



MEDITERRANEAN VS. ASIAN DIETS FOR DIABETICS

Introduction

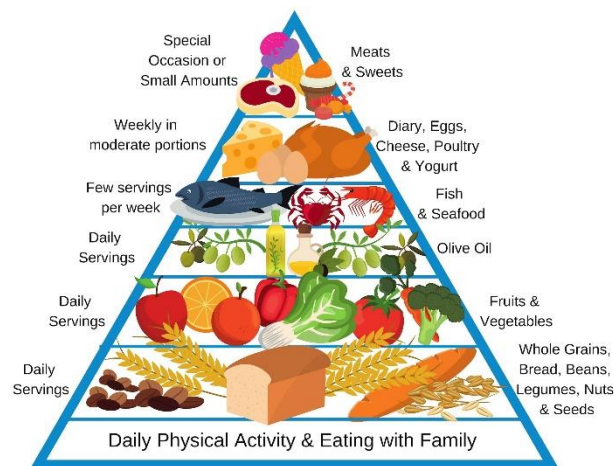
In this brief we will compare two of the dietary systems in the world, look at the practices and its history in keeping us in good health and fighting chronic diseases. At the conclusion of this brief we'll discuss what components of a particular system works the best for adults with Diabetes. We'll also look at possible additions to this system that promotes better health for diabetics.

What is a dietary system? Today, if one mentions 'diet', it immediately conjures up images of weighing food, counting carbohydrates, and deprivation. All in the name of losing a few pounds or knocking down some medical test results. In the case of diabetes this is almost always tied to reducing a persons A1c or blood glucose levels. Glucose levels that remain high can lead to chronic illnesses such as heart disease, poor circulation, and immune disorders. Diets have become a mainstay of our health services for many years, in fact the diet industry alone generates over 68 billion dollars annually in the US (LaRosa)! Many years ago, diets meant something totally different. Diets referred to what a person or society ate. Some ate fish, some all vegetarian, others combinations of food. Scholars have traced the words origin back to ancient Greece. Diet originated from the Greek word *diaita*, which came from the Greek phrase, *diaita via diaitan*. Translated to English it meant, "a way of life". (ERICT_CULINARYLORE). While early studies did reference physicians advice or direction, it wasn't solely focused on an eating plan to achieve weight loss. It was meant to represent a whole way of life, including things we ate or drank, lifestyle, and exercise.

We'll dive deeper into two of the many dietary systems out there that are not classified as a 'fad' diet in the weight loss arena, but ones that have stayed true to their origins and have been a vital part of a regions vitality, longevity, and lifestyle.

Mediterranean Diet

History – The Mediterranean diet is believed to have first been discovered in the Mediterranean basin, which historians recognize as "the cradle of society". This is simply because this area accounts of a lot of history of mankind and the rise of Christianity. Some believe that it has its origin from instructions contained in the bible referencing whole grains legumes and vegetables. Ansel Keys, a physiologist from Minnesota, was the first American who studied the diets of the Mediterranean area and is credited with bringing awareness to it in the 20th century. His study of the diets within Italy and Greece in the 1950's and 60's brought more awareness to healthy eating and inclusion of olive oil, high consumption of whole grains, and moderate amounts of red meat and dairy products. (Seven Countries Study)



MEDITERRANEAN DIET

Figure 1- Mediterranean Diet – Courtesy of Strengthening Health Institute



MEDITERRANEAN VS. ASIAN DIETS FOR DIABETICS

Foods – As with most dietary system,s it was developed based on what was plentiful in the area and how often it could be harvested, caught, or produced. Higher emphasis was put on vegetables, whole grains, legumes, nuts and seeds simply because they were, for the most part, readily available. Minimal dairy, red meat and poultry, with an emphasis on fish and seafood. It was also recognized that daily physical activity and communal eating played a very important part of one’s health.

These groups of foods can be further broken down into a food list with corresponding frequency of consumption. (Oldways)

Common Foods & Flavors of the **MEDITERRANEAN DIET**

*** eat most often ** eat moderately • eat less often

Vegetables & Tubers *** artichokes, arugula, beets, broccoli, brussels sprouts, cabbage, carrots, celery, celeriac, chicory, collard cucumber, dandelion greens, eggplant, fennel, kale, leeks, lettuce, mâche, mushrooms, mustard greens, nettles, okra, onions (red, sweet, white), peas, peppers, potatoes, purslane, radishes, rutabaga, scallions, shallots, spinach, sweet potatoes, turnips, zucchini	Fruits *** avocados, apples, apricots, cherries, clementines, dates, figs, grapefruit, grapes, lemons, melons, nectarines, olives, oranges, peaches, pears, pomegranates, pumpkin, strawberries, tangerines, tomatoes	Nuts, Seeds, & Legumes *** almonds, beans (cannellini, chickpeas, fava, green, kidney), cashews, hazelnuts, lentils, pine nuts, pistachios, sesame seeds (tahini), split peas, walnuts
Grains *** breads, barley, buckwheat, bulgur, couscous, durum, farro, freekeh, millet, oats, polenta, rice, wheat berries	Fish & Seafood ** abalone, cockles, clams, crab, eel, flounder, lobster, mackerel, mussels, octopus, oysters, salmon, sardines, sea bass, shrimp, squid, tilapia, tuna, whelk, yellowtail	Herbs & Spices *** anise, basil, bay leaf, chiles, clove, cumin, fennel, garlic, lavender, marjoram, mint, oregano, parsley, pepper, pul biber (Aleppo pepper), rosemary, sage, savory, sumac, tarragon, thyme, za'atar
Poultry & Eggs ** chicken, duck, guinea fowl, quail chicken eggs, duck eggs, quail eggs	Sweets • treats made with fruits, nuts, whole grains, and minimal sugars baklava, biscotti, crème caramel, chocolate, gelato, kunefe, lokum (Turkish delight), mousse au chocolat, sorbet	Cheese & Yogurt ** Brie, Chevre, Corvo, feta, Halloumi, Manchego, Parmigiano-Reggiano, Pecorino, ricotta Greek yogurt
		Meats • beef, goat, lamb, mutton, pork

OldwaysPT.org **OLDWAYS** CULTURAL FOOD TRADITIONS © 2019 Oldways

Figure 2- Food list (Oldways)

US News and World reports have rated this diet, and its food groups, top diet in the country 3 years in a row, 2018-2020.

Asian Diet

History – The Asian continent covers a vast geographic area, stretching from the Middle East to Japan. Given the diverse culture and food availability, the Asian diet has been broken into three distinct dietary



MEDITERRANEAN VS. ASIAN DIETS FOR DIABETICS

cultures; Southwest, Northeast, and Southeast. China is part of the Northeast culture and has its dietary roots dating back to the 15th Century BC. It is believed that Confucius and Tao influenced this culture, but in different ways. Confucius believed in the harmonious blending of ingredients across the taste spectrum, where Tao believed that all food was medicine and concentrated on the health benefits of the foods available. Both the Southwest and Southeast diet culture are believed to have come later around the 13th Century BC, with the Southwest having more of a Persian influence and the Southeast having more of a focus in the sea. All of these distinct regions are heavy in plant-based foods, with less emphasis (or no) red meat, and little dairy products. (Fredeen) All of these regional dietary cultures share common attributes in that they are typically rooted in religious beliefs and cultural customs. (Oldways)

Foods – The Asian diet is primarily based on vegetables, grains, legumes, herbs and spices. It is heavily influenced by rice and noodles (made from rice). Meat typically plays less of a role, and depending on country fresh fish and seafood. Dairy and eggs can be moderately consumed, with sweets taking a back seat by consuming infrequently. Communal eating with family and friends, along with physical activity is important to the healthy lifestyle.

Here is a breakdown of the food list documented by Oldways:

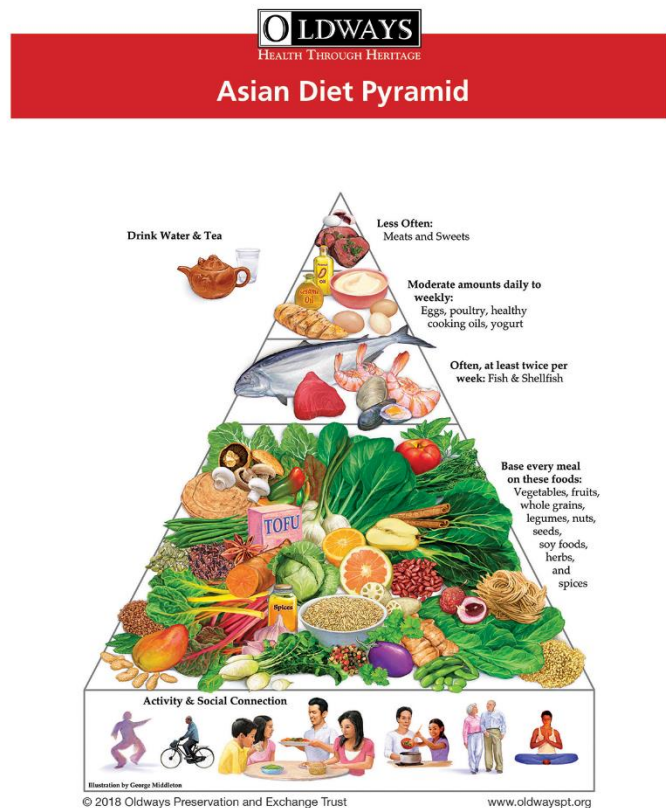


Figure 3 - Asian Heritage Pyramid, Courtesy of Oldways



MEDITERRANEAN VS. ASIAN DIETS FOR DIABETICS

Common Foods & Flavors of the **ASIAN HERITAGE DIET**

*** eat most often ** eat moderately * eat less often

Vegetables & Tubers *** bamboo shoots, bean sprouts, bitter melon, bok choy, broccoli, cabbage, carrots, daikon, eggplant, leeks, lettuce, lotus root, kale, kombu, mushrooms, mustard greens, peppers, seaweed, snow peas, spinach, sweet potatoes, taro root, turnips, water chestnuts, yams	Fruits *** apricots, bananas, cherries, coconut, dates, dragon fruit, grapes, kiwifruit, kumquat, lemons, limes, longan, lychee, mandarins, mangoes, mangosteen, melons, milk fruit, oranges, papaya, pears, pineapple, plums, pumpkin, rambutan, tangerines, yuzu	Nuts, Seeds, & Legumes *** almonds, cashews, hazelnuts, peanuts, sesame seeds beans (adzuki, edamame, mung, soy), lentils, miso, tempeh, tofu
Grains *** barley, breads (dumplings, chapatis, mantou, naan, roti), buckwheat, millet, noodles (rice, soba, somen, udon), rice	Herbs & Spices *** amchoor, asafoetida, basil (Thai), cardamom, chiles, clove, coriander, curry leaves, fennel, fenugreek, galangal, garlic, ginger, ginseng, lemongrass, makrut lime leaves, masala, mint, parsley, pepper, scallion, star anise, turmeric, wasabi	Poultry, Eggs, & Dairy ** chicken, duck, quail chicken eggs, duck eggs, quail eggs ghee, paneer yogurt (chaas, lassi) non-lactose: almond milk, rice milk, soy milk
Fish & Seafood ** abalone, bonito, clams, cockles, crab, eel, king fish, mussels, octopus, oysters, roe, salmon, scallops, sea bass, shrimp, squid, tuna, whelk, yellowtail	Meats * beef, pork	Sweets * treats made with fruits, nuts, whole grains, and minimal sugars Chinese mooncakes, Indian rice pudding, Japanese sugared sweet potatoes, Thai mango-coconut pudding

OldwaysPT.org **OLDWAYS** CULTURAL FOOD TRADITIONS © 2019 Oldways

Comparing the two

Both the Mediterranean and Asians diet are very similar with a focus on fruits and vegetables, they both have limited quantities of animal proteins, and both have a 'non-processed foods' mantra. Both diets contain moderate servings of fish and seafood. It is also worth noting that both diets are built on a base of physical activity, communal eating, and social interaction.

By comparison, there are several areas where the plans differ. While both rely on a solid base of fruits and vegetables, the Asian diet has a bit more of them. In addition, the traditional Asian diet has a larger portion of rice and noodles than the Mediterranean diet. While the Mediterranean diet does include whole grains and pasta, studies have recognized the amount of rice consumed by Asians to be higher. A subtle difference in alcohol consumption between the two plans. Mediterranean suggests wine in moderation, while the Asian plan suggests

drinking water and tea instead. (Oldways)

Diabetes and Diet Culture

By all estimates, Diabetes has reached epidemic proportions today. Over 30 million individuals today have diabetes (type 1 or 2), and another 84 million have 'pre-diabetes' (CDC, 2017). Pre-diabetes is defined as an individual who has an elevated HbA1c over 5.7 but below 6.4). Most experts today agree that the leading cause of diabetes is related to our diet and sedentary lifestyle. Although they have not specifically identified the genetic code, most researchers agree there is a genetic disposition to the likelihood of getting diabetes. However, the preponderance of what we eat is moving the needle in the wrong direction, and our addiction to refined carbohydrates (sugar) has created a condition known as insulin resistance.

While both diet cultures are based in higher physical activity and filled with fruits and vegetables, the Mediterranean diet focuses on more 'whole' foods and therefore I

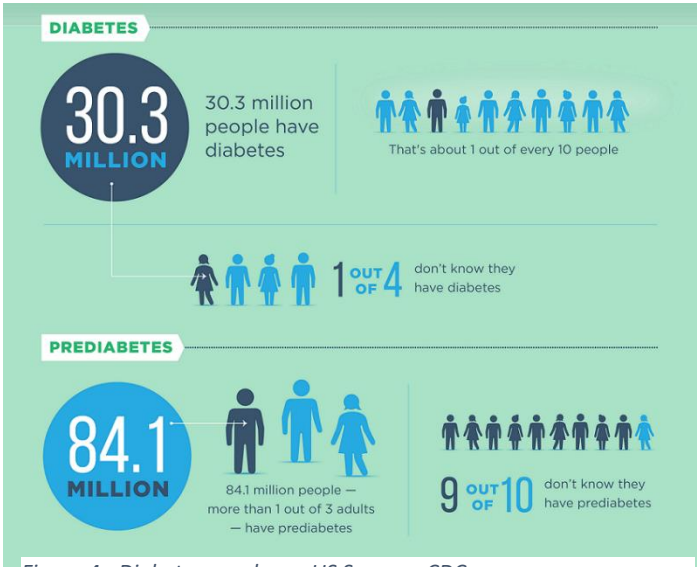


Figure 4 - Diabetes numbers, US Source - CDC



MEDITERRANEAN VS. ASIAN DIETS FOR DIABETICS

believe a better overall start to a healthy lifestyle change for diabetics. However, diabetics should moderate both their intake and frequency of both pasta and whole high fructose fruits like bananas and some types of apples. By comparison, the Asian diet contains a high amount of soy and rice-based products, and most vegetables are cooked or boiled reducing the nutritional value. Therefore, I would suggest a diabetic client look first to the Mediterranean program with a couple of slight modifications:

- Reduce overall consumption of pasta to 1 small serving a week and make or purchase the pasta that is made out of whole grain products vs highly refined semolina white flour.
 - Replace any additional pasta with vegetable-based zoodles (spiralized zucchini), spaghetti squash, or legumes
- Moderate the intake of higher fructose fruits like bananas, white grapes, and some ultra-sweet types of apples.
 - When eating fruit always eat it with the skin on where possible to maximize the amount of nutrients and fiber you are ingesting. This allows for better blood sugar spike control
 - Smoothies that contain the above may be the exception in moderate quantities and when combined with other fiber plant-based foods like spinach, kale, carrots, etc.
- Refrain from drinking most fruit juices as they are high in fructose. Even though natural, the production process used today removes the fiber and a lot of nutrients, leaving a high concentration of fructose.
 - Juicing that uses the fruits above may be an exception in moderate quantities and when combined with other fiber plant-based foods like spinach, kale, carrots, etc.
- Adding additional foods that are known to help our bodies reduce insulin resistance and build up hormonal and enzyme creation for better cell health. This allows for better removal of excess sugar from our blood and store it for energy in our liver and our cells for later release.
(Erica Oberg)
 - Whole grains (ancient) – Lower GI, extends digestion
 - Chia Seeds – stabilizes blood sugar, reduce glycemic load
 - Chicory (or any food high in inulin; J artichokes, jicama, garlic) – prebiotic that feeds our gut, stabilizes blood sugar (Spritzler)
 - Cinnamon – reduces blood sugar, helps reduce insulin resistance
 - Turmeric – reduce blood sugar, possible type 2 prevention (pre-diabetes) (Angel)



MEDITERRANEAN VS ASIAN DIET

- Clients should familiarize themselves with the Glycemic index (GI) and use low GI whole foods in the food groups recommended in the Mediterranean plan.
 - If consuming a higher GI food always make sure that you have combined it with good fat and protein at the same time. This will help moderate the blood sugar spikes from the higher GI foods.

With some of the above recommendations it is helpful to monitor blood sugar levels before and 1-1/2 hours after eating. This allows a diabetic to better understand what affect the particular food has on his or her blood sugar levels. With the wide availability of both Continuous Glucose Monitors (CGM) and software to log foods against the readings, it gives the diabetic a tool to use for better nutritional health and begin to develop their own food lists for better control.

As with any program or recommendation it is always advisable to work closely with your health professional to ensure your health and safety.

Eat fresh, eat colorfully, and enjoy the path you've chosen for your health and wellbeing. For further information on how you can incorporate easy, colorful plates into your diet please reach out to me at ray.orndorff@cookingandcolor.com.

Enjoy!



References

- Angel, Traci. *Can Turmeric Help Manage or Prevent Diabetes?* Ed. RD, LD Natalie Butler. 22 September 2016. web article. 23 January 2020. <<https://www.healthline.com/health/diabetes/turmeric-and-diabetes>>.
- CDC. "National Diabetes Statistics Report, 2017." 2017. *Center for Disease Control (CDC), data & statistics*. <<https://www.cdc.gov/diabetes/data/statistics/statistics-report.html>>.
- Erica Oberg, ND, MPH. *Type 2 Diabetic Diet*. 16 July 2019. article. 23 January 2020. <https://www.medicinenet.com/diabetic_diet_for_type_2_diabetes/article.htm>.
- ERICT_CULINARYLORE. *What is the origin of the word 'Diet'?* 26 August 2014. Blog. 20 January 2020. <<https://culinarylore.com/food-history:origin-of-the-word-diet/>>.
- Fredeen, Charles. *The History of Asian Food*. 28 September 2017. article. 22 January 2020. <<https://oureverydaylife.com/the-history-of-asian-food-12207267.html>>.
- LaRosa, John. *Top 6 Trends for the Weight Loss Industry in 2018*. 2 January 2018. article. 21 January 2020. <<https://blog.marketresearch.com/top-6-trends-for-the-weight-loss-market-in-2018>>.



MEDITERRANEAN VS ASIAN DIET

Oldways. *Asian Heritage Diet*. n.d. webpage. 22 January 2020. <<https://oldwayspt.org/traditional-diets/asian-heritage-diet>>.

—. *Mediterranean Diet*. 01 January 2020. website. 21 January 2020. <<https://oldwayspt.org/traditional-diets/mediterranean-diet>>.

Seven Countries Study. *The Seven Countries Study*. unknown. web article. 21 January 2020. <<https://www.sevencountriesstudy.com/mediterranean-dietary-patterns/>>.

Spritzler, Franziska. *What to know about inulin 101*. 1 August 2017. web article. 22 January 2020. <<https://www.medicalnewstoday.com/articles/318593.php#1>>.