

Secondary Stroke Prevention

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ROME 2020 ROCKY MOUNTAIN REGIONAL HOSPITALIST MEDICAL EDUCATION Vail, CO, March 5 - 8, 2020

COLORADO SOCIETY OF OSTHEOPATHIC MEDICINE

I have no conflicts and nothing to disclose

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STROKE

- MORE THAN 140,000 PEOPLE DIE EACH YEAR FROM STROKE
- LEADING CAUSE OF SERIOUS, LONG-TERM DISABILITY IN THE UNITED STATES
- YEARLY, APPROXIMATELY 795,000 PEOPLE SUFFER A STROKE
 - 600,000 OF THESE ARE FIRST ATTACKS
 - 185,000 ARE RECURRENT ATTACKS

Stroke Center, US Stroke Statistics, <http://www.strokecenter.org/patients/about-stroke/stroke-statistics/>


RISK FACTORS

Modifiable:	Non-modifiable:
-Hypertension	-Older age
-Diabetes Mellitus	-African American Race
-Smoking	-Male Gender
-Dyslipidemia	-Except women ages 35-44 and >85 years
-Physical Inactivity	-Family History or Genetic Disorders




AHA/ASA GOAL FOR SECONDARY STROKE PREVENTION


CONTROL ATHEROSCLEROTIC AND MODIFIABLE RISK FACTORS



DIET AND LIFESTYLE MODIFICATION



- 2014 AHA/ASA GUIDELINES FOR STROKE PREVENTION RECOMMENDS THAT PATIENTS WITH A PREVIOUS STROKE FOLLOW A MEDITERRANEAN TYPE DIET
 - A COCHRANE REVIEW SUGGESTS POOR DIET INCREASES RISK FOR STROKE BY ABOUT 19% (LARKKUR, 2015)
- OBESITY IS ASSOCIATED WITH AN INCREASED RISK OF STROKE
- LOW PHYSICAL ACTIVITY INCREASES CARDIOVASCULAR DISEASE AND STROKE RISK



DIET FOR STROKE PREVENTION

- Increased Westernized diet in China between 2003 and 2013 correlated to a 26.6% increase in strokes
 - Coronary mortality increased by 213% (Spence, 2018)
- Meta-analysis of 13 observational and 1 RCT
 - Adherence to a mediterranean style dietary pattern decreased risk of stroke by about 30% (relative risk 0.68)
 - Median follow-up of 4.8 years (Larson, 2017)
- Higher vitamin D levels associated with lower stroke risk (Larson, 2017)



DIET FOR STROKE PREVENTION

- Strong inverse relationship between fruit and vegetable consumption and stroke risk
 - 21% risk reduction for those in the highest quintile of fruit and vegetable consumption (Larkkur, 2015)
- High sodium intake increased risk of stroke by 24% (Larson, 2017)
- One serving per day of processed meat increased stroke risk by 13%
 - 10,630 stroke events among 329,495 participants (Larson, 2017)
- Replacing a serving of red meat with one of lean poultry once per week decreased risk by 27% (Larson, 2017)



MEDITERRANEAN DIET BASICS

INCREASE CONSUMPTION OF: **DECREASE CONSUMPTION OF:**

- Vegetables
- Fruits
- Nuts
- Whole Grains
- Beans
- Fish
- Poultry
- Olive oil



- Red Meats
- Butter and Margarine
- Cheese
- Pastries and Sweets
- Fried or Fast Food





