# THE HEARTSUMMIT 2018

ARKANSAS HEART HOSPITAL®

Food for Life

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# Some Nutrition Related Concerns in Emergency Medicine at AHH

- Congestive Heart Failure Exacerbation
  - Sodium, Fluid
- Diabetic Ketoacidosis
  - Carbohydrate
- Arrhythmias
  - Micronutrients (k+, mg, caffeine, fluid)
- Hypertensive Crisis
  - Micronutrients (sodium, fluid, k+, mg, calcium, caffeine)



# Some Nutrition Related Concerns in Emergency Medicine at AHH

- Sickle Cell Crisis
  - Fluid
- Dehydration/Acute Kidney Injury
  - Fluid balance
- Uremia/Chronic Kidney Disease
  - Protein (phosphorus, k+, mg, fluid, sodium)
- Gastritis
  - Alcohol



# Some Nutrition Related Concerns in Emergency Medicine at AHH

- Gastro Esophageal Reflux disease
  - Chocolate, Spices, Mint, Citrus, Caffeine, High Fat Foods
- Cholecystitis & Pancreatitis
  - Alcohol, Spicy Foods, High Fat Foods
- Liver Failure/Encephalopathy
  - Protein, Sodium
- Inflammatory Bowel Diseases & Syndromes
  - Fiber, Fluid
- Gout
  - Purines/Uric Acid, Fluid



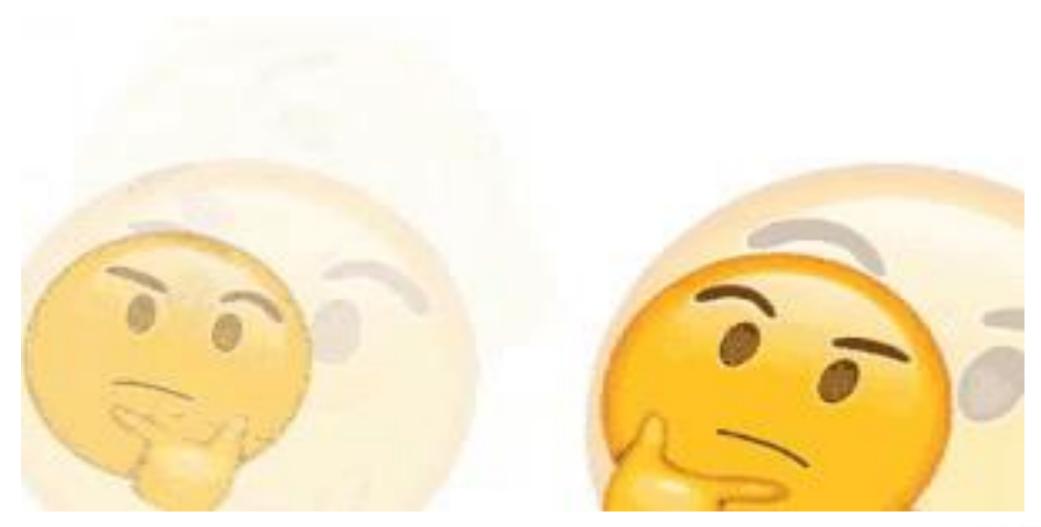
#### Food for Life

#### PICK YOUR POISON

GRAPEFRUIT DIET LOW CARB 3 DAY FAST Volumetrics
3 DAY DIET LOW FAT FRUIT FLUSH
BANANA DIET CABBAGE SOUP DIET The Werewolf Diet
3 DAY TUNA DIET DASH DIET Zone Diet FAT FREE
Alkaline Diet BABY FOOD DIET
The Cookie Diet Five Bite Diet Blood Type Diet
Sleeping Beauty Diet HCG Diet The Tapeworm Diet

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#### What Patients Need

 The World Health Association (WHO) and the Food and Agriculture Organization (FAO)'s Executive Summary on Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases recognizes the following as Major Nutrition Related Chronic Diseases

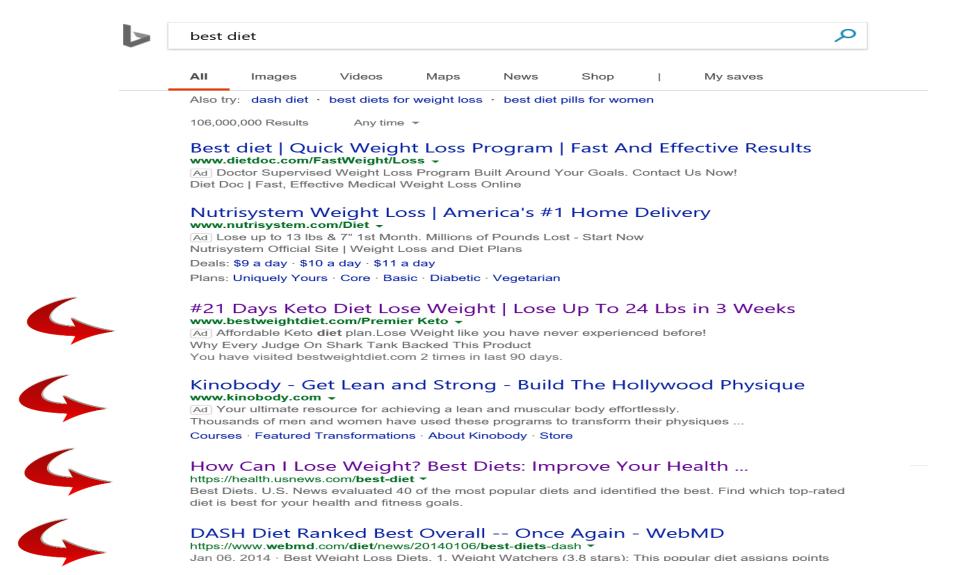


#### What Patients Need

- Obesity
- Diabetes
- Cardiovascular Diseases
- Cancer
- Osteoporosis and Bone Fractures
- Dental Disease

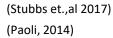


#### What Patients Want

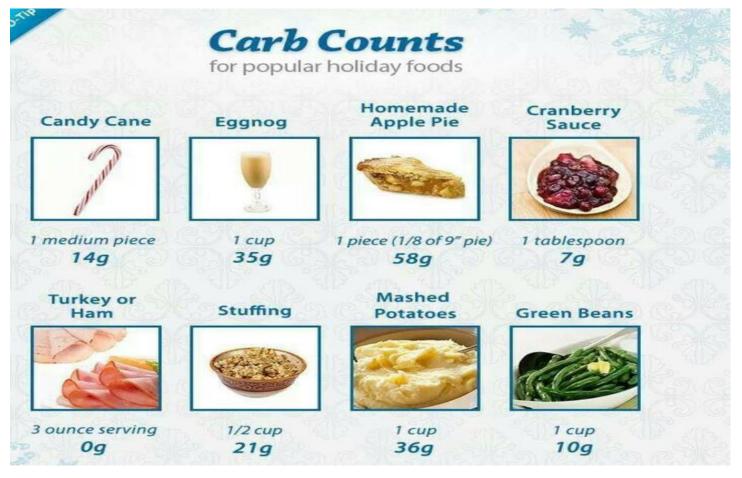




- Ketosis Diet
  - Ability to produce & oxidize ketone bodies to enhance survival during starvation.
  - Virtually no carbohydrate used as energy source (below 20 grams a day)
    - Difficult to achieve (fatigue, GI upset, dyslipidemia)
  - Epilepsy
  - DM 2 hyperglycemia
  - Cancer
  - Rapid Weight Loss (5-9 lbs a week)











• Diabetes and cardiovascular risk factors: Clinicians may be surprised to learn that such an extreme and seemingly unhealthy diet has been shown, in some studies, to improve glycemic control and reduce risk factors associated with cardiovascular disease, including blood pressure, cholesterol, triglyceride levels, and A1C—although there may be some tradeoffs. Most of the benefit to lipids from a KD results from improvement in triglycerides and an increase in high-density lipoprotein (HDL) cholesterol. Along with these benefits, however, many studies also show an increase in low-density lipoprotein (LDL) cholesterol from a KD."

## Therapeutic Diets-DASH DIET

- Dietary Approaches to Stop Hypertension Diet
  - Heart Healthy eating style
    - No special foods and instead provides daily and weekly nutritional goals
      - Low total & saturated fats, low cholesterol, low sodium
      - High fiber, high micronutrients
      - Low concentrated sweets
  - National Institute of Health- National Heart, Lung, Blood Institute
    - 4 studies tested health benefits of DASH Diet when compared to typical American Diet
    - DASH diet lowers blood pressure and LDL cholesterol
      - DECREASED SODIUM INTAKE



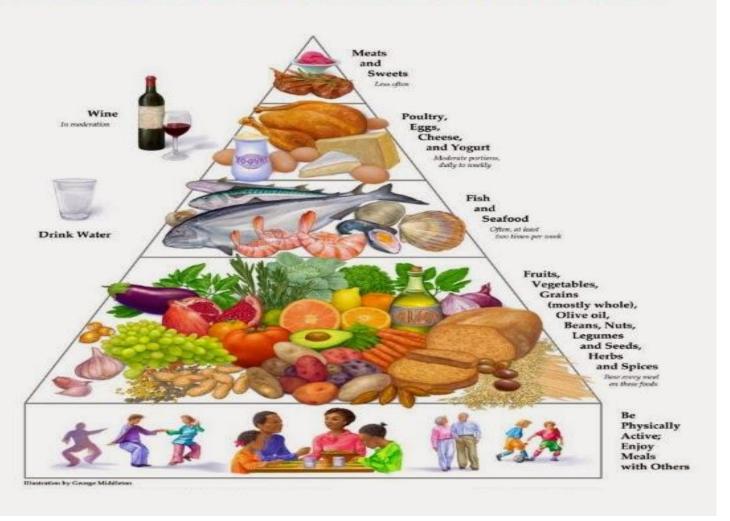
#### Therapeutic Diets-Mediterranean Diet

- Emphasizes nutritious foods with essential vitamins, minerals, antioxidants, fiber, & healthy fats. Mostly plant based. Low sodium.
- Lowers LDL & increases HDL
  - Olive Oils, Avocados, nuts, seed for primary fat source
  - Seafood, legumes, nuts, eggs, low fat dairy as protein source
  - Variety of Colors
  - Whole grains
  - Red wine



# Therapeutic Diets-Mediterranean Diet

#### **MEDITERRANEAN DIET PYRAMID**





# Therapeutic Diets-Animal Free Diets

- Vegan
  - No animal products. Solely plant based
- Vegetarian Diets
  - Lacto-Ovo (dairy products, eggs)
- Flexitarian
  - Predominantly plant based with occasional use of animal products
    - Butter, cream, breads



#### Conclusion- What's Best?

- One large study, 18 countries, 5 continents
  - High carbohydrate intake (>60% daily energy source) was associated with an adverse impact on total mortality and non-cardiovascular disease mortality.
  - In contrast, higher fat intake associated with lower risk of total mortality, non cardiovascular disease mortality, and stroke. (Dehghan, et al 2017)
- Dash Diet/Heart Healthy Diet
  - Remains successful in decreasing weight, LDL, cholesterol, & blood pressure in patients.



#### Conclusion- What's Best?

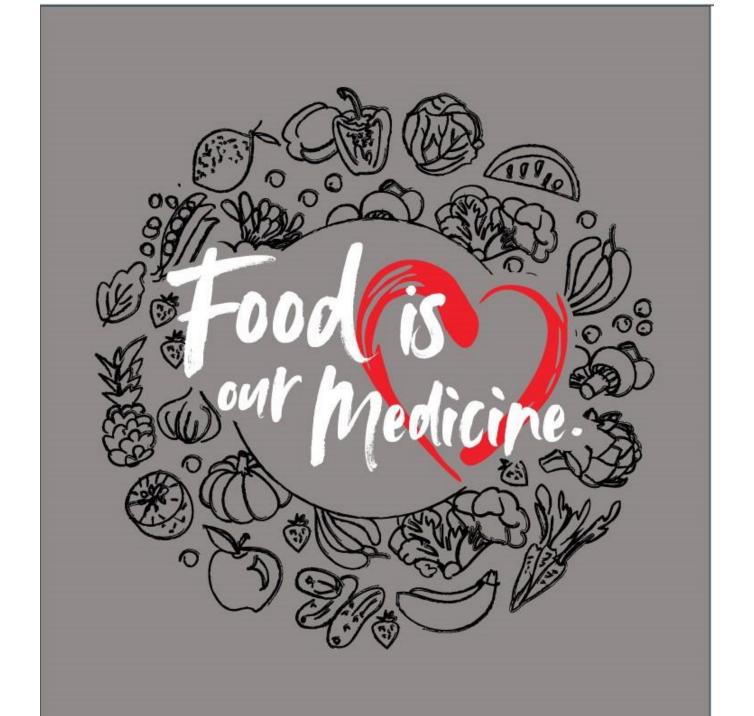
Nutrition Goals

Evidence Based

Attainable for patient

Progressive







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