**NOURISHING THE IMMUNE SYSTEM: 5 FOODS TO BOOST THE IMMUNE SYSTEM**

June 2, 2013 Harmony Hill Webinar

**YOUR IMMUNE SYSTEM**

Your immune system protects you from viruses, bacteria, mold, parasites and foreign proteins in your food!

How can you get immunity? You could be genetically inborn with the immunity, acquire it Actively through natural or artificial exposure or acquire it Passively through natural maternal or artificial antibodies.

Remember your immune system is your barrier, has a memory and most of it is in your gastrointestinal tract! Your hormones help modulate the immune system and your skin plays an important role as well. Make sure you get plenty of sleep and lower your stress because your immune is impacted deeply by this!

**CLUES YOU HAVE IMMUNE SYSTEM ISSUES:**

- Always feeling tired.
- Frequently sick or have the flu often.
- Frequent Temperature changes.
- Mood Swings.
- Trouble Concentrating.
- Unexplained Weight imbalances.
- Changes in skin and hair.
- Inflammation.
- Just not feeling your best.

**Disorders of the Immune System:**

- Autoimmune Diseases (such as celiac disease, thyroid disease and many others)
- Inflammatory Diseases (such as arthritis, asthma, IBD’s and many others)
- Cancer (all types)

“Balance is essential to your immune system. You must make sure your immune is not deficient nor is it hyperactive.”

**FOOD ALLERGY VS. FOOD INTERLERENCE**

A true food allergy describes an adverse immunological response to a food, usually IgE-mediated. Food intolerances, however, is a reproducible adverse reaction to a food that does not involve an immunological mechanism. However, many people misinterpret ANY food reaction, including food intolerance, as an “allergy.”

<table>
<thead>
<tr>
<th>Food Allergy</th>
<th>Food Intolerance</th>
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<td>Immune response to a food (IgE)</td>
<td>“Adverse food reaction”</td>
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<td>Most people confuse food allergy with intolerance</td>
<td>Often overlooked</td>
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<td>Immediate (IgE) and delayed (IgG) reactions</td>
<td>Could be from a lack of specific enzymes to digest food</td>
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<td>Classic reactions: hives, itching, edema, vomiting, diarrhea, wheezing</td>
<td>Unpleasant symptom(s) after eating: very mild to very debilitating</td>
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<td>About 2% of the population experiences</td>
<td>About 20% of the population experiences</td>
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When you eat these foods you will experience inflammation, welling in response to the inflammation and a craving or overeating addition-like to those trigger foods. You will find you can’t lose weight or possibly be healthy with a constant underlying inflammation with every meal.

**HOW TO FIND OUT IF YOU HAVE AN ALLERGY OR AN INTOLERANCE?**

- Lab Testing: IgE testing for classical allergic reactions
- Skin Testing: Used to detect environmental allergies and not as dependable for food allergies though.
- Dietary Considerations: Consider an elimination diet.

When a modified elimination diet does not uncover specific problem foods, it may be necessary to delve further into specific food elimination, such as histamines or FODMAPs (Fermentable Oligo-, Di- and Mono-saccharides, and Polyols). Research has shown a correlation between histamine and salicylate intolerance and headaches and also between digestive complaints and FODMAPs. The various diets for food intolerance will be discussed in detail.
TRY AN ELIMINATION DIET TO REMOVE TOP OFFENDERS FOR ONE MONTH!

- Eggs
- Shellfish and fish
- Corn
- Wheat/gluten
  - Stop eating wheat, hard wheat, red wheat, stone ground wheat, cracked wheat, flour, enriched or unenriched flour, bleach or unbleached flour
  - Avoid gluten containing foods like breads, cereals, pasta, noodles, couscous, bulgar, stuffing, pizza, biscuits, cakes, pies, pastries, scones, communion hosts, bread crumbs, pretzels, beer, whiskey and foods with a batter.
  - Be careful: Gluten also shows up unexpectedly in many processed foods that contain food additives, flavorings, and stabilizers or thickening agents, so label reading is critical.
  - spelt, farro, durum, semolina, kamut, triticale (a combination of wheat and rye), and malt, a derivative of wheat
  - REMEMBER BROWS: Barley, Rye, Oat, Wheat and Spelt are NOT ALLOWED
  - Try alternative grains like these:
    - Cereal: millet, amaranth, quinoa
    - Bread/Crackers: rice bread or wafers and cakes, bean chips (watch for corn)
    - Pasta: rice
    - Baking or Baked Goods: gluten free products (watch your sugar)
- Milk/dairy
  - Look for words like Casein, Lactose, Whey and Lactalbumin
  - As an alternatives try:
    - unsweetened Rice Dream rice milk, So Delicious coconut milk or Blue Diamond almond milk.
    - For Cheese substitute goat and Daiya products
    - For butter substitutes try canola or olive oil spreads and unprocessed organic coconut oil
    - For yogurt alternatives try coconut milk yogurt unsweetened.
    - Need something to put in your coffee or tea? Try Almond or Coconut milk.
- Soy
- Peanut and Tree Nuts

What can I do once I know what foods I am intolerant to?

It is recommended you remove the offending foods or groups of food for a period of time of usually 3-6 months.

Then start reintroducing them slowly to see if you have established a tolerance level to them.

First try the food then monitor your symptoms for 48 hours. Consider tracking your progress in a journal.

Rotate foods every 3-4 days and make sure you are eating plenty of rice, vegetables, meat, beans, fruit and nuts during this time to get the nutrition you need.

Consider working with a dietitian or nutritionist to help you through this process, keep you on track and provide encouragement through your journey!

We recommend you have a copy of the “AN A-Z Guide to Food Additives” by Dr. Deanna Minich to look up your foods before eating.
5 FOODS TO BOOST YOUR IMMUNE POTENTIAL!

CRUCIFERS/BRASSICAS BROCCOLI, BRUSSEL SPROUTS, CABBAGE, CAULIFLOWER, KALE, SWISS CHARD, PARSNIPS, WATERCRESS, ARUGULA, WATERCRESS, BOK CHOI, COLLARD AND MUSTARD GREENS.

- High in vitamin C, carotenoids, and soluble fiber
- Contain multiple nutrients with potent anticancer properties: indole-3-carbinol, 3,3'-diindolylmethane, sulforaphane and selenium.
- Indole-3-carbinol boosts DNA repair and may block the growth of cancer cells.
- Boiling reduces the level of anticancer compounds, but steaming, microwaving, and stir frying do not result in significant loss.
- Steaming for 3-4 minutes is recommended to maximize sulforaphane. Heat/cooking inactivates goitrogens.
- At a minimum, include cruciferous vegetables as part of your diet 2-3 times per week, and make the serving size at least 1-1/2 cups. Even better from a health standpoint, enjoy broccoli and other vegetables from the cruciferous vegetable group 4-5 times per week, and increase your serving size to 2 cups."
- Steam them 2-3 minutes. Buy them fresh or frozen.
- Reasons to eat Crucifers...

ASPARAGUS

- Stalks should be rounded, and neither fat nor twisted.
- Use within a day or two after purchasing for best flavor and texture. Store in the refrigerator with the ends wrapped in a damp paper towel.
- Wash asparagus under cold water to remove any sand or soil residues. It is best to cook asparagus whole.
- Add cold asparagus to your favorite salad.
- Toss freshly cooked pasta with asparagus, olive oil and your favorite pasta spices.
- Chopped asparagus make a flavorful and colorful addition to omelets.
- Healthy sauté asparagus with garlic, shiitake mushrooms and chicken for a complete meal.
- Reasons to eat Asparagus...

Contains inulin (prebiotic)
- Anti-inflammatory

Contains glutathione (“master antioxidant”)
- Rich in fiber (about 3 grams per cup, including about 2 grams of insoluble fiber and 1 gram of soluble fiber)
- Good source of protein (about 4-5 grams per cup)

Anti-cancer
Role in activating detoxification enzymes
Anti-inflammatory
Good source of vitamins, minerals, and fiber
"In a study funded by the National Cancer Institute, 20 participants were encouraged to eat 1 to 2 cups of cruciferous vegetables a day. After three weeks, the amount of oxidative stress in their body was measured. Oxidative stress in the subjects' bodies dropped 22% during the period when they were eating lots of cruciferous vegetables."
5 FOODS TO BOOST YOUR IMMUNE POTENTIAL CONTINUED…

MUSHROOMS

“Studies show that mushrooms increase the production and activity of white blood cells, making them more aggressive. This is a good thing when you have an infection.”

- Due to its immune effects, may help with cardiovascular disease by preventing too much immune cell binding to the lining of our blood vessels.
- Shiitake most studied – dietary intake has not been shown to strongly activate or suppress the immune system.
- Polysaccharides as one potent medicinal component.
- Shiitake, maitake, and reishi mushrooms
- Shiitake mushrooms are traditionally added to miso soup.
- Healthy sauté mushrooms with onions and garlic. Serve as a side dish or as a topping for chicken, beef, lamb or venison.
- Experts recommend at least ¼ ounce to an ounce a few times a day for maximum immune benefits.
- Keep them in the refrigerator in a loosely closed paper bag. They will keep fresh for about one week.
- Dried should be stored in a tightly sealed container in either the refrigerator or freezer where they will stay fresh for six months to one year.

ALLIUM: GARLIC, ONIONS, LEEKS, SHALLOTS, SCALLIONS

- This potent onion relative contains the active ingredient allicin, which fights infection and bacteria. British researchers gave 146 people either a placebo or a garlic extract for 12 weeks; the garlic takers were two-thirds less likely to catch a cold. Other studies suggest that garlic lovers who chow more than six cloves a week have a 30% lower rate of colorectal cancer and a 50% lower rate of stomach cancer.
- Your optimal dose: Two raw cloves a day and add crushed garlic to your cooking several times a week.
- Fresh is best! Although garlic in flake, powder, or paste form may be more convenient, you will derive less culinary and health benefits from these forms.
- Whole garlic keeps for about a month stored properly.
- Chopping or crushing stimulates production of Allicin, a compound to which many of garlic’s health benefits are attributed. Wait at least 5 minutes before eating, adding acid to (deactivate the enzymatic process) or cooking (reduce the activity of the health-promoting sulfur compounds and it will also make garlic bitter) after chopping/crushing.
- Do not expose to heat more than 5-15 minutes.
- Reasons to eat Allium…

Good source of selenium
May help promote healthy lipids (cholesterol, TG)
Anti-inflammatory
Anti-viral & anti-bacterial
Anti-cancer
GREEN TEA

- About 3 cups daily based on Asian intake
- Black pepper increases EGCG availability.
- Loose Tea: To test for freshness, smell the aroma to ensure it is sweet and grassy.
- Protect from light, moisture and food odors.
- “Spring water is ideal choice for brewing tea, followed by filtered water. Distilled water should never be used; the brew it produces will be flat since the minerals removed from it are essential to bringing out tea’s flavor.”
- Why Green Tea?

Antioxidant source (EGCG)
- Anti-cancer activity in cell and animal studies
- May be beneficial for bone mineral density
- Role in activating detoxification enzymes
- May help promote healthy metabolism
- May helps to promote healthy lipid (TG) levels
- May help to promote healthy blood sugar levels

“Green tea drinkers appear to have lower risk for a wide range of diseases, from simple bacterial or viral infections to chronic degenerative conditions including cardiovascular disease, cancer, stroke, periodontal disease, and osteoporosis.”