How Sweet it Isn’t

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Board Certified, Holistic Nutrition

www.wholefoodguideforbreastcancer.com
FB: Whole Food Guide for Breast Cancer
THE WHOLE-FOOD GUIDE for BREAST CANCER SURVIVORS
A NUTRITIONAL APPROACH to PREVENTING REOCURRENCE

EDWARD M. BAUMAN, MEd, PhD
HELAYNE L. WALDMAN, EdD
Obesity Trends* Among U.S. Adults
(*BMI ≥30, or about 30 lbs. overweight for 5’4” person)
Case study: What happened to Jeannie?

Jeannie, 58 yr. old, metabolic syndrome breast cancer
5’5”, 168 pounds
BMI: 28
BP: 165/92
Triglycerides: 215
HbA1c: 5.9
HDL: 25
C-reactive protein: 4.3
High stress job, sleeps approx. 5.5 hrs./night
Meds: Lipitor, lisinopril, Esidrix
Jeannie: 2000

- 5'5”, 130 pounds
- BMI: 21.6
- BP: 120/76
- Triglycerides: 95
- Hælc: 50
- Total cholesterol: 182
- HDL: 67
- C-reactive protein: .7
What happened to Jeannie?

- **Nutrient depletion**
  - S.A.D. lacks fiber, vitamins, minerals—but uses our stored nutrients to be metabolized
  - Nutrients such as magnesium, chromium, and zinc required to process glucose
  - **Glucose rises rapidly**
    - Refined carbs digested quickly—no fiber to slow process down
  - Induces excess insulin
  - Insulin instructs body to store fat

Jeannie was a victim of S.A.D.
2017: What Are We Eating?

Only 9% of Americans eat 5 servings from fruits and vegetables per day.

Americans eat over 150 lbs of sugar per year per person, or approx. 40 tsp/day.

What is the result?
Jeannie: January, 2017

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- BMI: 28
- BP: 165/92
- Triglycerides: 215
- Ha1c: 5.9
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Jeannie has metabolic syndrome
And... Jeannie is now addicted to sugar.
Sugar High:
14 ‘Healthy’ Foods Surprisingly High in Sugar
Got sugar?

- Muffins (up to 15 grams)
- Granola Bars (up to 9 grams)
- Protein bars (up to 20 grams)
- Cereal (Over 10 grams)
- Spaghetti sauce (up to 12 grams)
- Salad dressing (up to 10 grams)
- Condiments (over 10 grams)
- Fruit juice (up to 36 grams)
- Milk (up to 12 grams)
- Flavored yogurt (up to 20 grams)
- Energy drinks (up to 54 grams of sugar)
- Canned soup (up to 15 grams)
- Anything labeled “fat free”
A Day of "Healthy Eating" Can Contain Over 100 Grams of Sugar

- **Breakfast**: Cereal with milk + glass of juice
- **Snack**: Flavored yogurt
- **Lunch**: Chicken with BBQ sauce + salad with fat-free salad dressing
- **Snack**: Protein bar
- **Dinner**: Spaghetti + salad with fat-free salad dressing
- **Grand Total**: 140 Grams of Sugar
Excessive consumption of sugar can lead to:

- Obesity
- Type 2 diabetes
- Fatty liver disease
- Hypertension
- Elevated triglycerides
- Heart disease
- Kidney stones
- Irritable bowel syndrome
- Gall bladder disease
- Tooth decay
- Gallbladder disease
- Fatigue
- Anxiety
- Depression
- Attention deficit disorder
- Migraines
- Tension headaches
- Premenstrual syndrome
- Yeast infections

Gaby, Alan, M.D., Nutritional Medicine
Sugar and Cancer: a sweet relationship

• Sugar depresses immune system
• Cancer cells uptake of sugar is approx. 5X that of normal cells
• Cancer cells are “obligate sugar metabolizers”
• “We can get a lot of PET scans or eat a lot of sugar if we want to get cancer growing.”

Dr. Susan Silberstein, Center for Advancement in Cancer
If Jeannie had only known about...

- Sugar, refined carbohydrates and the glycemic index
- HFCS (high fructose corn syrup)
- Dangers of artificial sweeteners
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Gaby, Alan, M.D., Nutritional Medicine
What’s more: Glyphosate used on sugar cane crop

- Main ingredient in Monsanto’s ROUNDUP
- Glyphosate is used not only on Roundup Ready crops, but also on glyphosate-sensitive sugar cane and wheat shortly before harvest, when it acts as a dessicant (drying agent)
- Glyphosate may stimulate hormone-dependent cancers even at extremely low “environmentally relevant” amounts
- 2015: WHO declares glyphosate a “probable human carcinogen”
- If you buy processed food, opt for products bearing the USDA 100% Organic label, as organics do not permit GMOs or glyphosate
For example:

Cheerios Oats

NO GMO

but not ROUNDUP free?
Refined Carbs

Grains that have been stripped of the bran and germ layer, leaving only the endosperm

Usually equivalent to sugar on the glycemic index, causing all of the same problems and nutrient depletions

Better choices:
- Whole grains & whole grain cereals, such as brown rice, quinoa, millet, buckwheat, & oats
- Sprouted whole grain breads
- Brown rice & whole grain pastas
- Organic, please!
Glycemic Index

- The glycemic index (GI) tells you how quickly foods containing carbohydrates affect your blood sugar level when eaten by themselves. According to the American Diabetes Association (ADA), GI scores are rated as:
  - Low: 55 or below
  - Moderate: 56 to 69
  - High: 70 and above
# Low Glycemic Index Foods

## FRUITS
- Apple
- Apricot
- Avocado
- Berries (all)
- Cherries
- Grapefruit
- Kiwi
- Lemon
- Lime
- Nectarine
- Orange
- Peach
- Pear
- Plum
- Pomegranate
- Tangarine
- Tomato

## VEGETABLES
- Alfalfa Sprouts
- Asparagus
- Bok Choy
- Broccoli
- Cauliflower
- Cabbage
- Celery
- Cucumber
- Kale
- Lettuce
- Mushrooms
- Onion
- Radish
- Spinach
- Squash-green and yellow
- String beans
- Watercress
- Sweet Potato
- Yam

## LEGUMES
- Chickpeas
- Kidney beans
- Lentils
- Navy beans
- Soy beans

## GRAINS
- Bulgur
- Brown rice
- Pumpernickel bread (whole grain)
- Stone ground whole wheat bread
HFCs - How bad is it?

A number of animal studies show:

- High fructose diets induce hypertension in animals
- HFCs promotes atherosclerosis more than other carbohydrates
- HFCs raises triglycerides
- HFCs raises LDL and VLDL cholesterol
Fake Sugar may be worse than real sugar!
Fake Sugar may be worse than real sugar!

- Artificial sweeteners induce glucose intolerance by altering the gut microbiota. SEP 16, 2014
- Consumption of ≥2 servings per day of artificially sweetened soda is associated with a 2-fold increased odds for kidney function decline in women. SEP 30, 2010
- The dietary additive excitotoxins MSG and aspartame contribute to fibromyalgia symptoms. JUL 03, 2012
- Aspartame and saccharin led to overexpression of the key oncogene (h-Ras) and the downregulation of the tumor suppressor gene (P27) in all treated rats. MAY 31, 2015
- Artificial sweetener consumption is associated with urinary tract tumors. JUL 01, 2008

Source: GreenMedInfo.com
# How Sweet It Isn’t!

<table>
<thead>
<tr>
<th>Poor Choices</th>
<th>Better Choices in Moderation!</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Fructose Corn Sweetener</td>
<td>Maple syrup</td>
</tr>
<tr>
<td>White sugar</td>
<td>Unrefined honey</td>
</tr>
<tr>
<td>Brown sugar</td>
<td>Molasses</td>
</tr>
<tr>
<td>Raw sugar</td>
<td>Date sugar</td>
</tr>
<tr>
<td>Splenda</td>
<td>Stevia leaf</td>
</tr>
<tr>
<td>Nutrasweet</td>
<td>Xylitol from birch bark or corn husk</td>
</tr>
<tr>
<td>Equal</td>
<td>Mannitol - a sugar alcohol</td>
</tr>
</tbody>
</table>
Insulin Resistance and Metabolic Syndrome

- Refined sugar is absorbed rapidly into the bloodstream.
- This triggers the pancreas to secrete massive amounts of insulin.
- Results:
  - Insulin is a fat storage hormone.
  - Eventually, insulin receptors wear out; sugar cannot enter cells (insulin resistance).
  - Result is elevated blood glucose, which leads to metabolic syndrome and often Type II diabetes.
Essential nutrition for blood sugar regulation
What to eat

- Protein at every meal
- Plenty of healthy fat
  - Fatty fish (salmon, halibut, sardines, anchovies)
  - Avocados
  - Nuts and seeds
  - Healthy oils: olive oil, coconut oil, ghee, avocado oil
    - AVOID com, soy, canola and other “vegetable” oils!
- Lots of fiber from whole grains, fruits, vegetables, legumes
- Low glycemic index foods

Protein, fat and fiber slow the release of glucose into the bloodstream
To keep blood sugar stable, stick to...

**Low Glycemic Index Foods**

<table>
<thead>
<tr>
<th>FRUITS</th>
<th>LEGUMES</th>
<th>VEGETABLES</th>
</tr>
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<tbody>
<tr>
<td>Apple</td>
<td>Chickpeas</td>
<td>Alfalfa Sprouts</td>
</tr>
<tr>
<td>Apricot</td>
<td>Kidney beans</td>
<td>Asparagus</td>
</tr>
<tr>
<td>Avocado</td>
<td>Lentils</td>
<td>Bok Choy</td>
</tr>
<tr>
<td>Berries (all)</td>
<td>Navy beans</td>
<td>Broccoli</td>
</tr>
<tr>
<td>Cherries</td>
<td>Soy beans</td>
<td>Cauliflower</td>
</tr>
<tr>
<td>Grapefruit</td>
<td></td>
<td>Cabbage</td>
</tr>
<tr>
<td>Kiwi</td>
<td></td>
<td>Celery</td>
</tr>
<tr>
<td>Lemon</td>
<td></td>
<td>Cucumber</td>
</tr>
<tr>
<td>Lime</td>
<td></td>
<td>Kale</td>
</tr>
<tr>
<td>Nectarine</td>
<td></td>
<td>Lettuce</td>
</tr>
<tr>
<td>Orange</td>
<td></td>
<td>Mushrooms</td>
</tr>
<tr>
<td>Peach</td>
<td>Bulgar</td>
<td>Onion</td>
</tr>
<tr>
<td>Pear</td>
<td>Brown rice</td>
<td>Radish</td>
</tr>
<tr>
<td>Plum</td>
<td>Pumpernickel bread (whole grain)</td>
<td>Spinach</td>
</tr>
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<td>Pomegranate</td>
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<td>Tangarine</td>
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<td>Sweet Potato</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yam</td>
</tr>
</tbody>
</table>
Magnesium is found in more than 300 different enzymes in your body, including some of those that help regulate blood sugar. After six months, those taking the magnesium had lower fasting blood sugar levels and less insulin resistance than the control group.¹

“Magnesium deficiencies can lead to metabolic diseases.”

- World Health Report 2000 (Geneva WHO)

Magnesium Deficiency Symptoms

- Muscle weakness, tremor, or spasm
- Heart arrhythmia, irregular contraction, or increased heart rate
- Softening and weakening of bone
- Imbalanced blood sugar levels
- Headaches
- Elevated blood pressure
## Sources of Magnesium

<table>
<thead>
<tr>
<th>Food</th>
<th>Calories</th>
<th>% Daily Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumpkin seeds, raw</td>
<td>187</td>
<td></td>
</tr>
<tr>
<td>Spinach, boiled</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Swiss chard, boiled</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Soybeans, cooked</td>
<td>298</td>
<td></td>
</tr>
<tr>
<td>Salmon, chinook</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>Sunflower seeds, raw</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>Sesame seeds</td>
<td>206</td>
<td></td>
</tr>
<tr>
<td>Halibut, baked/broiled</td>
<td>159</td>
<td></td>
</tr>
<tr>
<td>Black beans, cooked</td>
<td>227</td>
<td></td>
</tr>
<tr>
<td>Navy beans, cooked</td>
<td>258</td>
<td></td>
</tr>
</tbody>
</table>

Source: [www.whfoods.com](http://www.whfoods.com)
Chromium for Glucose Tolerance

“Chromium is without a doubt the most important mineral for the prevention and treatment of insulin resistance and Syndrome X. The symptoms of chromium deficiency are actually the symptoms of Syndrome X: elevated glucose, insulin, and cholesterol; elevated triglycerides; and decreased levels of the good HDL cholesterol.”

Syndrome X by Burt Berkson, M.D. (2000)
Food sources of chromium

Other sources: cheese, brown rice, mushrooms, chicken, eggs, liver, nutritional yeast, beer and the herbs Wild yam, Nettle, Catnip, Oat straw, Licorice, Horsetail, Yarrow, Red clover and Sarsaparilla.
Zinc

- Reasons for zinc deficiency
  - Soil depletion
  - Depleted foods
  - Stress
  - High Copper
- High blood sugar causes excretion of zinc more quickly
- Zinc protects insulin receptors
## Food sources of zinc

<table>
<thead>
<tr>
<th>Food</th>
<th>Calories</th>
<th>% Daily Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calf’s liver, braised</td>
<td>187</td>
<td>72.0%</td>
</tr>
<tr>
<td>Beef tenderloin, lean</td>
<td>240</td>
<td></td>
</tr>
<tr>
<td>Lamb loin, roasted</td>
<td>229</td>
<td></td>
</tr>
<tr>
<td>Venison</td>
<td>179</td>
<td></td>
</tr>
<tr>
<td>Sesame seeds</td>
<td>206</td>
<td></td>
</tr>
<tr>
<td>Pumpkin seeds, raw</td>
<td>187</td>
<td></td>
</tr>
<tr>
<td>Yogurt, low-fat</td>
<td>155</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>153</td>
<td></td>
</tr>
<tr>
<td>Green peas, boiled</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>Shrimp, steamed/boiled</td>
<td>112</td>
<td></td>
</tr>
</tbody>
</table>
Recent research suggests that cinnamon may be helpful as a supplement to regular diabetes treatment in people with type 2 diabetes. One study published in 2009 found that cinnamon taken twice a day for 90 days improved hemoglobin A1C levels in people with poorly controlled type 2 diabetes (hemoglobin A1C levels greater than 7 percent).

Maria Collazo-Clavell, M.D, Mayo Clinic
The low-sugar, anti-cancer diet plan

- Avoid cancer promoting foods
  - soda’s
  - pastries
  - white foods, breads, rice, potatoes w/out skins, skim milk
  - packaged snack foods
  - alcohol
  - excessive coffee
  - Processed oils

- Eat Cancer Protective Foods
  - fresh vegetables and fruits
  - lean proteins
  - whole grains
  - flax and olive oil
  - nutritional yeast
  - green foods & powders
  - bitter melon
  - herbs and spices esp. cinnamon
Basic nutritional Rx for Jeannie

- Reduce or eliminate refined carbs, sodas, alcohol and caffeine and damaged fats
- Eat protein at every meal (esp. breakfast),
- Avoid cancer promoting foods; eat cancer protective foods
- Increase intake of Omega 3 fats, healthy oils such as olive oil, and foods rich in magnesium, chromium, zinc and antioxidants (easy to do by consuming pastured/organic meat and 5-10 organic veggies/fruit a day)
- Eat plenty of fiber
- Take a high quality multinutrient with ample amounts of magnesium, chromium, zinc and B vitamins
- Check for additional nutrient depletions from medications (statins, ACE inhibitors, diuretics)
- Begin strength training program
- Sleep 7 + hrs/ night
In short

“Don’t eat anything your great-great grandmother wouldn’t recognize as food. There are a great many food-like items in the supermarket your ancestors wouldn’t recognize as food... stay away from these”  ~Michael Pollan
In short

One cannot think well, love well, sleep well, if one has not dined well.

~ Virginia Woolf
Thank you!

For more information:

FB: Whole Food Guide for Breast Cancer

hwaldman@turning-the-tables.com

www.wholefoodguideforbreastcancer.com