unhealthy diet.

References:


http://www.choosemyplate.gov/

By Milly Canela
Why Children Need to Increase Consumption of Vegetables and Fruits

“An apple a day, keeps the doctor away.” We all learned this quote from somewhere. Do you know the reasons why apples have such strength to keep our immune system strong and stay away from diseases? Apples rich in vitamin C can improve our immune system to fight against bacteria. On the other hand, an apple is not the fruit with the highest amount of vitamin C when compared with an orange. Why is an apple used in the proverb, but not an orange instead? According to epidemiological studies, a variety apple is also rich in fiber, polyphenols (antioxidants), and vitamins and minerals, which help to lower LDL (bad cholesterol), lower serum lipid profile, and delay the onset of cardiovascular disease. Not only are apples beneficial to our body health, but also every kind of vegetable and fruit especially dark-green and red and orange vegetables, and beans and peas. They contain different amounts of a variety of vitamins, minerals, and fibers contribute to promote good health. A healthy diet is crucial to everyone in different stages of a lifecycle, especially to children who don’t have knowledge to differentiate between good and bad diets.

Vegetables and Fruits Vs. Processed Food

First of all, vegetables and fruits play an important role in maintaining our health, so we should fill half of the plate from vegetables. In addition, vegetables and fruits are good examples of nutrient dense food. Nutrient dense food is the food with fewer calories but provides a high amount of nutrients promoting positive health effects such as having enough vitamins and minerals. In fact, fruits and vegetables are low in fat or cholesterol, and with no or limited added sugar, no added fats, and no added refined grains but with essential nutrients and dietary fibers. Also, one of dietary fiber’s functions is to surround the excess fat or glucose inside and escort them out of the body. As a result, an extra amount of fats and glucose won’t be stored in our body as fat and resulted in weight gain. Moreover, vegetables and fruits especially dark orange and green vegetables contain large amounts of folate, magnesium, potassium, dietary fiber, and vitamin A, C, and K, and these nutrients are under-consumed for most children. Our
body needs these vitamins and minerals to operate our body functions, if there is not enough available, our body won’t function well like a train won’t move without fuel. In fact, beans and peas are excellent sources of protein, and which also provides iron, zinc, potassium and folate. Those are the nutrients that keep us healthy and away from disease. Unlike vegetables and fruits, processed food such as potato chips have added fat and added sodium, while added fats and added sugar are the main cause of the rise of American obesity epidemic. Also, processed food and sugary drinks provide a high amount of calories but without any nutrient values. It is not worthy to consume a large bag of potato chips that is 1500 calories and only contains added fats and added sodium that increase your risk of being overweight and getting hypertension. I am sure you know how to choose a more beneficial food for your beloved kids.

**Correlation of Food and Diseases**

Studies show a higher consumption of fruit and vegetables are associated with lower risk of chronic disease such as hypertension and cancer. In addition, naturally occurring dietary fiber helps to reduce the risk of cardiovascular disease, obesity, and type II diabetes. Also, evidence shows that consumption of at least 2.5 cups of vegetables and fruits each day will lower risk of cardiovascular disease, including heart attack and stroke. In fact, some vegetables and fruits can also prevent certain cancers. In contrast, processed food and sugary drinks contribute to obesity, high blood pressure, heart disease and diabetes.

**Ways to Increase the Consumption of Fruits and Vegetables**

Children always look up to parents as role models, so parents should act as good examples to their kids. Make sure they see you eating salads, fruits and vegetables abundance everyday. You should minimize the amount of processed food and sugary drinks at home, but fresh fruits and vegetables keep handy instead. Also, you can prepare juice from fresh fruit/vegetable ready and store them in refrigerators for kids to consume. Besides, peers and friends can easily influence each other. If every parent promotes fruits and vegetables at home and each kid affects his/her friends with healthy food, as a result, all of them value eating healthily. In fact, if there is any chance,
growing some vegetables in a garden with participation of the children, or visiting a farm with kids and educating them about fruit and vegetables. Kids are more willing to consume if they are involved in the procedure of growing the food. Moreover, keep the plate looking bright, with a variety of fruits and vegetables, and studies show brighter colors make food more inviting. You can also make some efforts to cut the vegetable and fruit into different shapes that may increase the child’s interest to intake. Lastly, kids won’t like and eat new food at the first bite, they might accept it after they try a couple time and get used to the taste. So make sure your kids take a bite of the new fruit or vegetable each time you introduce, but don’t make them eat more than they want to.

**Examples of Good Food to Consume**

**Avocados** provide good sources of soluble fiber, protein, monounsaturated fat, folate, vitamin A, sterols, and potassium. You should use avocados to replace other fat sources when you are making a dish for your kids.

**Broccoli** is rich in anticancer compounds, fibers, vitamin C, and calcium. Remember not to cook broccoli with a lot of water, otherwise, those beneficial nutrients leach into water.

**Beans** are loaded with folate, vitamin A and C, soluble fiber, protein and iron. They are good for heart health.

**Carrots** are rich in beta-carotene (vitamin A), vitamin B6 and C, and fiber. It helps to prevent night blindness and cataracts, lower cholesterol, and protect and fight against cancer. The best way our body to absorb beta-carotene is to eat carrots with a little fat (such as olive oil).

In conclusion, consumption of vegetables and fruits especially dark orange and green vegetables helps to promote good health, such as positive correlation with lowering risk of chronic disease, reducing the risk of cardiovascular disease, obesity, and type II diabetes. In contrast, processed food and sugary drinks contribute to obesity, hypertension, cardiovascular disease and diabetes.
Reference:

By Mei Wa Ng
This I Believe

Over the summer I had a friend up to visit, she arrived right around dinner time and we had decided to go out to eat. I asked her what she was in the mood for, her response to was, “Something girly.” I did not really know what she meant by this so I asked her to clarify, “You know something that is healthy and won’t make you feel bad after you eat it.” As a nutrition major I hate hearing people talk like this, I believe that food should not be associated with guilt.

I think that the media is most at fault for putting the idea that unhealthy food should make you feel bad into the public. Magazines and television especially highlight fad diets and foods that create and maximize “ideal” bodies. I feel this just encourages people to sort foods into “good” vs. “bad”. There is clearly a large health difference between choosing to eat a super strict healthful diet of only fresh foods, lean protein, and whole grain versus completely following a diet of prepackaged goods, high fats, and fast food. I understand this difference but I feel that society places too much emphasis on both extremes and not enough on the realistic middle ground that is relatively easy to maintain.

Eating a balanced diet is not only beneficial to the body; it is helpful for the mind. If a person constantly restricts certain foods because they feel bad after eating them then an unhealthy relationship with food is formed. It is much better to follow a wholesome diet but also to allow oneself some leeway and occasionally eat foods that are “unhealthy” or “bad.”

Maintaining a positive relationship with all foods by not associating food and guilt is something I strongly believe in. I don’t like pushing my views on people, especially close companions, so I took my best friend to the most “girly” place I could think of. I do hope that one day she, and many other people like her, can come to view food as both a pleasure and a way to uphold fine health.

By Anna O’Brien