

Food Matters

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A NOTE FROM DINA



Extensive research suggests that a diet high in fruits and vegetables has a significant protective effect against a variety of chronic diseases, such as cardiovascular disease and cancer.

Much of the protective effect of fruits and vegetables has been attributed to vitamins, minerals, phytochemicals and antioxidants found in raw fruits and vegetables, which have the capacity to neutralize and inactivate free radical molecules that cause tissue damage, disease, aging and ultimately death. Thousands of these phytochemicals have been identified and are being studied and it is estimated that there are tens of thousands still unidentified.

Due to their nutritional content, *raw* foods are valued as extremely healing and a raw food diet has been highly regarded as the most nutritious and health promoting diet.

Cooking, for the most part, leads to nutrient degradation and loss, however it has also been shown to have some benefits in specific situations. Knowing when to eat raw and cooked foods can certainly be a bit tricky but there is a way to get the best of both worlds.

To your health,

Dina Boyer

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Raw versus Cooked

Raw foods are fruits, vegetables, nuts and seeds that have not been cooked in any way, pasteurized or exposed to heat above 115 degrees Fahrenheit.

In addition to all the phytonutrients we already mentioned, raw foods also contain enzymes, which aid in the digestion of our food. (These food enzymes are different than our digestive enzymes produced in our pancreas and also different than our metabolic enzymes used for all other metabolic and biochemical functions in the body.)

Without the help of the food enzymes, we are forced to produce more stomach acid and pancreatic enzymes to break down our meals. This puts a lot of unnecessary stress on our body and according to the Food-Enzyme concept, leads to enzyme depletion, which has been associated with autism, arthritis, allergies, cancer, cardiovascular disease and death.

Home cooking such as boiling, microwaving, pressure-cooking, frying, baking and even milder food preparation methods such as chopping and blending denature food, destroy the food enzymes and can have a detrimental effect on the nutritional value of raw fruits and vegetables. On average, cooking can destroy 75% of vitamins and proteins and up to 100% of phytonutrients.

The impact of the nutrient loss is highly dependent on the cooking method, the type of food and the nutrients involved. Water soluble vitamins such as vitamin Bs and C are especially sensitive to heat; and minerals like calcium, magnesium, iron, potassium, phosphorus and zinc may be depleted by 60-70%.



One study looked at the impact of cooking on folate and showed 51% and 56% reductions in folate content after boiling spinach and broccoli compared to their raw counterparts respectively. However, no significant losses of folate were observed with steaming. A different study showed 34.6%, 30%, 52.2%, 45.9% and 32.2% reductions of Vitamin C, thiamine, riboflavin, beta-carotene and folic acid respectively from cooking 11 different raw vegetables.

While some of the nutrients and enzymes can be depleted during cooking, the bioavailability of a few nutrients is increased. Tomatoes and carrots have been shown to be much more nutritious when cooked than when raw. Cooking breaks the plant cell walls down, increasing digestibility and thus making phytochemicals such as lycopene and beta-carotene in tomatoes and carrots more bioavailable. Cooking can also destroy some anti-nutrients such as oxalate (that binds calcium and make it unavailable for absorption), that interfere with protein and mineral absorption.

So it becomes very tricky in deciding if and how to cook our meals as you can potentially have some losses and some gains. Overall, my recommendation is a diet of at least 50% raw for optimal health, taking into consideration the rules on the next page to get the best of both worlds.

COMPANY-WIDE SUCCESS



Meet: **Megan Gillespie, 24 yrs old**
Human Resources Assistant
Pneumatic Division,
Wadsworth, OH

Megan started gaining weight in high school and kept gaining until she went to college. The summer leading into her freshman year of college, she completed a 30 day fitness boot camp and was disappointed and discouraged for not even being able to lose a single pound!

Around the same time she was diagnosed with hypothyroidism. She was prescribed medication and within a couple of months she lost 20 pounds, where she stayed for the remainder of her college career. She was an emotional eater and loved peanut butter and jelly sandwiches, pasta, diet Coke and milk. She was always exhausted and was never motivated enough to exercise or try any diet. Looking back she realizes how unhappy she was with her body and that was ultimately her motivation to change.






She started searching for a positive outlet, where she could accomplish something and feel proud of herself. In 2013 she found that opportunity at a local CrossFit gym. She gradually built her endurance and strength and soon fell in love with the workouts. As she simply stated "her life changed completely with just that one decision."

Eighteen months later with the continued support of her CrossFit coach Eric and often with her mom at her side during her races, Megan is 30 pounds lighter has participated in a marathon relay, has completed three 5K races and is happier than ever!

Her advice to others is "Find what works for you. Whether it is exercise or diet, be patient, work hard and hold yourself accountable!"

HEALTHY PANTRY

Raw Food Kitchen Essentials

A powerful blender or A Food Processor	
A Food Dehydrator	
Spiralizer (fancy)	
Spiralizer (simpler options)	
Mandoline or slicer	

ASK THE NUTRITIONIST

Q: What rules to follow when choosing raw vs cooked foods?

- Choose raw fruits and vegetables as much as possible.
- Treat Vitamin-C rich foods with care.
- When you cook vegetables, be gentle. Cook foods to just tender crisp; enough to facilitate digestion and nutrient absorption without depleting all the nutrients out of the food.

A study that looked at 20 vegetables and their antioxidant levels when exposed to cooking showed that:

- Artichokes were the most durable vegetables
- Steaming, baking, griddling, and microwaving preserves more of the nutrition. Boiling and pressure-cooking produced the greatest loss of nutrients and frying falls in the middle.
- Highest nutrient loss was observed in cauliflower, peas, and zucchini, followed closely by peppers, spinach and broccoli.

Zucchini Noodles with Raw Tomato Marinara

By Ani Phyo

Ingredients

- 1 ¼ pounds tomatoes, diced
- 2 dry or oil packed sun dried tomato halves
- ½ cup basil leaves
- ¼ cup extra virgin olive oil
- 1 Tbs fresh lemon juice
- 1 soft Medjool date, pitted and minced
- 1 small garlic clove
- 1 tsp thyme leaves and chopped parsley
- Salt and Pepper
- 4 medium zucchini (1 ¼ pounds)

Directions:

1. In a blender add all ingredients besides the zucchini and puree until smooth. Season with salt and pepper.
2. Using a spiralizer cut the zucchini in spaghetti like strips. Add marinara sauce and enjoy! Servings: 4

Nutrition (per 1 ½ cup serving): 145cal, 10.6g fat, 1.5g of sat. fat, 11.1g Carbs, 8.3g Sugars, 1.8g Protein, 296 mg Sodium, 404 mg Potassium, 2g Fiber