

2019 ACOI BOARD REVIEW

# NUTRITION

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PARKINSON DISEASE

LOW-PROTEIN DIET

ALZHEIMER DISEASE

MEDITERRANEAN DIET

REDUCES RISK

## CYSTIC FIBROSIS

- 3 MONTH NUTRITIONAL ASSESSMENTS
- CONSIDER CHECKING LEVELS FOR VITAMINS A, D, E, K,  
IRON, PROTEIN STORES, A1C (AT DIAGNOSIS OR  
ANNUALLY)

CHRONIC KIDNEY DISEASE

PROTEIN RESTRICTION APPEARS  
FAVORABLE (0.6-0.8G/KG/DAY)

## CIRRHOSIS

MONITOR VITAMINS A, D, & E, AND ZINC  
SMALL, FREQUENT MEALS WITH BEDTIME SNACKS  
ARE EFFECTIVE AGAINST CATABOLISM

GOUT

ENCOURAGE LOW-FAT  
DAIRY



EPILEPSY

KETOGENIC DIET (HIGH  
FAT/LOW CARBS) BENEFICIAL

## CALCIUM OXALATE NEPHROLITHIASIS

AVOID LOW-CALCIUM DIETS (INCREASE EPISODES)

AVOID CHOCOLATE, SPINACH, GREEN/BLACK TEA

PYRIDOXINE (VITAMIN B6) MAY BE HELPFUL

## ICU NUTRITION

POSTPYLORIC FEEDING EQUIVALENT TO GASTRIC FEEDING  
HARRIS-BENEDICT EQUATION SOMETIMES HELPFUL  
25 KCAL/KG/D FOR CALORIES & 2 G/KG/D FOR PROTEIN

CONDITIONS ASSOCIATED WITH WORSE OUTCOMES WITH PARENTERAL NUTRITION

CANCER PATIENTS

HYPEREMESIS GRAVIDARUM

SEVERELY BURNED PATIENTS

GLUTAMINE SUPPLEMENTATION

ASSOCIATED WITH INCREASED RISK OF  
MORTALITY IN VENTILATED PATIENTS  
ON MECHANICAL VENTILATION

## DYSLIPIDEMIA

<7% SATURATED FATS, DIETARY CHOLESTEROL  
CONSUMPTION <200 MG/DAY, PLANT  
STANOLS/STEROLS, OATS/FRUITS/LEGUMES

# NUTRITION IN PREGNANCY

NUTRIENT	RATIONALE
FISH/SHELLFISH (OR OMEGA-3 FA)	REDUCED RISK OF PRETERM
B12	PROMOTES FETAL GROWTH
CHOLINE	PROPER NEURAL DEVELOPMENT
CALCIUM	DECREASES RISK OF PREECLAMPSIA
IRON	REDUCED RISK OF LOW-BIRTH-WEIGHT. INFANTS AND MATERNAL ANEMIA
FOLATE	PREVENTS NEURAL TUBE DEFECTS

# REFEEDING SYNDROME

- Hypophosphatemia is the hallmark (Intracellular movement/ATP)
- Volume Overload is common
- Prevention: Moderation of Calories/Fluid and Judicious Correction of Electrolytes (phosphorous, magnesium, potassium)



BUPROPRION ASSOCIATED WITH TONIC-  
CLONIC SEIZURES IN THOSE WITH  
EATING DISORDERS

# O B E S I T Y

3500 Calories/Pound

22 cal/kg to maintain weight

POSTOPERATIVE NUTRITION IN A BARIATRIC SURGICAL PATIENT

3,6,12 (THEN ANNUALLY): B12, FE, CBC,  
CMP, FERRITIN, VITAMIN D, THIAMINE,  
FOLATE, PTH

Population	Recommendation	Grade (What's This?)
Use of Multivitamins to Prevent Cardiovascular Disease or Cancer	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the use of multivitamins for the prevention of cardiovascular disease or cancer.	<b>I</b>
Single- or Paired-Nutrient Supplements for Prevention of Cardiovascular Disease or Cancer	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the use of single- or paired-nutrient supplements (except $\beta$ -carotene and vitamin E) for the prevention of cardiovascular disease or cancer.	<b>I</b>
Use of $\beta$ -carotene or Vitamin E for Prevention of Cardiovascular Disease or Cancer	The USPSTF recommends against the use of $\beta$ -carotene or vitamin E supplements for the prevention of cardiovascular disease or cancer.	<b>D</b>

Population	Recommendation	Grade (What's This?)
Community-dwelling, nonpregnant, asymptomatic adults age 18 years and older	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for vitamin D deficiency in asymptomatic adults.	<b>I</b>

Population	Recommendation	Grade (What's This?)
Premenopausal Women	<p>The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of combined vitamin D and calcium supplementation for the primary prevention of fractures in premenopausal women.</p> <p>Go to the <a href="#">Clinical Considerations</a> for suggestions for practice regarding the I statements.</p>	<b>I</b>
Men	<p>The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of combined vitamin D and calcium supplementation for the primary prevention of fractures in men.</p> <p>Go to the <a href="#">Clinical Considerations</a> for suggestions for practice regarding the I statements.</p>	<b>I</b>
Noninstitutionalized Postmenopausal Women	<p>The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of daily supplementation with greater than 400 IU of vitamin D and greater than 1,000 mg of calcium for the primary prevention of fractures in noninstitutionalized postmenopausal women.</p> <p>Go to the <a href="#">Clinical Considerations</a> for suggestions for practice regarding the I statements.</p>	<b>I</b>
Noninstitutionalized Postmenopausal Women	<p>The USPSTF recommends against daily supplementation with 400 IU or less of vitamin D3 and 1,000 mg or less of calcium for the primary prevention of fractures in noninstitutionalized postmenopausal women.</p>	<b>D</b>
Community-dwelling Adults, 65 Years or Older, at Increased Risk for Falls	<p>The USPSTF has previously concluded in a separate recommendation that vitamin D supplementation is effective in preventing falls in community-dwelling adults aged 65 years or older who are at increased risk for falls.</p>	<b>B</b>

SYMPTOM	ASSOCIATED DEFICIENCY
SUBACUTE COMBINED DEGENERATION	VITAMIN B12
WERNICKE-KORSAKOFF	THIAMINE
PELLAGRA (DERMATITIS, DIARRHEA, DEMENTIA, AND DEATH)	NIACIN
CORKSCREW HAIR	VITAMIN C
SKIN DESQUAMATION	RIBOFLAVIN
ECCHYMOSIS	VITAMINS C & K

# ANH

## Artificial Nutrition and Hydration



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