



Center for
Psychosocial Research
in GI



NORTHWESTERN
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Healthy Eating for PSC/IBD

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The Building Blocks of Well-Being

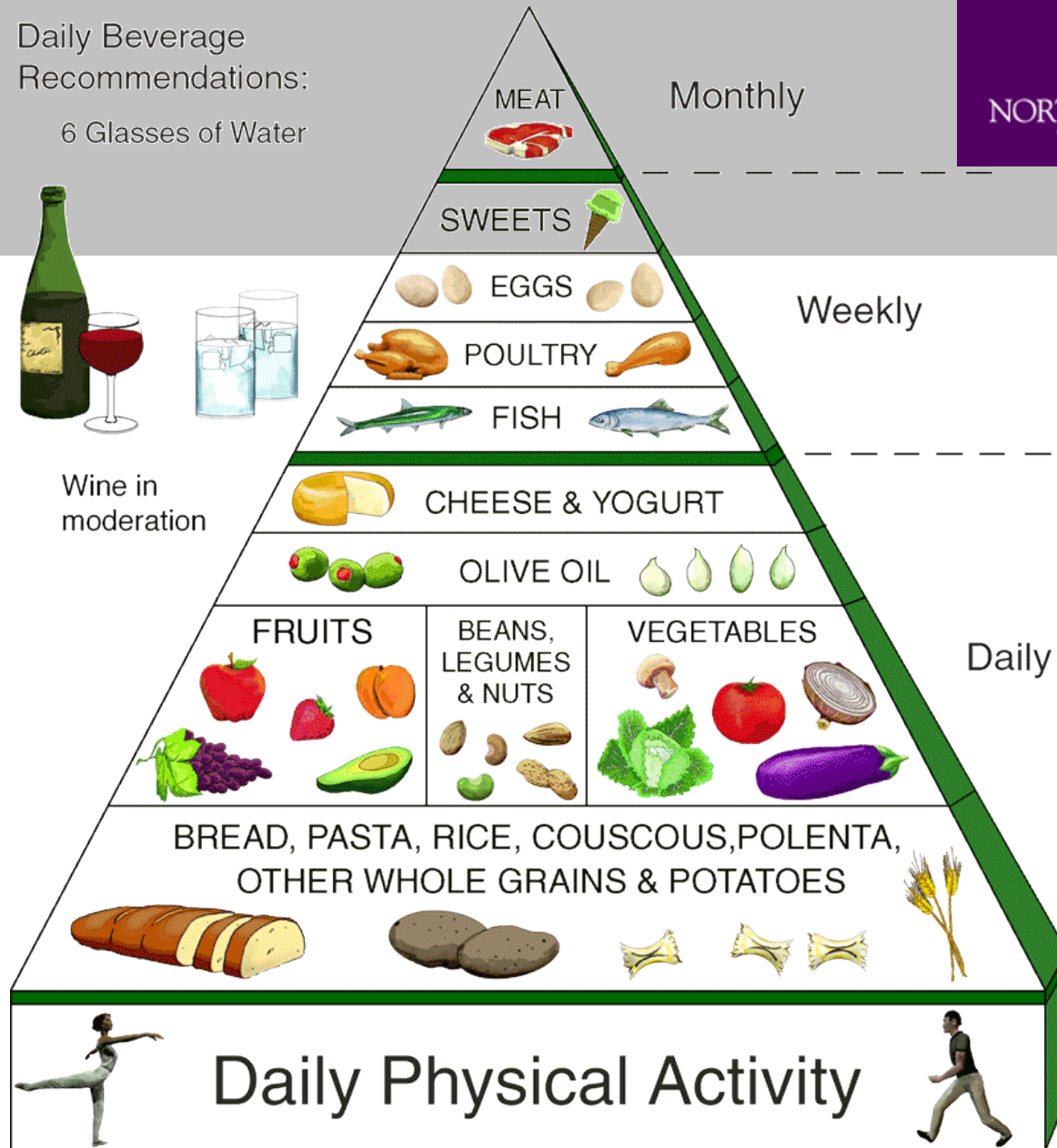
- Nutrition: realistic strategies to eat well
- So....What do I eat?
 - Focus on *how* and *what* eat
 - Eating to fight fatigue
 - The Importance of Protein
 - Media Mixed Messages
- Patient driven learning- Q&A

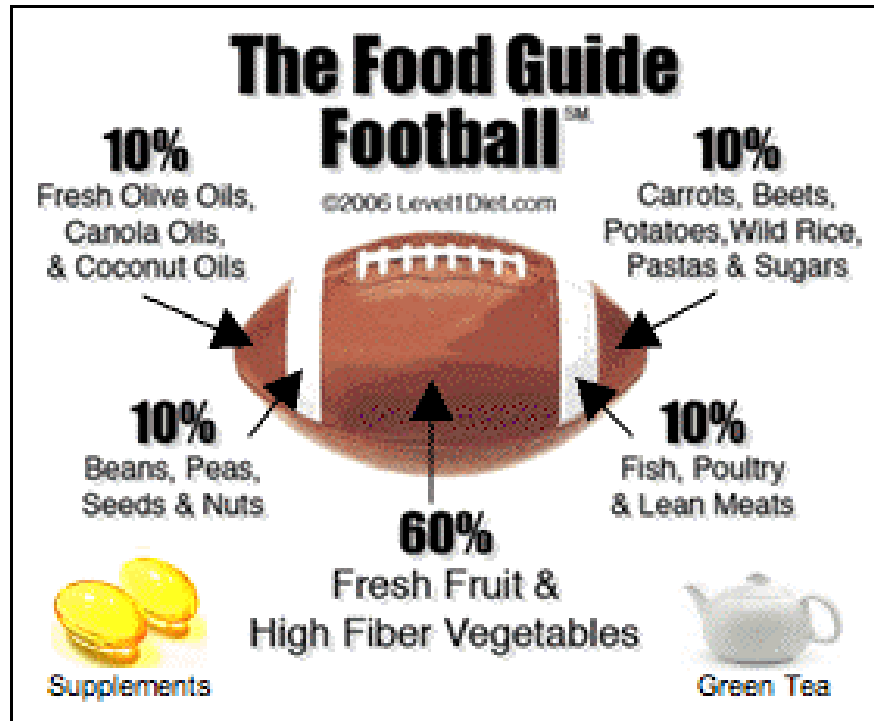


What is a Healthy Diet?

- 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





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!**

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**“I was on the low-carbohydrate diet for a week
and lost three inches off my smile.”**

Importance and Safety of Higher Protein

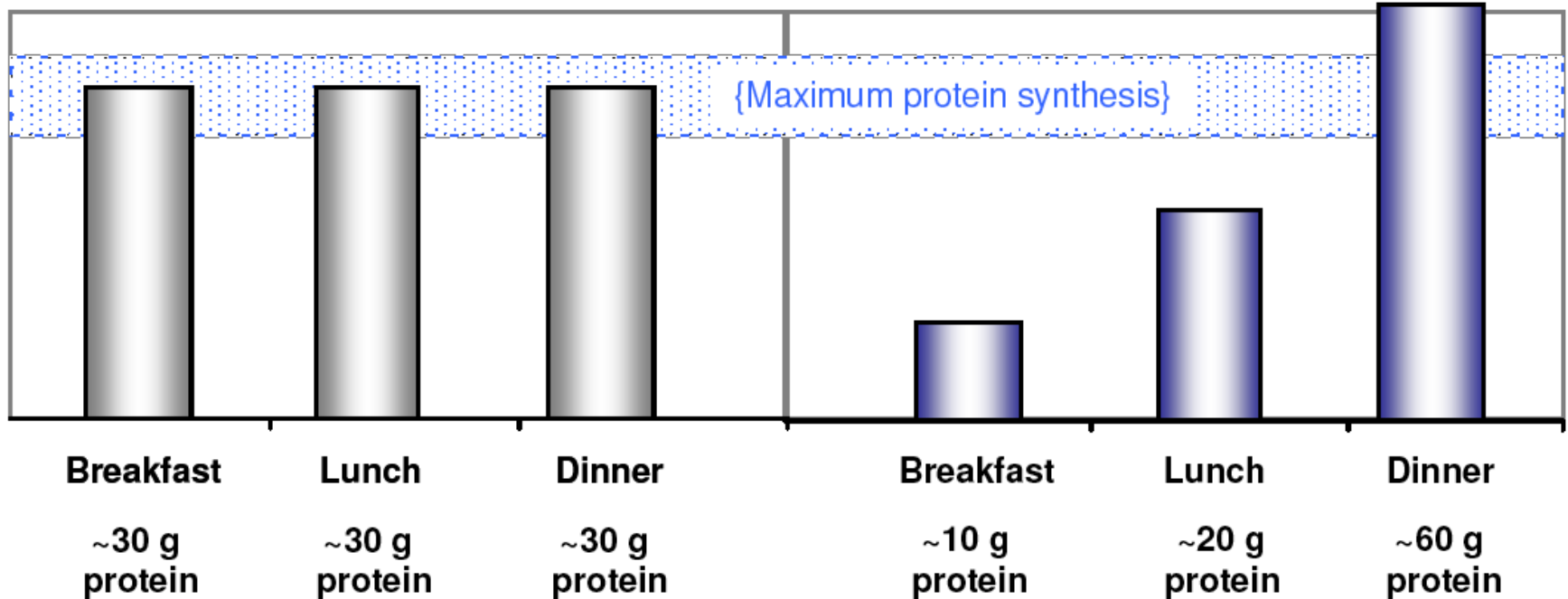
- Benefits:
 - Increased fat burning with more protein
 - Blood sugar regulation
 - Stimulate muscle synthesis (need 30 gm)
 - Improved satiety
 - Improved bone density
 - Less fatigue
 - AA precursors to important neurotransmitters

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
 - Schultz GJ et al. Curr Opin Clin Nutr Metab Care 11:275–280
 - Plauth M, Cabre´ E, Riggio O, et al. ESPEN guidelines on enteral nutrition: liver disease. Clin Nutr 2006; 25:285–294.

A. Optimal Protein Distribution

B. Skewed Protein Distribution



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
 - $\frac{3}{4}$ cup low-fat tuna salad
 - *Lean Cuisine* SPA Fish Entrée with 6 oz yogurt
 - 1 cup scrambled *Egg Beaters*TM

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

Raw Grain (1 cup)	Thiamin mg	Riboflavin mg	Niacin mg	Folate mcg	Calcium mg	Iron mg	Magnesium mg	Zinc mg	Protein g	Fiber g
Amaranth	0.16	0.41	2.5	96	298	14.8	519	6.2	28.2	18.1
Brown Rice	0.74	0.17	9.4	37	43	2.7	265	3.7	14.7	6.5
Buckwheat Groats	0.37	0.44	8.4	69	28	4.1	362	4.0	19.2	16.9
Corn Grits (yellow, enriched)	0.99	0.59	7.7	320	3	6.1	42	0.6	13.7	2.5
Millet	0.84	0.58	9.4	170	16	6.0	228	3.4	22.0	17.0
Oat Groats*	1.19	0.22	1.5	87	84	7.4	276	6.2	26.4	16.5
Quinoa	0.34	0.67	5.0	83	102	15.7	357	5.6	22.3	10.0
Sorghum	0.46	0.27	5.6	38	54	8.5	365	3.0	21.7	12.1
Teff	0.70	0.20	2.7	135	331	12.1	342	8.8	21.8	11.2
Wild Rice	0.18	0.42	10.8	152	34	3.1	283	9.5	23.6	9.9
Bulgur (quick cooking whole wheat)	0.32	0.16	7.16	38	49	3.4	230	2.7	17.2	25.6

Nutrient composition data from:
1. *Gluten-Free Diet: A Comprehensive Resource Guide – Revised and Expanded Edition, 2008* by
Shelley Case, RD. www.glutenfreediet.ca (Amaranth, brown rice, buckwheat, millet, quinoa, sorghum, teff
and wild rice)

How to Cook Whole Grains

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

Grain (1 cup)	Boiling Water or Broth	Approximate Cooking Time
Amaranth 1	2 cups	20-25 minutes
Brown rice	2 1/2 cups	50-55 minutes
Buckwheat 2	2 cups	15-20 minutes
Oat Groats 3	2 cups	40-45 minutes
Millet Grits/Meal 4	3 cups	10-15 minutes
Polenta (Corn) Grits	4 cups	10 minutes
Quinoa 5	2 cups	15-20 minutes
Sorghum 6 (soak overnight)	2 cups	45-60 minutes
Steel-Cut Oats 7	4 cups	10-15 minutes (rinse with hot water)
Teff 8	3 cups	10-15 minutes
Wild Rice	4 cups	40 minutes

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.diabeteseducator.org/>
- Celiac Disease and Use of Alternative Grains:
 - www.glutenfreediet.ca
 - www.celiaccentral.org
 - www.gluten.net
 - www.celiaccentral.org
 - www.glutenfreequickeasy.com
 - www.glutenfreeonthego.com

Helpful Website for Food Allergies/Asthma

- Allergy and Asthma Network/
Mothers of Asthmatics www.aanma.org
- American Academy of Allergy, Asthma, &
Immunology www.aaaai.org
- American College of Allergy, Asthma, and
Immunology <http://allergy.mcg.edu>
- Asthma & Allergy Foundation .of America
800-7ASTHMA; www.aafa.org
- Food Allergy & Anaphylaxis Network
800.9294040; 703.691.3179
www.foodallergy.org, www.fankids.org (for
kids)
- International Food Information Council
<http://ifinfo.health.org/>
e-mail: foodinfo@ifinfo.health.org

Seeking Information on Supplements & Complementary Therapies

- National Institute of Health Office of Dietary Supplements:
 - <http://dietary-supplements.info.nih.gov/>
- Look up your supplement:
 - http://ods.od.nih.gov/health_information/health_information.aspx
- Complementary and Alternative Medicine
 - http://nccam.nih.gov/news/camstats/2007/camsurvey_fs1.htm
- Institute of Medicine
 - <http://www.iom.edu/?ID=4829>
- Department of Health and Human Services Agency for Healthcare Research and Quality
 - <http://www.ahrq.gov/>