Healthy Eating for PSC/IBD

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The Building Blocks of Well-Being

• Nutrition: realistic strategies to eat well
• So….What do I eat?
  – Focus on *how* and *what* eat
  – Eating to fight fatigue
  – The Importance of Protein
  – Media Mixed Messages
• Patient driven learning- Q&A
What is a Healthy Diet?

• Healthy:
  – Rich in fruits and veggies (5-9/day)
  – Rich in whole grains
    • Brown rice, oats, whole corn, whole wheat, quinoa, amaranth, teff….
    • Focus on alternative grains for complete protein
  – Lean proteins
    • Fish, poultry, pork, lean beef
    • Legumes, soy, nuts
  – Moderate in heart-healthy fats and limited in sugars
    • www.usda.gov/dietaryguidelines
  – Eating small meals throughout the day
Daily Beverage Recommendations:

- 6 Glasses of Water

Monthly

Weekly

Daily

- Wine in moderation

Daily Physical Activity
Pedometer Use
How Does Someone with PSC/IBD Eat Healthy?

• **Cheat System**
  – Cook/peel/chop/puree high fiber foods improve tolerance
  – Break down fibers (not destroy)
  – Result less fermentation = less bloating/pain

• **Widen Your View**
  – Other whole grains- see Carol Fenster’s Guide to Cooking
  – 100% corn tortilla whole grain
  – Many whole grains also complete proteins: quinoa, teff, amaranth
    • Try instead of rice or potato

• **Change Fats**
  – *Type* as important as the amount
  – Monounsaturated fats- mix in Omega-3 fatty acids
    • Avocado, canola/olive oils, olives, nuts/nut butters, soybeans
  – Moderate intake best- avoid ultra low-fat diet unless directed

• **Eat More Protein- Really!**
“I was on the low-carbohydrate diet for a week and lost three inches off my smile.”
Importance and Safety of Higher Protein

• Benefits:
  – Increased fat burning with more protein
  – Blood sugar regulation
  – Stimulate muscle synthesis (need 30 gm)
  – Improved satiety
  – Improved bone density
  – Less fatigue
    • AA precursors to important neurotransmitters
Importance and Safety of Higher Protein

**Benefits:**
- Less fatigue
  - AA tryptophan and tyrosine are precursors to serotonin, dopamine, norepinephrine
  - Neurochemicals help fight fatigue and improve motivation
- Can rely on plant-based proteins for branched chain amino acids (BCAA)

**Safety:**
- Protein restrictions are rarely necessary
  - Cirrhosis should include quality protein
- Safely tolerate range of 1.0-1.5 gm/kg/bw
  - To figure out kg = weight(#)/ 2.2
  - ~ 80-100 gm protein in 150 (68 kg) person
A. Optimal Protein Distribution

Breakfast: ~30 g protein  
Lunch: ~30 g protein  
Dinner: ~30 g protein

B. Skewed Protein Distribution

Breakfast: ~10 g protein  
Lunch: ~20 g protein  
Dinner: ~60 g protein

{Maximum protein synthesis}

Getting More Lean Protein into Meals

• What does 30 gm look like?
  – Veggie burger with 1 slice cheese on whole grain roll
  – 4 oz lean animal protein such as fish, poultry, lean beef, pork
  – 1.5 cups tofu veggie stir fry
  – 1- 1.5 cups cooked whole grains such as quinoa, amaranth, teff
  – 1-1.5 cups chili
  – 2 chicken tacos
  – 1 protein smoothie made with 1 scoop powder and 1 cup milk
  – ¾ cup low-fat tuna salad
  – Lean Cuisine SPA Fish Entrée with 6 oz yogurt
  – 1 cup scrambled Egg Beaters™
Benefits of Plant-Based Protein

- More plant-based & dairy protein = Branched Chain Amino Acids (BCAA)
  - Help fatigued muscle
  - Lower in saturated fats
  - Quick
  - Important in liver disease
- Good choices:
  - Whey protein powder
  - Alternative/whole grains
  - Soy veggie burgers
  - Flavored pre-cooked tofu
  - Pureed lentil soup/ refried beans
  - Hummus/legumes
  - Nut butters
  - Reduced-fat cheese and Greek style yogurt
### Nutritional Information for Whole Grains

<table>
<thead>
<tr>
<th>Raw Grain (1 cup)</th>
<th>Thiamin (mg)</th>
<th>Riboflavin (mg)</th>
<th>Niacin (mg)</th>
<th>Folate (mcg)</th>
<th>Calcium (mg)</th>
<th>Iron (mg)</th>
<th>Magnesium (mg)</th>
<th>Zinc (mg)</th>
<th>Protein (g)</th>
<th>Fiber (g)</th>
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</thead>
<tbody>
<tr>
<td>Amaranth</td>
<td>0.16</td>
<td>0.41</td>
<td>2.5</td>
<td>96</td>
<td>298</td>
<td>14.8</td>
<td>519</td>
<td>6.2</td>
<td>28.2</td>
<td>18.1</td>
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<tr>
<td>Brown Rice</td>
<td>0.74</td>
<td>0.17</td>
<td>9.4</td>
<td>37</td>
<td>43</td>
<td>2.7</td>
<td>265</td>
<td>3.7</td>
<td>14.7</td>
<td>6.5</td>
</tr>
<tr>
<td>Buckwheat Groat</td>
<td>0.37</td>
<td>0.44</td>
<td>8.4</td>
<td>69</td>
<td>28</td>
<td>4.1</td>
<td>362</td>
<td>4.0</td>
<td>19.2</td>
<td>16.9</td>
</tr>
<tr>
<td>Corn Grits (yellow, enriched)</td>
<td>0.99</td>
<td>0.59</td>
<td>7.7</td>
<td>320</td>
<td>3</td>
<td>6.1</td>
<td>42</td>
<td>0.6</td>
<td>13.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Millet</td>
<td>0.84</td>
<td>0.58</td>
<td>9.4</td>
<td>170</td>
<td>16</td>
<td>6.0</td>
<td>228</td>
<td>3.4</td>
<td>22.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Oat Groat*</td>
<td>1.19</td>
<td>0.22</td>
<td>1.5</td>
<td>87</td>
<td>84</td>
<td>7.4</td>
<td>276</td>
<td>6.2</td>
<td>26.4</td>
<td>16.5</td>
</tr>
<tr>
<td>Quinoa</td>
<td>0.34</td>
<td>0.67</td>
<td>5.0</td>
<td>83</td>
<td>102</td>
<td>15.7</td>
<td>357</td>
<td>5.6</td>
<td>22.3</td>
<td>10.0</td>
</tr>
<tr>
<td>Sorghum</td>
<td>0.46</td>
<td>0.27</td>
<td>5.6</td>
<td>38</td>
<td>54</td>
<td>8.5</td>
<td>365</td>
<td>3.0</td>
<td>21.7</td>
<td>12.1</td>
</tr>
<tr>
<td>Teff</td>
<td>0.70</td>
<td>0.20</td>
<td>2.7</td>
<td>135</td>
<td>331</td>
<td>12.1</td>
<td>342</td>
<td>8.8</td>
<td>21.8</td>
<td>11.2</td>
</tr>
<tr>
<td>Wild Rice</td>
<td>0.18</td>
<td>0.42</td>
<td>10.8</td>
<td>152</td>
<td>34</td>
<td>3.1</td>
<td>283</td>
<td>9.5</td>
<td>23.6</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Nutrient composition data from:
### How to Cook Whole Grains

From *1000 Gluten-Free Recipes by Carol Fenster, PhD*

<table>
<thead>
<tr>
<th>Grain (1 cup)</th>
<th>Boiling Water or Broth</th>
<th>Approximate Cooking Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amaranth 1</td>
<td>2 cups</td>
<td>20-25 minutes</td>
</tr>
<tr>
<td>Brown rice</td>
<td>2 1/2 cups</td>
<td>50-55 minutes</td>
</tr>
<tr>
<td>Buckwheat 2</td>
<td>2 cups</td>
<td>15-20 minutes</td>
</tr>
<tr>
<td>Oat Groats 3</td>
<td>2 cups</td>
<td>40-45 minutes</td>
</tr>
<tr>
<td>Millet Grits/Meal 4</td>
<td>3 cups</td>
<td>10-15 minutes</td>
</tr>
<tr>
<td>Polenta (Corn) Grits</td>
<td>4 cups</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Quinoa 5</td>
<td>2 cups</td>
<td>15-20 minutes</td>
</tr>
<tr>
<td>Sorghum 6 (soak overnite)</td>
<td>2 cups</td>
<td>45-60 minutes</td>
</tr>
<tr>
<td>Steel-Cut Oats 7</td>
<td>4 cups</td>
<td>10-15 minutes (rinse with hot water)</td>
</tr>
<tr>
<td>Teff 8</td>
<td>3 cups</td>
<td>10-15 minutes</td>
</tr>
<tr>
<td>Wild Rice</td>
<td>4 cups</td>
<td>40 minutes</td>
</tr>
</tbody>
</table>
Other Strategies for Healthy Eating

• Weekend pre-planning
  – Batch cooking
  – Crock pot
  – Freeze in pre-packaged ready-to-go
• Change expectations of Healthy Meal
  – Cereal with fruit and egg whites great dinner
• Frozen just as good as fresh
• Pre-cut/chopped fruits and veggies retain nutritional value
• Focus on meal *assembly*
Patient Q & A

- I Heard that I shouldn’t eat bananas because they are too high in sugars?
- Should I try an anti-inflammatory diet where I only eat certain grains and certain fruits?
- What about fish oils, probiotics and milk thistle?
- Should I follow an allergy free diet?
Helpful Links: Specialty Diet Information

- **Dietetic Associations:**
  - [www.eatright.org](http://www.eatright.org)
  - [http://www.diabeteseducator.org/](http://www.diabeteseducator.org/)

- **Celiac Disease and Use of Alternative Grains:**
  - [www.glutenfreediet.ca](http://www.glutenfreediet.ca)
  - [www.celiaccentral.org](http://www.celiaccentral.org)
  - [www.gluten.net](http://www.gluten.net)
  - [www.celiaccentral.org](http://www.celiaccentral.org)
  - [www.glutenfreequickandeasy.com](http://www.glutenfreequickandeasy.com)
  - [www.glutenfreeontheego.com](http://www.glutenfreeontheego.com)
Helpful Website for Food Allergies/Asthma

- Allergy and Asthma Network/ Mothers of Asthmatics [www.aanma.org](http://www.aanma.org)

- American Academy of Allergy, Asthma, & Immunology [www.aaaai.org](http://www.aaaai.org)

- American College of Allergy, Asthma, and Immunology [http://allergy.mcq.edu](http://allergy.mcq.edu)

- Asthma & Allergy Foundation .of America 800-7ASTHMA; [www.aafa.org](http://www.aafa.org)

- Food Allergy & Anaphylaxis Network 800.9294040; 703.691.3179 [www.foodallergy.org](http://www.foodallergy.org), [www.fankids.org](http://www.fankids.org) (for kids)

  e-mail: foodinfo@IFICinfo.health.org
Seeking Information on Supplements & Complementary Therapies

- National Institute of Health Office of Dietary Supplements:
- Look up your supplement:
- Complementary and Alternative Medicine
- Institute of Medicine
  - [http://www.iom.edu/?ID=4829](http://www.iom.edu/?ID=4829)
- Department of Health and Human Services Agency for Healthcare Research and Quality