



ELITE

Personal Training and Fitness Solutions

HEALTH TOPIC OF THE WEEK

7/31 - Mango: A Sweet Treat

Introduction

Did you know that mango is the most popular fruit in the world? So, it should come as no surprise that mangoes are routinely used to enhance sweetness in processed foods. But what if we used that knowledge of mango's sweetness for good!

By now our faithful readers know how we feel about sugar, artificial sugar, and processed foods. Steer clear! Let's take a closer look at mangoes, ending with how to use them in healthy ways.

MANGŌ



Background and Clarification

Mango is a delicious tropical fruit indigenous to southern Asia. Mangoes grow on evergreen trees. But don't think Christmas trees. Mango trees can grow as high as fifty feet. They are also incredibly long living. Some specimens are known to still bear fruit after 300 years.



More fresh mangoes are eaten around the world every day than any other fruit. Mango is the national fruit of India, Pakistan and the Philippines.

Mango fruit comes in various shapes and sizes. Colors include yellow, orange red and green. In India, mangoes symbolize love. Giving someone a basket of mangoes is also considered a gesture of friendship. Legend has it that Buddha meditated under the shade of mango trees.

Mango trees arrived in Mexico and South America in the 1600s with Spanish explorers. The first attempts to grow mangoes occurred in Florida in the 1800s.



Elite Personal Training and Fitness Solutions does not provide medical treatment or intervention. We acknowledge scientific evidence that appropriately intensive exercise and sustainable nutritional intervention can have significant impact on chronic health disorders and obesity, dramatically improving symptoms when recommendations are followed. Please visit us at Eliteptf.com for more information and to schedule your evaluation.

Health Benefits

According to the American Heart Association, "If mangoes could be any more of a nutritional hero, they might need to wear capes".

There are roughly 200 calories in a whole mango. They contain over 20 vitamins and minerals and are fat and sodium free. A 3/4 cup of mango provides 50% of your daily vitamin C and 7% of your daily fiber intake.

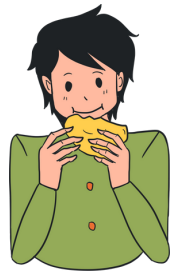


With beneficial fiber content and nutrients, mango supports healthy gut microbiome and diversity.

Vitamin content depends on the variety and maturity of the fruit. When a mango is green and still growing, there is a high vitamin C content. As the fruit ripens, the amount of vitamin A increases. Mangoes are rich in vitamin B-6, which helps in improved brain functioning.

Mangoes are packed with polyphenols, which are plant compounds that act as antioxidants to protect your body. Mango polyphenols fight oxidative stress, which is linked to many serious health conditions, including colon, lung, prostate, breast, and bone cancers.

Mango intake (200–400 g of pulp for 8 weeks) has been shown to decrease inflammatory biomarkers and improve the intestinal microbiota in patients with inflammatory bowel disease. Mangoes contain a group of digestive enzymes called amylases. Digestive enzymes break down large food molecules so that your body can absorb them easily. Amylases break down complex carbs into sugars, such as glucose and maltose. These enzymes are more active in ripe mangoes, which is why they're sweeter than unripe ones.



Mangoes and Sweetness Perception Research

Back to the dark side. With the evolution of processed foods, low-calorie products and artificial sweeteners, research turned to nature for an answer to sweetness. Various berries and tropical fruits were analyzed to determine which had the highest sweetness perception. Mango won hands down.

Mango's Role in Sensory Science

When you eat food, you mechanically break it down for digestion. During this process, chemical reactions occur in your soft palate. Compounds bind directly with tastebuds, providing basic tastes (sweet, sour, salty, bitter, umami). Others volatilize and travel to the olfactory receptors in your sinuses.

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To evaluate taste and flavor attributes of foods, trained sensory assessors blind taste and rate foods on numbered sensory intensity scales. Many variations and methodologies exist, but scales of 0-15 are common in research.

As the name implies, sensory intensity scales use measured references at increasing intensities. For example, sweetness is rated using increasing concentrations of sucrose in water. Trained evaluators learn what sweetness is and then train on this scale. They compare the sweetness of any product on this scale, along with many other taste and flavor attributes.

Think of the taste of a food like a paragraph. Assessors break that paragraph down into letters and words. Fruits and foods with sugars in them are relatively easy to evaluate for sweetness. However, there is a far greater challenge with artificial sweeteners.

Sugars bind directly to the tastebuds in your mouth. They signal “sweetness” to your brain. Artificial and non-nutritive sweeteners are not at all structured like sugar chemically. They do not bind to your tastebuds or send signals to your brain like sugar does. Most only bind to bitter receptors. The sweetness you perceive is actually aromatic, meaning the compounds volatilize and travel to your olfactory receptors.

So, What Do Mangoes Have to do with Artificial Sweeteners?

Mango flavoring, extracts and juices are used to distract from bitterness and trick your brain into perceiving higher sweetness. But the knowledge of the mango’s sweet benefits does not have to veer to the dark side!

There are many healthy ways to use mangoes. From island coladas and margaritas to cobb salads, salsa and curries, mangoes can be used in a wide array of recipes. Do a quick google search and you will find endless ideas. To promote gut health, try mango pickles and check out our health topics on fermented and probiotic foods.

Mango Pairings

Looking for ways to spice things up? Look no further than fresh herbs. The bright, aromatic flavors of cilantro, mint, and basil complement the velvety sweetness of mango. When making something sweet, mix mango with spices like clove, cinnamon, and nutmeg. And if you’re really looking to awaken your palate, pair your mango with chili powder.



Tips on Cutting a Mango

If you've ever cut into a mango before, you probably know they aren't the easiest fruit to slice and dice. They have a tough skin and large pit. Here's our tip:



1. With the mango skin still on, cut long vertical slices 1/4 inch away from the middle to separate the flesh from the pit.
2. Cut the flesh on each of these slices into a grid-like pattern without cutting the skin.
3. Scoop the cut flesh out of the skin.

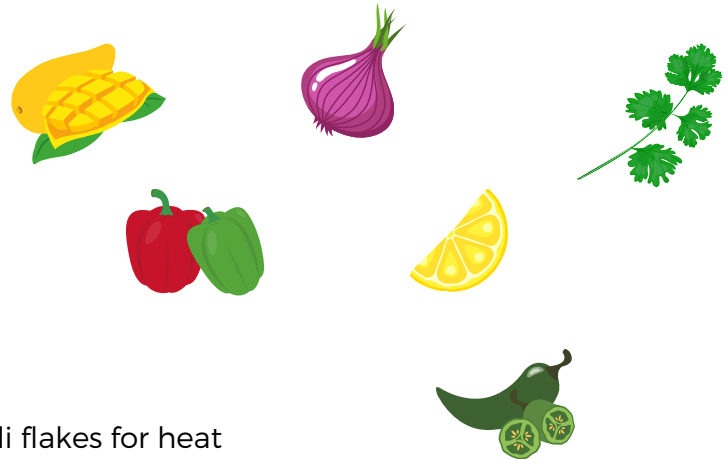
EPT Safety Tip: Make sure to keep the mango on a cutting board. Do not try to hold it in your hand when scoring the flesh or you might score your flesh!

EPT Recipes

Mango Salsa Recipe by Tasty

Ingredients

- 1 ½ cups mango, diced
- ½ cup red bell pepper, finely diced
- ½ cup green bell pepper, finely diced
- ½ cup red onion, finely chopped
- ¼ cup fresh cilantro, chopped
- 2 tablespoons lemon juice
- Salt and pepper to taste
- Optional: jalapeno, other chili peppers or chili flakes for heat



Preparation: Mix all ingredients together in a large bowl.

Serve: Eat with high fiber corn chips, on a salad, tacos and other dishes. Tastes great on fish!



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This article was contributed by Lynette Jernigan, Director of Business Development/ Certified Personal Trainer / Certified Functional Nutritionist. For her bio, please see www.eliteptf.com/lynette-jernigan

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