

# **Nutrition in the Elderly**

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# Outline

- Basics
- Age Related Changes
- Special Diets
- Malnutrition
- Screening
- Outcomes
- Treatment possibilities

# Basics

- Energy Needs
  - 25–30 cal/kg/day
  - Lipids (Fat) = 9 cal/g = 25-30% of calories
- Protein
  - 0.8–1.5 g/kg/day
  - 4 cal/g = 10-35% of total calories
- Fluids
  - Oral, IV, TPN
- Micronutrients
  - Vitamins, Minerals, Fiber

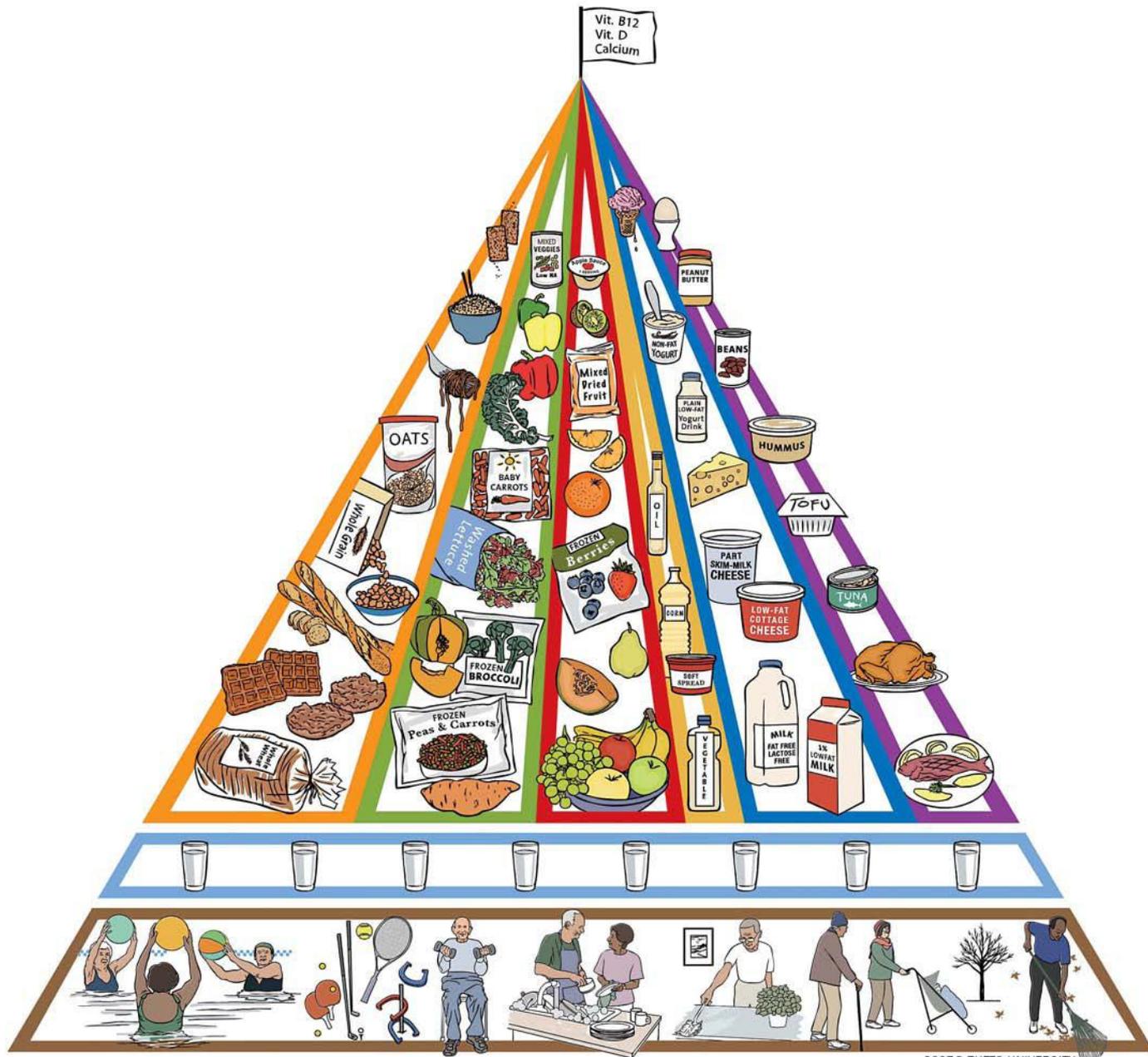


# Age Related Changes

- Body Composition
- Energy Requirements
- Micronutrients
- Fluid Needs



# Modified MyPyramid for Older Adults



# Special Considerations

- Low salt “Cardiac Diet”
- No concentrated sweets “ADA Diet”
- Low  $K^+$ ,  $Ph^-$ , protein “Renal Diet”
- Puree → Soft → Regular “Mechanical Diet”

# Malnutrition

- 5% in 1 month or 10% in 6 months
- Minimal BMI = 18.5
- #1 Prevention
- Medications? Depression?



# Malnutrition

- Prevalance

- 23 – 85% of nursing home residents
- 54% malnourished at time of admission

- Adverse effects:

- Cytopenia
- Fracture
- Fatigue
- Decreased cognition
- Ulcers
- Edema

# Nutrition and Outcomes

- Cochrane Database of Systematic Reviews of 2464 randomized patients
  - Weight gain, mortality, hospitalization
- Post operatively
  - Grip strength, quality of life, morbidity (Beattie et al)
- Hip fracture
  - Less bone loss, rehabilitation time (Tkatch et al)

# Nutrition Screening

- **D**isease
- **E**ating poorly
- **T**ooth loss, mouth pain
- **E**conomic hardship
- **R**educed social contact
- **M**ultiple medicines
- **I**nvoluntary weight loss or gain
- **N**eed for assistance in self-care
- **E**lderly (age > 80)



# Supplementation

- First things first
- Small frequent snacks
  - Simple supplements
- Commercial Supplementation
  - Ensure, Boost, etc.



# Orexigenic Medications

- Megestrol (Megace)
- Mirtazapine (Remeron)
- Cyproheptadine (Periactin)
- Dronabinol (Marinol)
- HGH, Steroids, Testosterone



# Conclusions

- Nutrition and age related changes
- Screening for and diagnosing malnutrition
- Importance of prevention/treatment
- Step-wise options for treatment
- Orexigenic Medications

# Thank You!

## Questions?



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