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CURES START HERE™

Study Designs

Cohort Studies

Observational studies - “real life”

Examine multiple exposures/multiple outcomes

Confounding/self report

Clinical Trials

Allow investigators to test hypotheses using an experimental design in humans

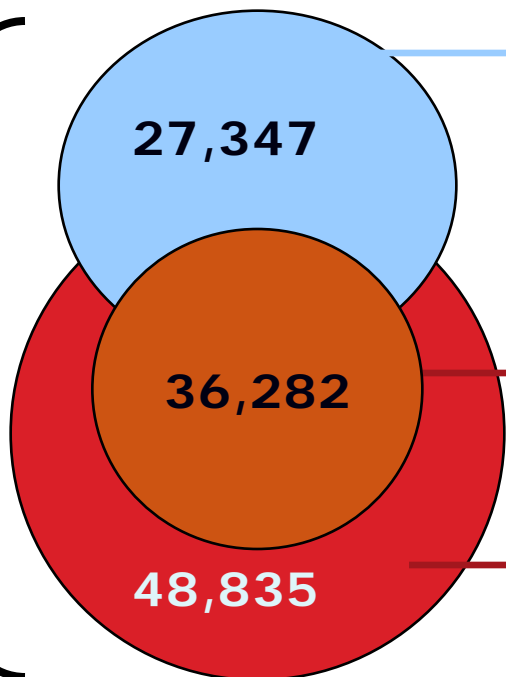
Causal inference

Gold standard for medical treatments/medical practice

Very expensive, logistics, infrastructure, oversight

Women's Health Initiative (WHI)

3 Controlled Trials

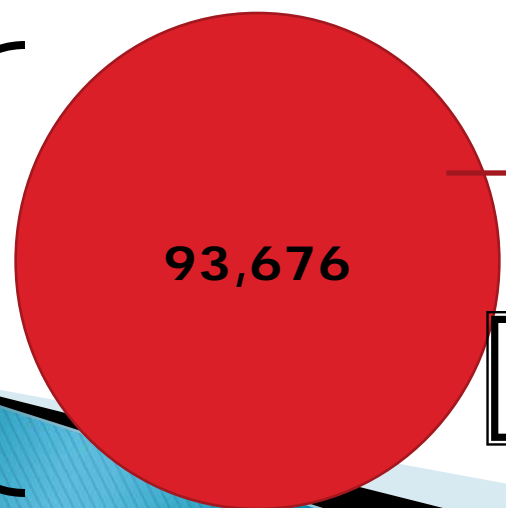


Hormone Therapy Trials:
Coronary Heart Disease & Fractures.
Adverse effect for Breast Cancer?

Calcium/Vitamin D Trial:
Fractures & Colorectal Cancer

Dietary Modification Trial:
Breast & Colorectal Cancers &
Coronary Heart Disease

1 Observational Study



Observational Study

161,808 women total

Dietary patterns

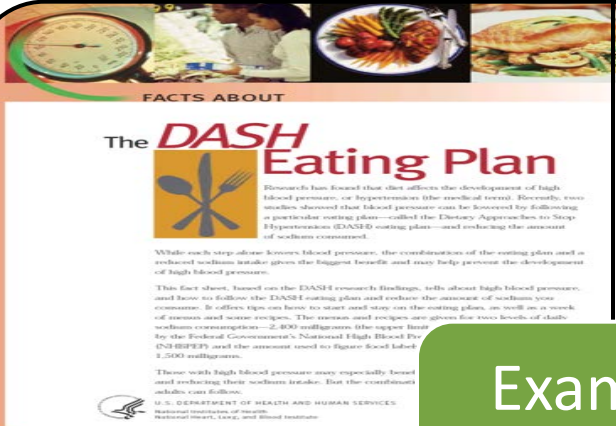
- ▶ “ . . . the quantities, proportions, variety, or combination of different foods, drinks, and nutrients (when available) in diets, and the frequency with which they are habitually consumed”

Why study dietary patterns?

- Complexity of diet
 - People eat foods (and meals), not nutrients
- Correlation among dietary constituents
 - Analysis of single nutrients may be confounded by the effect of dietary patterns
- Clinical trials show positive health outcomes with changes in “total diet”
 - Dietary Approaches to Stop Hypertension (DASH)
 - Lyon Diet Heart Study, OMNI Heart Trial
- Relevance for policy and guidance



Types of Dietary Indices



FACTS ABOUT

The DASH Eating Plan

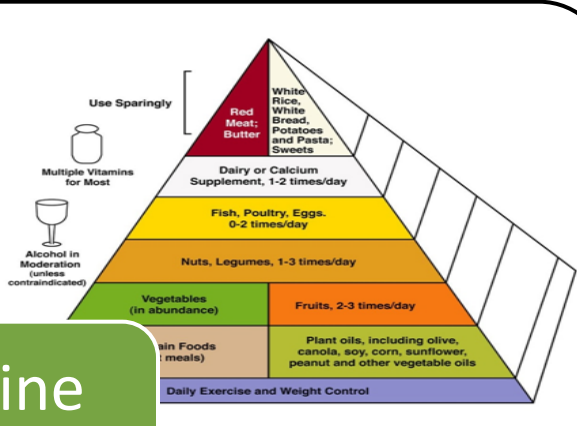
Research has found that diet affects the development of high blood pressure or hypertension (the medical term). Recently, two studies showed that blood pressure can be lowered by following a particular eating plan—called the Dietary Approaches to Stop Hypertension (DASH) eating plan—and reducing the amount of sodium consumed.

While each step alone lowers blood pressure, the combination of the eating plan and a reduced sodium intake gives the biggest benefit and may help prevent the development of high blood pressure.

This fact sheet, based on the DASH research findings, tells about high blood pressure and how to follow the DASH eating plan and reduce the amount of sodium you consume. It offers tips on how to start and stay on the eating plan, as well as a week of menus and some recipes. The menus and recipes are given five levels of daily sodium consumption—2,400 milligrams (the upper limit set by the Federal Government's National High Blood Pressure Program) and the amount used to figure food labels (2,300 milligrams).

Those with high blood pressure may especially benefit from reducing their sodium intake. But the combination of diet and exercise can help.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Heart, Lung, and Blood Institute



Use Sparingly

White Rice, White Bread, Potatoes and Pasta; Sweets

Red Meat; Butter

Dairy or Calcium Supplement, 1-2 times/day

Multiple Vitamins for Most

Fish, Poultry, Eggs, 0-2 times/day

Nuts, Legumes, 1-3 times/day

Alcohol in Moderation (unless contraindicated)

Vegetables (in abundance)


Fruits, 2-3 times/day

Plant oils, including olive, canola, soy, corn, sunflower, peanut and other vegetable oils

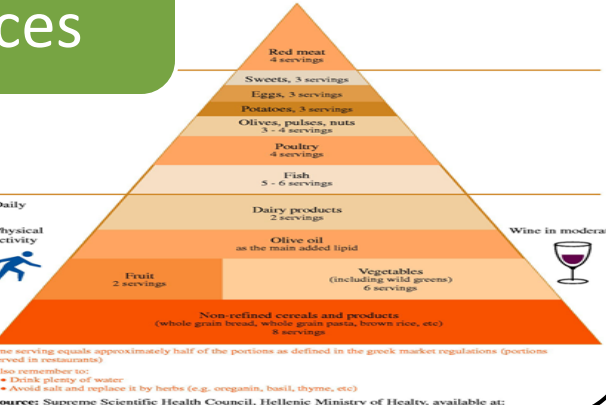
Grain Foods (meals)

Daily Exercise and Weight Control

Examine indices



Healthy Eating Index



Mediterranean diet

Red meat 4 servings

Sweets, 3 servings

Eggs, 3 servings

Potatoes, 3 servings

Olives, pulses, nuts 3 - 4 servings

Poultry 4 servings

Fish 5 - 6 servings

Dairy products 2 servings

Wine in moderation

Olive oil as the main added lipid

Fruit 2 servings

Vegetables (including wild greens) 6 servings

Non-refined cereals and products (whole grain bread, whole grain pasta, brown rice, etc) 6 servings

Physical activity

One serving equals approximately half of the portions as defined in the greek market regulations (portions served in restaurants)

Also remember to:

- Drink plenty of water
- Avoid salt and replace it by herbs (e.g. oregano, basil, thyme, etc)

Source: Supreme Scientific Health Council, Hellenic Ministry of Health, available at: www.nut.uoi.gr/oliganc/ENGL.html

Randomized Controlled Trials

The FRESH Study (as an example)
FRESH= Frequency of Eating and Satiety
Hormones

The FRESH Study

This study is a randomized cross-over trial where participants completed both study arms. On one arm participants consume 3 meals/day and on the other arm 6 meals a day. They also complete a 6 hour meal test protocol at the end of each arm.

Blood samples drawn at the beginning and end of each study period will be used to assess inflammatory factors, adipokines and satiety hormones. We will also assess self-reported appetite

Results from pilot data

