Let Food Be Thy Medicine-
Exploring the health benefits of foods & phytonutrients

Ashley Harris, M5, RD, LD – Fresh Food Fresh Perspective
Healthy Columbus Nutrition Seminar
July 25, 2013

“Let food be thy medicine and medicine be thy food”
Hippocrates
(460-377 BC)

Outline

- History & background on healing foods
- How foods heal
- Why foods heal
- Best food choices
- Foods for specific conditions
History
- Food used for thousands of years as medicine
  - Bible references ~4,000 years ago note foods and herbs used for medicinal purposes
- Stems across many cultures
  - (i.e. Chinese yin-yang foods, Indian principles of Ayurveda, Greek medicine)

How can foods heal?
- Prevent or fight chronic disease
  - Cancer, heart disease, diabetes
- Cure acute medical conditions
  - UTI, high cholesterol, colds, indigestion
- Improve mental states
  - Depression, anxiety, stress

Fact or Fiction?
- Modern science has proven many traditional healing foods actually do contribute to health and can have medicinal properties
- Some traditional healing foods more fiction than fact (i.e. pigs ears to cure cancer)
  - Some foods with some healing properties have falsely elevated claims (i.e. honey and cinnamon)
Which are the best?

- So many claims!!
- No true “superfoods”
  - Many are good but not better over others
  - Variety is key!!

Why do foods heal?

Health benefiting food components

- Macronutrients
  - Protein, fats, carbohydrates
- Vitamins, minerals
- Other nutrients
  - Fiber, pre/pro-biotics
- Phytochemicals
Macronutrients

- **Protein** - building blocks of life (make up muscles, hormones, genes, immune cells, brain chemicals, etc)

Macronutrients

- **Fats** - energy reserve, cushions organs, transports fat-soluble nutrients, provides structure to cell membranes
  - Monounsaturated fats (olive oil, nuts, avocados) = protect against high blood pressure, cholesterol, heart disease
  - Omega-3 fatty acids (fatty fish, shellfish, walnuts) = improve cardiovascular health, decrease inflammation, relieve depression

Macronutrients

- **Carbohydrates** - most efficient fuel source for the body & necessary for certain organs to function (i.e. brain)
### Vitamins & Minerals

<table>
<thead>
<tr>
<th>Vitamin/Mineral</th>
<th>May be helpful for</th>
<th>Where to find it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium</td>
<td>Osteoporosis, anxiety &amp; stress, blood pressure, PMS</td>
<td>Broccoli, dairy products, almonds, tofu, canned fish w/ bones</td>
</tr>
<tr>
<td>Folate</td>
<td>Anemia, depression, heart disease, infertility, insomnia, osteoporosis, pregnancy, rheumatoid arthritis</td>
<td>Asparagus, avocados, beans, broccoli, collard greens, oranges</td>
</tr>
<tr>
<td>Iron</td>
<td>Anemia, breast feeding, menorrhagia</td>
<td>Apricots, fatty fish, figs, lentils, nuts, peas, poultry, spinach, whole grains</td>
</tr>
<tr>
<td>Magnesium</td>
<td>Anxiety &amp; stress, fatigue, constipation, diabetes, blood pressure, kidney stones, migraines, PMS</td>
<td>Avocados, grains, nuts, seeds, shellfish, spinach, winter squashes</td>
</tr>
<tr>
<td>Selenium</td>
<td>Allergies, macular degeneration, prostate problems</td>
<td>Grains, mushrooms, nuts, poultry, rice, seeds, shellfish, whole grains</td>
</tr>
<tr>
<td>Vitamin B6</td>
<td>Anemia, depression, heart disease, insomnia</td>
<td>Asparagus, bananas, fatty fish, figs, mushrooms, peas, potatoes, rice</td>
</tr>
<tr>
<td>Vitamin B12</td>
<td>Anemia, depression, heart disease</td>
<td>Dairy products, fish, meat, poultry</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>Allergies, asthma, eczema, CFS, colds &amp; flu, acne, heart disease, homosexuality, immune system, blood pressure, osteoporosis, osteoarthritis, insulin resistance, diabetes, stress, sprains</td>
<td>Berries, cabbage, citrus fruits, broccoli, peppers, strawberries, spinach, walnuts, turnips</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>Breast cancer, eczema, eczema, memory loss, macular degeneration, prostate, rheumatoid arthritis</td>
<td>Avocados, grains, nuts, olive oil, salad greens, seeds</td>
</tr>
<tr>
<td>Zinc</td>
<td>Acne, cold &amp; flu, cold sores, eczema, insomnia</td>
<td>Beans, grains, meat, poultry, shellfish</td>
</tr>
</tbody>
</table>

### Other Nutrients

- **Soluble fiber** (apples, apricots, beans, berries, pumpkin, prunes, oats, figs) – lowers cholesterol, helps manage diarrhea/constipation
- **Insoluble fiber** (fruits/veggies, whole grains, flax) – fights cancer, manages constipation
- **Probiotics** (yogurt, fermented products) – helps immune system, diarrhea, obesity, UTI’s, infection

### Phytochemicals

- **aka phyto-nutrients**
- **Give plants distinctive color, smell, taste**
- **Provide MANY health benefits**
  - Especially for fighting cancer!!
AICR Phytochemical Chart

RED

- Improves prostate Health
  - Clinical trials at OSU using tomato juice to fight prostate cancer!
- Improves urinary tract health
- Improves memory

http://www.aicr.org/reduce-your-cancer-risk/diet/elements_phytochemicals.html
ORANGE/YELLOW

- Helps maintain vision, keeps skin healthy and heals cuts
- Helps keep immune system strong and especially fight colds

GREEN

- Improves circulation
- Keeps bones and teeth strong
- Prevents cataracts and eye disease

BLUE/PURPLE

- Prevents symptoms of aging – keeps you looking and feeling young!
- Prevents blood clots
- Improves memory
**WHITE/TAN**

- Lowers cholesterol
- Helps with joint pain
- Fights inflammation

---

**What are the best foods?**

- **ALL** plant foods
  - Fruits, vegetables, whole grains, nuts, seeds, beans, legumes, flaxseed, herbs & spices, olive oil
- Fish
  - especially cold-water, fatty fish like salmon, sardines
- Fermented products
  - Yogurt, kimchi, sauerkraut, miso
- Teas
  - Green, black, white, herbal
- Eggs

---

**My favorite healing foods**

- **ALL** plant foods
  - Fruits, vegetables, whole grains, nuts, seeds, beans, legumes, flaxseed, herbs & spices, olive oil
- Fish
  - especially cold-water, fatty fish like salmon, sardines
- Fermented products
  - Yogurt, kimchi, sauerkraut, miso
- Teas
  - Green, black, white, herbal
- Eggs
Foods for specific conditions

Acne

- **Beta-carotene**
  (apricots, asparagus, sweet potatoes, winter squash)

- **Vitamin B6**
  (avocados, bananas, potatoes, salmon)

- **Zinc**
  (crab, oysters, tofu, turkey)
Asthma & Allergies

- **Magnesium**
  (amaranth, avocados, quinoa, sunflower seeds)

- **Quercetin**
  (apples, berries, cherries, red onion)

- **Selenium**
  (brazil nuts, fish, oysters, sunflower seeds)

- **Vitamin C**
  (broccoli, citrus fruits, strawberries)

Anxiety & Stress

- **Calcium**
  (broccoli, cooking greens, dairy products, figs)

- **Complex carbohydrates**
  (beans, potatoes, rice, whole grains)

- **Magnesium**
  (amaranth, avocados, sunflower seeds, wheat germ)

- **Tryptophan**
  (bananas, dairy products, peas, poultry, turnips)

- **Vitamin B6**
  (bananas, potatoes, salmon)

Cancer

- **SO MANY PLANT FOODS!!!!**

- Certain plant foods & phytonutrients associated with specific cancer types
  - **Lycopene/tomatoes** – prostate cancer
  - **Berries** – esophageal cancer
  - **Carotenoids** – breast cancer
  - **Beta-carotene** – lung cancer
Colds & Flu

- Quercetin
  (apples, berries, plums & prunes, red onions)

- Vitamin C
  (citrus fruits, kiwifruit, peppers, strawberries)

- Zinc
  (beef, cashews, chicken)

Depression

- Folate
  (asparagus, lentils, peas, salad greens)

- Omega-3 fatty acids
  (fatty fish, shellfish, walnuts)

- Tryptophan
  (bananas, dairy products, peas, poultry)

- Vitamin B-12
  (dairy products, fatty fish, poultry, shellfish)

- Vitamin B-6
  (bananas, peas, potatoes)

Diabetes

- Complex carbohydrates
  (beans, potatoes, rice, whole grains)

- Fiber
  (vegetables, whole grains, beans, lentils)

- Magnesium
  (amaranth, brown rice, sunflower seeds)

- Monounsaturated fat
  (avocados, canola oil, nuts, olive oil)

- Vitamin C
  (bell peppers, broccoli, citrus fruits)
Heart Disease
- Soluble fiber (beans, carrots, oats)
- Folate (asparagus, lentils)
- Monounsaturated fat (avocados, olive oil)
- Omega-3 fatty acids (Fatty fish, flaxseed, shellfish, walnuts)
- Soy (tofu, edamame, miso)

Memory
- Flavonoids (blueberries, strawberries)
- Isoflavones (soy products- tofu, soy milk, edamame, miso)
- Monounsaturated fat (avocados, olive oil)
- Vitamin E (avocados, seeds)

Questions??

THANK YOU!!