



# Nutrition and PSC

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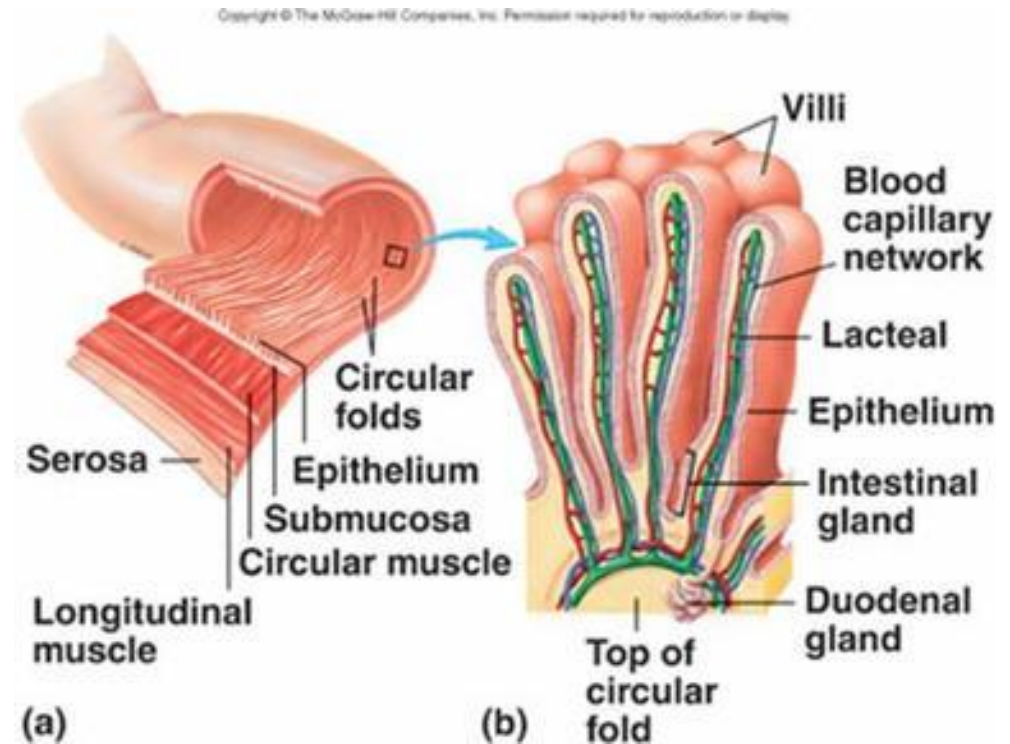


## We will discuss:

- The role of fat, carbohydrates, and protein in PSC
- Potential vitamin deficiencies
- Individualize your diet
- Fighting fatigue
- After transplantation.....
- Your questions!

# What can I absorb?

- Status of your liver disease
- IBD involvement
- Food intolerances





# Fat

- Requires bile to breakdown
- Quantity trumps quality
  - Lower fat diet
  - Still strive for less saturated forms
    - Stress more olive oil and omega-3 fatty acids
    - Saturated fat is inflammatory





# Protein

- Eat a “normal” protein diet (~1 g of protein per kilogram)
  - Generally ~55-70 g for women and ~75-90 g for men
  - One kilogram=2.2 pounds
- This can vary with inflammatory state, corticosteroid use, and liver disease
- The sicker you are the more important protein intake is to sustain muscle.





# Carbohydrates

- Should make up 40-60% of your calories
- Many vegetables, fruits, legumes, and dairy foods are carbs
- Stretch your horizon
- Tolerance will vary
  - IBD may influence this
  - Co-existing disease (ie. celiac disease)
  - Fructose and concentrated sugars are more inflammatory



# Should I take vitamins? Always ask your MD!

- Chronic inflammation or gastric losses
  - Anemia-VitB12, folic acid, iron
  - zinc
- Progressive liver disease and bile duct stricturing
  - Fat soluble vitamins: A, E, D, K
- Diuretic use
  - Potassium, calcium, magnesium, thiamine
- Corticosteroid
  - Calcium and vitamin D





# Can diet help fight fatigue?

- Support the energy your body is able to produce
- Don't skip meals
- Include snacks
- Eat “balanced”
- Stay hydrated
- Remove unnecessary substances
- Get help when you need it!







## Are supplements safe?

- Avoid supplement blends and diet aids
- If a little is good, it doesn't mean a lot is better
- Always have them approved by your MD and pharmacist
- Generally safe
  - Probiotics
  - Omega-3 fatty acids
  - Most vitamins



# Preparing for Transplant

- Goals for surgery
  - Stay strong and retain your muscle mass!
    - Eat frequently through the day
    - Stay as active as you are able
  - Control fluid retention
    - Low sodium diets





# After Transplant

- Rehabilitate and heal first
- Long-term nutritional complications due to medications
  - High cholesterol and triglycerides
  - Hypertension
  - Diabetes
  - Osteoporosis
  - Unwanted weight gain
  - Food-drug interactions



Questions??





# Resources

## Herbal Supplement Safety

- <http://nccam.nih.gov/health/herbsataglance.htm>
- <https://fnic.nal.usda.gov/dietary-supplements/herbal-information>
- <http://www.ibsgroup.org/brochures/fodmap-intolerances.pdf>