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The Mediterranean Diet — An Up-Close Look at Its Origins in Pantelleria

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Experience this traditional, healthful eating pattern from the rustic, windswept island of Pantelleria in the Sicilian region of Italy. Sharon Palmer, RD, captured the magic of this island's nutritious diet during an Oldways International Mediterranean Symposium.

Time seems to stand still on the island of Pantelleria, located on the Mediterranean Sea, about 36 miles from North Africa and 65 miles from the coast of Sicily. There are no taxis that make their way around the perimeter of this small island—only 9 miles long and 6 miles wide—composed of jet black volcanic rocks, remnants of ancient volcanoes, juxtaposed against the sea's green waters. Thousands of worn black rock terraces wind around slopes, resembling multiple tiers on a wedding cake. Traditional low stone cottages, fashioned in black stone and vaulted white domes, called “dammuso,” dot the hills. The locals—only 8,000 of them—are warm and vibrant, possessing the slow and relaxed nature so prevalent in this part of the world.

Few tourists have discovered this “black pearl” in the Mediterranean, although it's become a secret hideaway for designers and architects, including Giorgio Armani, who established a villa there. One of Pantelleria's most charming attributes is the local cuisine, which focuses on regionally produced plant foods, such as olives, capers, and herbs and spices, harking back to cultural food traditions passed down through the generations—the foundation of the Mediterranean diet.

Pantelleria serves as a vivid example of the types of foods to eat when following the Mediterranean diet. Meals are made with olive oil, grains, fresh fruits and vegetables, beans, legumes, fish, and shellfish. Read on to learn about this country's rich history, how the Mediterranean diet evolved, and how following such an eating style can promote optimal health and well-being.

Shaping the Land for Survival

The traditional diet in the countries surrounding the Mediterranean Sea, including France, Italy, Spain, Morocco, and Greece, was considered a “poor man's” diet, developed over the centuries as people labored to create sustenance in less hospitable terrain. In Pantelleria, inhabitants during prehistoric times hunted and raised animals, but starting in the Bronze Age, they gradually cleared the island for farming, which has been the inhabitants' primary source of nourishment throughout history and even up to today.

A thousand years ago, the locals began piling lava stones to form miles of perfectly constructed walls that curve around the island. In fact, every slope of every hill was terraced in an ingenious attempt to contain and protect the soil from erosion, and capture every drop of precious moisture on this dry island. The terraces created a unique ecosystem, where low grapevines and caper plants flourish in their harsh surroundings, according to Gabriella Giuntoli, an award-winning architect, urban planner, and expert of Pantellerian architecture, who spoke at the Oldways International Mediterranean Symposium on September 9, 2012, in Pantelleria. Today, the terraces serve as a graceful, charming feature of Pantellerian vistas as well as a practical tool for farming.

“There was little arable land—the island has narrow coastal planes flanked by big mountains, and the climate is extreme with erratic rainfall. The winds blow all of the time,” said Mary Taylor Simeti, a Sicilian food expert who has written extensively on food traditions of the region, and who spoke at the conference.

Another agricultural and architectural feature arose on the island: the giardino pantesco, a dry stone enclosure, either round, square, or oval shaped, which created the ideal internal climactic conditions needed for growing citrus fruit. Dating back to the Arab domination of the island, more than 1,500 of these beautiful, enclosed “secret” gardens still exist in Pantelleria.

While these architectural treasures attract an appreciation for their rustic charm, their real value is the display of man’s quest for survival by shaping the land and environment to sustain the body and soul. This facet is seen in the countries along the Mediterranean. In Pantelleria, for example, the people had to face a rocky terrain, scant rainfall, and constant winds that rattled the island. So the terraces and enclosed gardens created a buffer against the wind while simultaneously allowing moisture from the dew to collect on the rocks to provide hydration to the thirsty plants, without any form of irrigation. These terraces and enclosed gardens are icons symbolizing the ingenuity and determination that was needed to create the regional diets in the Mediterranean.

Plants of Pantelleria

Behind the terraces, the plants, from olive trees to grapevines, grow low to the ground almost horizontally, protected from the wind. At the base of each grapevine you’ll find a small basin, which collects the dew that slides down into the roots of the grapevine—a technique that was engineered hundreds of years ago.

Pantelleria is famous for Passito di Pantelleria, an ancient sweet wine dating back 2,000 years. It’s made from the Muscat of Alexandria grape (called Zibibbo in Pantelleria), which originated from the Nile Delta. This delicately sweet wine is made from fresh grape must and raisins; wooden racks of grapes drying in the sun can be found all over the island at harvest time.

Other local treasures include capers, which sprout like weeds in the most unlikely places, like a crack in a rock hanging over the sea. Pantellerians are quite proud of their capers, which are known to be especially intense in taste, “with flavors of the middle of the sea,” according to local caper growers. The capers simply are the flower buds, which emerge from long trailing vines with coin-shaped leaves, harvested by hand before they open into white-purple blossoms. Unlike most capers found in America, Pantellerian capers are fermented and preserved in sea salt instead of vinegar.

Of course, this wouldn’t be a Mediterranean country without the presence of the olive tree, a symbol of the vegetable world uniting the three religions in this region: Christianity, Judaism, and Islam. But in Pantelleria, olive trees take the form of small bushes no more than 2 ft tall, growing out rather than up.

“If people didn’t grow it in Pantelleria, they didn’t eat it. This is true of the majority of foods in the Mediterranean diet. The harsh climate limits the crops that can be produced, but it’s responsible for giving them intense flavors. There was incredible creativity and inventiveness in the diet here,” Simeti said, listing tomatoes, zucchinis, peppers, potatoes, and wild herbs as common vegetables grown on the island along with staples such as wheat, barley, lentils, and chickpeas, which came to the Sicilian region in the Neolithic Age. Almonds, which show up in many regional dishes, traditionally are grown in one’s home garden.

The Birth of Local Dishes

Like many countries in the Mediterranean, the local diet in Pantelleria has been shaped by a rich history of various ethnic cultures, from Arabian to Italian. The region always has been a crossroads for many civilizations and cultures. While the island was created by volcanic eruptions some 250,000 years ago, the first settlers arrived from North Africa in 3,000 BC. The Phoenicians and the Carthaginians visited the island, and the Romans occupied it in the third century BC.

For centuries pirates plundered the island, but Muslim farmers colonized it in 860 AD, and introduced grapes and citrus trees. In 1090, the Arabs were exiled, and the island changed hands numerous times over the next centuries until it finally was known as Pantelleria. During the Napoleonic wars, French cuisine was brought to the Sicilian region, which was married with the local food tradition.

Traditional dishes mirrored the vast cultural influences and food availability. Take, for example, a Pantellerian seafood couscous, which owes heavily to the flavors and traditions of North Africa. “A dish with tomatoes, eggplant, and potatoes is a perfect reflection of the cooking style of the island. You first looked at your garden, and then you decided what your recipe would be,” Simeti said. “While seafood is an important part of the diet here, Pantellerians are more farmers than fisherman. The dishes were made of simple ingredients, as it was expensive to import foods. For example, sugar was expensive to import, so many of the traditional desserts were flavored with honey or grape must.”

During a visit to Pantelleria, you’re likely to see several iconic dishes, including a pesto made of raw tomatoes, olive oil, garlic, and basil; fish couscous with a variety of local seafood, vegetables, and legumes; caponata fashioned with eggplant, capers, and olive oil; ciaku ciuka, a combination of eggplant, tomatoes, and potatoes; and Pantescan salad made with potatoes, tomatoes, red onions, and capers. These local foods are hearty, rustic, and generously flavored with capers, olive oil, and wild herbs—key crops of the island.

Rise of the Mediterranean Diet for Health

Health experts and nutrition researchers didn’t create the Mediterranean diet in a lab. “The Mediterranean diet is a traditional diet that evolved over 5,000 years,” said Antonia Trichopoulou, MD, PhD, a professor at the University of Athens and one of the leading Mediterranean diet researchers who attended the conference. “People used local resources and prepared food from nothing in order to develop it. It was shaped by the regional environment, culture, and religious practices. People always believed the Mediterranean diet was good for you, but it hadn’t been documented before. It’s a way of living—it respects the environment and religions. The focus is on seasonal foods, traditional options, and local products.”

The Mediterranean diet has been the subject of intensive research for more than 50 years, ever since Ancel Keys, PhD, a professor from the University of Minnesota, first performed his legendary, post-World War II Seven Countries Study, which examined the health outcomes of nearly 13,000 middle-aged men in the United States, Japan, Italy, Greece, the Netherlands, Finland, and then-Yugoslavia. His team found that men from Crete experienced lower cardiovascular disease rates than their counterparts in other countries—a link the researchers attributed to the men’s postwar “poor” diet, which focused on fruits, vegetables, grains, beans, and fish.

Since Keys’ first observation decades ago, hundreds of studies have documented an array of health benefits linked with the traditional Mediterranean diet, including increased life span; healthy weight; improved brain function; fewer symptoms of rheumatoid arthritis and poor fertility and eye health; lower risks of certain cancers, heart disease, Alzheimer’s disease, and diabetes; and lower levels of blood pressure and LDL cholesterol.

“The Lyon Diet Heart Trial in 1998 showed that after three years on the Mediterranean diet subjects had a 56% lower risk of dying and a 50% to 70% reduced risk of myocardial infarction,” said Kathy McManus, MS, RD, LDN, director of the nutrition department at Brigham and Women’s Hospital in Boston, as she highlighted some of the major clinical findings at the symposium.^{1,2} “In the Gissi Prevenzione Trial in Italy, with more than 11,000 men and women, the diet was associated with a 50% reduced death rate. Now the diet is the medical standard for weight loss in diabetes,” she said.^{1,2}

Research on the health benefits of the Mediterranean diet continues to grow, with the recent publication of a study that attracted worldwide attention. In the landmark multicenter PREDIMED trial, researchers from Spain found that a Mediterranean diet that included nuts reduced the risk of cardiovascular disease by 30% and specifically decreased the risk of stroke by 49% when compared with a low-fat American Heart Association-recommended diet.³

The lesson of the Mediterranean diet is that it's not a magic bullet—it's not about one particular food that offers special benefits. It's about eating a simple, plant-based diet, based on regional, local, nutrient-dense foods. It's about savoring the flavors of foods, and making the most of the foods available to us. These are lessons that can be applied to diets across the country. You can eat a local, seasonal, plant-rich diet in the Northwest as well as in the South, and pay special attention to regional dishes, such as wild mushroom risotto and fresh berry compote in the Northwest and greens with black-eyed peas in the South. By translating the key characteristics of the Mediterranean diet into our clients' own lifestyles, we can bring the benefits of this lifestyle to America.

— *Sharon Palmer, RD, is a Los Angeles-based food and nutrition writer. She's the author of **The Plant-Powered Diet**, the editor of **Environmental Nutrition**, and a contributing editor of **Today's Dietitian**.*

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Portrait of a Mediterranean Diet

Researchers have identified the following characteristics of the traditional Mediterranean diet¹:

- Each meal includes vegetables, fruits, and grains. The majority of grains are consumed in their whole, minimally processed form, such as wheat, oats, rice, rye, barley, and corn.
- Olives and olive oil are the principal sources of fat. Olives are eaten whole and incorporated into dishes, and olive oil is used in cooking.
- Nuts, beans, legumes, and seeds are regular features. From lentils and chickpeas to walnuts and sesame seeds, these foods—rich in protein and healthful fats—are an important part of the diet.
- Herbs and spices are used liberally for added flavor and a potent boost of health-promoting antioxidants.
- Milk, cheese, and yogurt are consumed in moderation.
- Fish and shellfish take priority, such as tuna, herring, sardines, salmon, mussels, clams, and shrimp.
- Eggs are included routinely in place of meat in traditional dishes.
- Meats are eaten in small quantities, with moderate portions of poultry.

- Sweets are enjoyed in small amounts but consumed less frequently.
- Wine is enjoyed in moderation, up to one 5-oz glass per day for women and up to two 5-oz glasses for men.
- Water is the beverage of choice instead of sweetened beverages.
- Portion size is under control at each meal.
- Daily physical activity is a way of life and includes strenuous exercise, such as biking and hiking, and leisurely activities, such as walking and gardening.
- Meals are enjoyed with others. Food, drinks, and meals are savored with family and friends.

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Pantescan Salad

Serves 8

Ingredients

3 potatoes
5 tomatoes, sliced
1 red onion, sliced
10 black olives
1 oz capers, rinsed
2 T extra-virgin olive oil
Dried oregano, as desired

Directions

1. Boil the potatoes, peel, and slice them.
2. Add the sliced tomatoes, onion, olives, and capers.
3. Season with extra-virgin olive oil and sprinkle with oregano.

Nutrient Analysis per serving

Calories: 112; Total fat: 4 g; Sat fat: 1 g; Trans fat: 0 g; Cholesterol: 0 mg; Sodium: 129 mg; Total carbohydrate: 18 g; Dietary fiber: 2 g; Sugars: 2 g; Protein: 2 g

— *Recipe adapted courtesy of Oldways*

Pantelleria Pesto

Makes 8 servings

Ingredients

1 3-1/2 oz ripe tomatoes
2 cloves garlic
1 sprig parsley
1 basil leaf
1/4 cup extra-virgin olive oil
Salt, pepper, and chili pepper to taste

Directions

1. Roast the tomatoes. Peel, seed, and chop them.
2. In a mortar, grind the garlic, parsley, and basil with olive oil using a pestle until creamy.
3. Mix with the tomatoes, season with salt and pepper, and add chili pepper as desired.
4. Serve with dishes such as pasta.

Nutrient Analysis per serving

Calories: 70; Total fat: 7 g; Sat fat: 1 g; Trans fat: 0 g; Cholesterol: 0 mg; Sodium: 3 mg; Total carbohydrate: 2 g; Dietary fiber: 1 g; Sugars: 1 g; Protein: 0 g

— *Recipe adapted from of Oldways*

Warm Caponata With Toasted Almonds

Serves 8

Ingredients

4 eggplants
3 celery stalks, sliced
1 medium onion, sliced
5 oz extra-virgin olive oil, plus additional
1 cup water
2/3 oz Pantelleria capers in oil
1 2/3 oz black olives
1 oz vinegar
3 T sugar
3 T tomato sauce
Salt to taste
1 2/3 oz chopped toasted almonds

Directions

1. Peel the eggplant and dice into 1/2-inch cubes. Sprinkle with salt and set aside for about 1 hour.
2. Add the celery and onion to a skillet with olive oil and water, sautéing over medium heat until the water evaporates.
3. Add the capers, olives, vinegar, sugar, and tomato sauce, and simmer for 15 minutes.
4. Sauté the eggplants in additional olive oil and add to other ingredients.
5. Season with salt to taste, and garnish with almonds.

Nutrient Analysis per serving

Calories: 275; Total fat: 22 g; Sat fat: 3 g; Trans fat: 0 g; Cholesterol: 0 mg; Sodium: 178 mg; Total carbohydrate: 22 g; Dietary fiber: 9 g; Sugars: 11 g; Protein: 4 g

— *Recipe adapted from of Oldways*

Ciaku Ciuka

Serves 8

Ingredients

1 onion, minced
1/4 cup extra-virgin olive oil
13 oz bell peppers
10 oz tomatoes
5 oz eggplant
10 oz potatoes
Salt and pepper to taste
Chili pepper (optional)

Directions

1. Sauté the minced onion in the olive oil until golden.
2. Dice the bell peppers, tomatoes, eggplant, and potatoes into small cubes. Add to onion mixture and cook for 30 minutes, adding salt and pepper to taste.
3. May add chili pepper as desired.

Nutrient Analysis per serving

Calories: 118; Total fat: 7 g; Sat fat: 1 g; Trans fat: 0 g; Cholesterol: 0 mg; Sodium: 6 mg; Total carbohydrate: 13 g; Dietary fiber: 3 g; Sugars: 4 g; Protein: 2 g

— *Recipe adapted courtesy of Oldways*