

# Heart Healthy Eating the Mediterranean Way

Sally Barclay, MS RD LD  
Nutrition Clinic for  
Employee Wellness



## History/Basis for Diet

- Based on dietary traditions of Crete, most of Greece and southern Italy in the 1960's
- Rates of chronic diseases among the lowest in the world and highest adult life expectancy in this time period
- Data available describing food consumption patterns
- Variations of this diet existed in other parts of Italy, parts of Spain and Portugal, southern France, parts of North Africa (Morocco, Tunisia), parts of Turkey, parts of the Balkan region, parts of Middle East (Lebanon and Syria)



## What is the Mediterranean Diet?



- Features abundance of:
  - vegetables    -legumes    -breads and grains
  - fruits            -nuts, seeds
  - cereals/pasta
  - regular use of olive oil
  - moderate amounts of fish, poultry
  - small amounts of red meat
  - moderate amounts of dairy (yogurt, cheese)
  - moderate consumption of alcohol (wine at meals)

## Other keys to Mediterranean eating



- Eating what is freshest and available locally
  - Quality in food, not quantity
  - Fresh and whole-not processed or refined
  - Primarily plant based
  - Relish experience of eating-savor every bite!
- Also playing key role:
- Regular physical activity at level to promote healthy weight, fitness and well-being

## Why eat in the Mediterranean way?



- Heart disease substantially reduced (heart attack, stroke, hardening of the arteries, mortality)
- Protection against cancer, arthritis, diabetes, osteoporosis, Alzheimer's disease
- Slows the aging process
- Promotes longevity
- Considered moderate-does not require radical changes in eating habits (better compliance over long-term)

## Lyon Diet Heart Study



- 605 patients who had survived a heart attack
- After 4 years, patients who ate Mediterranean diet with increased omega 3 fatty acids and monounsaturated fats (olive oil and nuts) had 55% reduction in risk of death and 50-70% decreased risk of recurrent heart problems compared with patients on control diet

## Fat intake



- Focus of diet is not to limit total fat intake
- Make wise choices about type of fat:
  - low in saturated fat, trans fat
  - generous omega-3 fatty acids (fatty fish, walnuts, flaxseed, various vegetables)
  - abundant monounsaturated fat (olive oil, nuts, avocados)
- Olive oil replaced other fats-margarine, butter

## Olive Oil



- Mostly monounsaturated fat (oleic acid)
- Rich in Vitamins A, B-1, B-2, C, D, E, K and iron
- Reduces total and LDL (bad) cholesterol with favorable effect on triglycerides and HDL (good) cholesterol
- May lower blood pressure
- Inhibits oxidation of LDL cholesterol
- Improve insulin sensitivity
- Decrease tendency of blood to clot
- Significant amounts of flavonoids-decrease risk of cardiac mortality

## Types of olive oils



- Plain olive oil is most common-blend of refined olive oil and virgin oil
- Extra virgin and virgin olive oil-longer shelf life, high in anti-oxidants (\*\* preferred)
- Light and extra light olive oil-pure olive oil blended with small amount of virgin oil-same caloric value

## Fish



- Important in prevention of CAD
- Currently recommend at least 2x/week (8 oz).
- Protective effects most likely related to omega-3 fatty acids-especially DHA and EPA
- Helps regular heart beat, makes blood less likely to clot, protects arteries from damage
- Best fish sources: mackerel, salmon, herring, sardines, albacore tuna, trout, bluefish
- Can also get omega-3 from flaxseed, canola oil, walnuts, soybeans, other beans



## Plant Sources

- Breads, potatoes
- Grains-pasta, couscous, rice, polenta, bulgur
- Fruits and Vegetables-variety!
- Herbs-basil, rosemary, parsley, mint, tarragon, thyme
- Legumes-chickpeas, lentils, peanuts, beans, peas
- Tree nuts- almonds, hazelnuts, pistachios, walnuts
- Seed-primarily sesame seeds

\*\*\*Critical importance:

Ratio of plant foods to animal foods at high level  
(suggest 8 or more servings a day)



## Typical Grain Dishes

Dense and hearty whole grain breads  
Pasta in endless shapes with unique sauces  
Creamy risotto (Italian rice dish)  
Spanish rice  
Greek rice pilaf  
Polenta (cornmeal-based)  
Gnocchi (Italian dumplings)  
Bulgur wheat (Mideast)  
Couscous (Africa and Middle East)  
Pizza, calzones, moussaka, vegetable/meat pies

## Legumes



- Take the place of meat as main course or used to stretch small amounts of meat to serve more
- Generally consume two ½ cup servings/day (recommend minimum of 3 servings/week)
- Excellent sources of protein, fiber, vitamins, minerals, phytochemicals

## Common Legumes



- White cannellini beans
- Chick peas (garbanzo beans)
- Fava beans (broad beans)
- Black beans
- Green and red lentils
- Tiny white haricot beans
- Red kidney beans
- Lima beans
- Egyptian ful beans

## Nuts and Seeds



- Add significant nutrients, phytochemicals, protein, monounsaturated fats, fiber
- 80% of calories from fat however, contain 10% sat fat and no cholesterol
- Studies show frequent seed and nut intake linked to low rates of certain cancers and heart disease
- Add flavor and crunch to diet, convenient and nutritious snack item

## Nuts and Seeds



- Consumption in diet 1 oz. or 2 Tbsp. nut butter per day (often spread across day)
- Avoid those packaged with added hydrogenated oils
- Most common:
  - walnuts    -almonds    -hazelnuts
  - pine nuts                      -pistachios
  - peanuts (legume)

## Eggs



- White contains high quality protein
- Yolk contains cholesterol and some sat fat
- Recommend 0-4 eggs/week including those used in baking and prepared foods

## Meat, Poultry, Fish, Dairy, Egg Consumption



- Less importance and appear less frequently
- Used for flavoring rather than as main event of meal
- Moderation gives you nutritional benefits without excess sat. fat and calories and still leaves room for highly beneficial plant foods
- Choose animal products closer to base more often-the higher you go, the more sat fat

## Low Intake of Dairy



- Used dairy products from sheep, goat, cow, water buffalo, camel-unique taste
- Principally in form of cheese and yogurt
- Per-capita consumption:  
Crete: 3 oz cheese/week, 1 cup yogurt  
Italy: 2 oz. cheese/week, 2+ cups yogurt
- Only need small amounts of high-fat, full flavored cheeses to accent dishes
- Calcium sources: dark green vegetables, figs, sesame seeds, beans
- Rec'd: nonfat or low fat dairy daily (2 serv/day), medium fat dairy weekly, save high fat dairy items for holidays and special occasions

## Fat Content of Cheeses



- Low fat (3 gm or less per serving)  
1% fat cottage cheese, grated Parmesan and Romano, nonfat ricotta
- Medium fat (5 gms or less per serving)  
part-skim mozzarella, low fat cheddar, feta
- High fat (more than 5 gm fat per serving)  
bleu, brie, cheddar, provolone, edam, Swiss, Colby, ricotta, gruyere, camembert

## Limiting Meat Consumption



- Plan your meals for the week
- Choose lean cuts and smaller portions
- Plan 4-5 meals/week that include some meat but only one where meat is center focus
- Stretch one piece of meat to last several meals- roast beef, mix with rice, pasta sauce, salad, soup
- Begin to use meat, poultry, and fish as flavoring elements-small amount in each dish
- Substitute seafood for meat or poultry-stir-fry, soup, salads
- Keep experimenting with non-meat dishes

## Limiting Meat Consumption



- Buy most of your groceries from produce section-avoid meat section
- Shop at farmer's markets or local produce stands (use grocery for staples)
- Reserve large pieces of meat for holidays and special occasions
- Once you learn to eat plant-centered diet, you may not miss meat at all (often plant-based dishes are more interesting and creative)

\*\*Even when meat dominates Med. menu, it is surrounded by plant foods of all types

## Mediterranean Menu



- Breakfasts:
  1. 1-2 cups whole-grain cereal topped with dried fruit and ½ oz. nuts, 1 c. milk or yogurt
  2. Banana bread (made with olive or canola, whole-grain flour), ½ oz. nuts or seeds, fresh orange, 1 cup warm milk with vanilla & cinnamon.
  3. Oatmeal made with milk, add 1-2 T. pumpkin puree, 1 T. dried fruit and walnuts
  4. Whole grain bagel with 2 T. almond or peanut butter, 6 whole pitted dates, 1 c. milk

## Mediterranean Menu



- Lunches:
  1. Falafel, green salad w/tomatoes, olive oil vinaigrette, 2 dried apricots
  2. Mashed white beans spread on WW pita, Greek salad, citrus fruit
  3. 2 slices WW bread, 1 oz. mozz cheese, 3 large Romaine leaves, tomato, dash olive oil, 1 cup vegetable soup, 1 fresh pear
  4. Tapenade on whole-grain sesame crackers, green salad with tomatoes, almonds, olive oil vinaigrette, tangerine, 1 c. milk



## Mediterranean Menu

- Dinners:
  1. Tuscan Bean Soup, whole-grain bread, ½ to 1 oz. low-fat cheese, fruit salad
  2. Vegetable pizza topped with ½ to 1 oz. mozz cheese, stuffed artichoke, baked apple
  3. Paella (shrimp with rice, beans, tomatoes, zucchini, corn), broccoli w/olive oil and garlic, ½ c. yogurt with berries
  4. Seafood risotto, spinach sautéed w/garlic and olive oil, grilled bananas



## Mediterranean Snacks

- 12 whole almonds
- Baby carrots with hummus dip
- 1 slice whole-grain toast with peanut or almond butter
- Broccoli florets with low-fat dip
- ½ oz. sunflower seeds with whole wheat breadsticks
- 1 oz. low-fat cheese on whole-grain crackers

## Embracing the Med. Lifestyle



- Eating should be pleasurable and fulfilling
- Tech simple, physically rigorous, in touch with natural world—simpler!
- Regular exercise lowers risk of many chronic diseases, death risk (need aerobic and weight-bearing activity)  
\*\*Rec'd: 30 min/day on most days (45-60 min for weight loss)
- Less stress-strong social ties, close to nature