# **Family and Consumer Sciences**

# Healthful Eating, Mediterranean Style, for Overall Health and Wellbeing

Debra Head, EdD Associate Department Head; Associate Professor, Nutrition Specialist

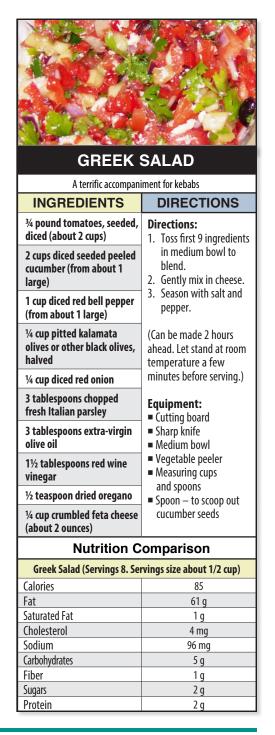
DIVISION OF AGRICULTURE RESEARCH & EXTENSION University of Arkansas System

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Visit our web site at: https://www.uaex.uada.edu Why is a healthy diet important for someone with chronic pain? A healthy diet means an eating plan that promotes good health. A healthy diet is lower in calories, sodium, added sugars, and saturated fat — all recommendations from the Dietary Guidelines for Americans. Most Americans want to be healthy and physically fit, but sometimes there are challenges, such as pain and or chronic inflammation of joints.

You may have heard of "antiinflammatory" foods and wondered what exactly qualifies as an "anti-inflammatory" food. The definition of inflammation in the body is "the non-specific immune response that occurs in response to any type of bodily injury."(1) Inflammation is one of the body's ways of protecting itself. But, as with any body processes, too much inflammation can be harmful. Lifestyle choices can decrease the amount of inflammation. One lifestyle choice could be the inclusion of foods high in antioxidants.

An antioxidant is an "agent that prevents or inhibits oxidation." (1) According to the National Institutes of Health, antioxidants may prevent or delay some types of cell damage. An eating plan that includes high amounts of fruits and vegetables, which are excellent sources of natural antioxidants, is recommended for everyone and research has shown that diets high in fruits and vegetables contribute to lower risk of disease. Free radicals, formed by the body during exercise or when converting food to energy can cause "oxidative stress" in the body. The oxidative stress process can trigger cell damage and is thought to play a part in a variety



of chronic diseases. Antioxidants counteract oxidative stress in the body, meaning antioxidants, such as fruits and vegetables, are powerful tools to limit the amount of cell damage from oxidative stress.

An eating plan high in fruits and vegetables may be a great defense against chronic inflammation and subsequent pain. Good sources of antioxidant foods are foods that are high in Vitamins C and E, selenium and carotenoids. Fruits and vegetables are



#### GRILLED CHICKEN, RED ONION AND MINT KEBABS WITH GREEK SALAD

Yield: 8 skewers Serving Size: 1 skewer (119 g)

INGREDIENTS		DIRECTIONS	
	kinless boneless chick- lves, cut into 1-inch	Directions: 1. Mix chicken, 2 tablespoons oil, garlic, dried mint, oregano, salt, and	
4 Tablespoons extra-virgin olive oil, divided		<ul> <li>pepper in medium bowl. Let marinate 30 minutes. Whisk remaining 2 tablespoons oil and lemon juice in small bowl to blend.</li> <li>Prepare grill (medium-high heat).</li> <li>Pull off large mint leaves from stems. Alternate chicken, onion, and mint leaves on skewers; sprinkle with salt and pepper.</li> <li>Grill until chicken is just cooked through, turning and basting occasionally with oil-lemon mixture, about 9 minutes. Serve Greek Salad alongside.</li> <li>Equipment: <ul> <li>Cutting board</li> <li>Sharp knife</li> <li>Medium bowl</li> <li>Wire whisk</li> <li>Small bowl</li> <li>12-inch Skewers</li> <li>Tongs</li> <li>Measuring spoons</li> </ul> </li> </ul>	
4 garlic cloves, crushed			
1 teaspoon dried mint			
1 teaspoon dried oregano			
1 teaspoon salt			
1 teaspoon ground black pepper			
2 Tablespoons fresh lemon juice			
1 bunch fresh mint, washed & patted dry			
1 red onion, cut into 1-inch pieces			
8 12-inch metal skewers			
Nutrition Summary			
Calories	213	Sodium	553 mg
Fat	10 g	Carbohydrates	3 g
Saturated Fat	2 g	Fiber	1 g
Cholesterol	72 mg	Protein	27 g

great sources of antioxidants! Polyphenols are aromatic compounds found in fruits, vegetables, grains, chocolate, coffee, olive oil and tea. Some polyphenols show powerful anti-inflammatory effects in the body, although more study in this area is needed to be conclusive.

A healthy Mediterranean-style diet includes daily intake of a variety of fresh fruit and vegetables in a variety of colors, smaller portions of poultry, fish, and lean meats, and limited processed foods. Healthy food is viewed as part of an overall healthy lifestyle, that includes regular physical activity, adequate sleep, and stress management. From the recommendations on consuming foods with potential protection from inflammation (such as antioxidants) and limiting foods that may promote inflammation, such as sugar sweetened beverages, refined grains, and excessive amounts of red and processed meats, one could conclude the healthy Mediterranean-style eating plan could aid in the anti-inflammatory process.

In the healthy Mediterranean-style eating plan, one chooses a less-structured, overall food pattern rather than targeting a single food or food group to eat or not eat. Healthy eating styles aren't meant to be rigid plans to follow but more of a lifestyle change over time. The Mediterranean-style eating plan is more plant based, is high in fiber and contains healthy fats. The diet is relatively high in fat intake from healthier fats, low in saturated fats and high in fiber and nutrients. Any diet that has a high intake of a variety of fruits and vegetables will be rich in antioxidants, which aid in the anti-inflammatory process. Additionally whole foods (non-processed foods) have a lower glycemic index. The glycemic index is a number that ranks food by how fast the body converts the food item into glucose. Foods with a lower glycemic index number typically have less effect on glucose levels, which means less spikes in blood sugar.

A wise practice is to replace processed foods with healthier options (an example is to replace bagged chips with nuts, or sugary snacks with fresh fruit), limiting sugar-sweetened beverages and choosing water instead, and choosing fruits for dessert, limiting cakes, cookies, ice cream and other sugar-laden desserts to the occasional treat.

Healthy diets need not be costly. Buy fruits and vegetables that are in season and visit the frozen foods sections for low cost fruits and vegetables anytime. Use coupons and in-store sales to lower food costs even more. Remember meat (usually the highest cost in a meal) can be a smaller portion. Try a meatless meal a few times per week.

The chart below provides some of the foods recommended on the Mediterranean-style Eating Plan:

FOOD GROUP	FOODS RECOMMENDED	
Grains	Whole wheat, barley, rye, corn, quinoa, millet, brown and wild rice, oats. Focus on intact cooked whole grains (1/2 cup cooked equals one serving)	
Protein Foods Choose Seafood and plant protein most often	Fresh, frozen, or canned seafood including fish, tuna, salmon, herring, and sardines; Legumes such as dried beans, lentils, or peas (1/2 cup cooked equals one serving); eggs; unsalted nuts and seeds (1 ounce equals one serving), such as peanuts, walnuts, almonds, pistachios, and sunflower seeds; nut and seed butters (2 Tablespoons equals one serving) such as peanut butter, almond butter, and sunflower seed butter; poultry (2-3 ounces equals one serving) such as skinless chicken or turkey (limit to a few servings per week); red meat (2-3 ounces equals one serving) including beef, pork, or lamb. Have red meat less often.	
Dairy	Low fat or fat free milk, yogurt (no added sugar), cottage cheese, and cheese (one ounce equals one serving). Fortified soymilk.	
Vegetables	A variety of fresh, frozen and canned whole vegetables including dark green, red, and orange vegetables, legumes (beans, lentils, and peas), and starchy vegetables.	
Fruit	A variety of fresh, frozen, canned, or dried whole unsweetened fruits canned fruit packed in water or fruit juice with no added sugar.	
Oils and Fats	Unsaturated vegetables oils, including olive, peanut, and canola oil. Margarines and spreads (1 tsp equals one serving) that list liquid vegetable oil as the first ingredient and do not contain trans fats (check the label to make sure "partially hydrogenated oil" is NOT listed in the ingredients). Use all oils and fats in moderations.	
Beverages	Coffee, tea (unsweetened), water, 100 percent fruit juice (1/2 cup equals one serving). Avoid sugar sweetened beverages including soda, sweet tea, sports drinks, energy drinks, and coffee drinks.	
Other	Prepared foods, including soups, casseroles, salads, baked goods, and snacks made from recommended ingredients, with low levels of added saturated fat, sugars, or salt.	

Below are some strategies for a successful lifestyle change to the healthy Mediterranean-Style Eating Plan:

**Choose whole foods more often and processed foods less often.** Whole grains such as wheat, oats, rice, rye, barley, and corn, are called "whole grains" because they retain much of the original nutrients, antioxidants, and fiber.

**Increase intake of fruits and veggies by adding them to current recipes**. For example, add fruit to cereal, snack on fruit, toss chopped veggies in soups and casseroles, experiment with fruit salsas or chutneys for fish toppings.

**Choose seafood at least twice per week.** Prepare plant proteins (beans, peas, and lentils) several times per week. Use smaller portions of meat, fish, and poultry to save money while making pantry staples, such as rice and beans, the bulk of the meal. Use spices to add flavor.

**Consider portions.** Make other meat portions more realistic to the "deck of cards" size mentioned for years by the American Health Association and less the focal point of the meal. Make half the grains eaten, whole grains, such as oatmeal, brown rice, quinoa, couscous, whole grain bread, tortillas, and pasta.

**Eat healthy fats.** Choose fats that are more heart healthy, like avocadoes and olives, keeping in mind that all fats are higher in calories. For cooking, canola oil is sometimes a better choice, while extra-virgin olive oil is

the choice for tossing on salads or roasted vegetables.

Use fresh or dried herbs and spices instead of salt to add flavor to food. Try basil, chilies, cinnamon, cloves, cumin, dill, garlic, fennel, mint, oregano, black pepper, turmeric, or ginger to entice taste buds.

**Check the nutrition label.** Read labels to help you rethink choices that are higher in added sugar, sodium, saturated fat, and trans fat.

**Enjoy food.** When it's meal or snack time, take time to enjoy each bite. Try to relax and limit distractions while eating and savor the meal. Make meal time family time, if possible.

**Be Active.** Current physical activity recommendations for adults are 150 minutes per week of weight bearing activity such as walking. Muscle strengthening or resistance exercise are recommended at least twice per week. Check out <u>www.uaex.uada.edu/life-skills-</u> <u>wellness/health/physical-activity-resources/</u> for great ideas on staying physically active!

**Manage Stress.** Stress can be either positive or negative. Avoid excess negative stress by choosing self-management techniques that work for you. Check out <u>www.uaex.uada.edu/life-skills-wellness/</u> <u>personal-family-well-being/personal/</u> for additional ideas on stress management.

**Get Enough Sleep.** Lack of adequate rest can rob the body of valuable "recharging" time. Make sure to get six to eight hours of sleep each day on a regular basis.

## Summary:

There are several simple strategies one can use to help in reducing levels of chronic inflammation in the body. By increasing the amount of fruits and vegetables, whole grains, nuts, and fish while decreasing intake of processed foods and sugar-sweetened foods, one can make advances to a healthy eating plan. This style of eating plan is sometimes called the Mediterranean-style eating plan. Small changes can play a major role in overall health improvement. Being willing to make changes over time, called lifestyle changes, including a healthy eating plan, being physically active most days, getting adequate sleep, and managing stress are all ways to improve overall health.

### References

- 1. Academy of Nutrition and Dietetics: "General Healthful Mediterranean Diet"
- 2. National Institutes of Health. Antioxidants: In Depth. Accessed at NIH.gov/health/antioxidants.
- 3. University of Arkansas Division of Agriculture: "The Mediterranean Diet: healthy eating for lifelong good health.

**DEBRA HEAD** EdD, is an associate department head, associate professor and nutrition specialist with the University of Arkansas System Division of Agriculture and is located in Little Rock.

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