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**Nutrition**  
**NEWSLETTER**



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# Tilapia Dinner

## Ingredients:

1 tsp olive oil  
2 cups sliced mushrooms  
1 cup short grain rice  
2 cups vegetable broth, low sodium  
1 tablespoon Parmesan cheese  
Garlic salt and pepper to taste  
Fresh parsley or basil

Rainbow chard leaves, rinsed, 1 bunch

1 tsp olive oil  
2 cloves of garlic, minced

Corn on the cob, 4 ears

4 Tilapia filets on oiled foil with dried herbs:  
oregano, chives, basil, thyme, black pepper



## Directions:

- Sauté the mushrooms in the olive oil until browned trying not to stir too much initially. Add the rice, followed by the broth. Stir frequently. Cook until the rice is done, about 20 minutes. Season with cheese, garlic, and herbs. Keep warm until ready to serve.
- Preheat a grill and place the fish and corn on oiled foil. Cook on the grill until done. Turn the corn once during cooking. Cut it off the cob to serve.
- Sauté the rainbow chard leaves with olive oil and garlic. Plate all items and serve hot together.

## Chef's Tips:

You can use kale or spinach in place of the rainbow chard. You can use tofu in place of the fish to keep the dish vegetarian. Or you can add any kind of your favorite protein on the grill. The short grain rice is a cheaper substitute for arborio rice, but it yields a similar dish.

## Nutrition Facts:

Serves 4. Each 1 plate serving: 392 calories, 6g fat, 1g saturated fat, 0g trans fat, 52mg cholesterol, 712mg sodium, 62g carbohydrate, 6g fiber, 5g sugars, 26g protein

# Agua Frescas



Agua frescas are refreshing beverages made with a little pureed fruit and water. They are very refreshing and low in sugar. Plus, they make a great base for popsicles. And they are a perfect solution for fruit that is getting a little too ripe too fast.

## Ingredients:

- ❖ 4 cups seedless watermelon cubes
- ❖ 4 cups water
- ❖ 1 tablespoon of granulated sugar
- ❖ Juice of 1 lime or lemon

## Directions:

Cut the rind off the watermelon and cut in cubes.

Bring the water and sugar to a boil to make a syrup. Allow to cool on the stove.

Add the syrup to the watermelon and blend on medium speed in a blender until smooth. Add the lime juice.

Chill until ready to serve.

## Nutrition Facts:

Serves 8. Each 1 cup serving: 30 calories, 0g fat, 0g saturated fat, 0g trans fat, 0mg cholesterol, 6mg sodium, 8g carbohydrate, 0g fiber, 6g sugars, 0g protein.

# Coronavirus and Diabetes

**D**o you wake up with an occasional sore throat, cough, or watery eyes and immediately think, “coronavirus?” You’re not alone. As the number of cases of COVID19 has surpassed [two million in the US](#), we all await a vaccine in hopes of preventing the potentially deadly disease. To date, over 100,000 people have succumbed to the virus and the US will most certainly see even more deaths this summer. 1

## Now is not the time to lower your guard

While wearing a mask and social distancing may help to prevent the spread of coronavirus, the arrival of summer has made it more difficult for people to stay inside. Warm weather and relaxed rules, which vary from state to state, are bringing people outdoors. And with the loss of jobs and plunge of the US economy, many people are eager to return to work, regardless of the risk.

The good news is that most healthy people will recover from the virus, but certain populations tend to be more vulnerable. Studies show that adults with chronic health conditions such as diabetes, obesity, and heart disease are at higher risk of having more health complications than healthy adults. 1

## Diabetes and coronavirus risks

As mentioned above, one population that’s been found to be more vulnerable is those with diabetes. For starters, people with diabetes are at higher risk for any infection, including the flu and coronavirus. Patients with diabetes often have altered immune responses to infection including T-cell and macrophage activation. In addition, poor glucose control impacts many aspects of the immune response to viral infection including possible bacterial infection in the lungs. 2

Individuals with diabetes are often obese, which also raises the risk of severe infection. Abdominal obesity specifically impacts immunity through secretion of adipokines and cytokines that may impair the immune response to infection.3

According to the CDC, individuals with diabetes are not necessarily at higher risk for contracting the illness but do seem to have more dire consequences when they do. 1 A recent study from *Diabetes and Metabolism* by Targher, et. al found a 4-fold risk of having severe COVID19 illness compared to a non-diabetic population. The researchers note this was independent of age, smoking, sex, hypertension, and obesity.

The reasons behind the increased risk are not always clear, but scientists suggest it may be related to underlying, low-grade inflammation, impaired cell-mediated response, and underlying changes in metabolism. It’s also been noted that those with diabetes may have a higher angiotensin-converting enzyme-2, which increases viral uptake and may raise the risk for COVID19 severity. 4

# COVID-19 Survival Tips for Diabetes

## How to survive COVID19 with diabetes

While good glycemic control helps to lower the chance of complications, being ill raises blood sugar and impacts morbidity and mortality. Blood sugar control is more difficult when medications, treatment, and altered appetite and intake are occurring at the same time. For example, medications such as steroids that are used to reduce inflammation during illness raise blood sugar. Poor intake or use of high-calorie supplements may cause blood sugar fluctuations. Decreased physical activity also impacts blood sugar. 5

As mentioned above, having well-controlled blood sugar may help reduce the chance of becoming severely ill with coronavirus (i.e. avoiding respiratory complications and ventilator dependence). Here are some ways to manage diabetes:

- 1. Seek advice and education.** MyWay Digital Health, a company started by the University of Dundee, UK, ran a free online course called, “Understanding type 2 diabetes” on April 28 and 29 and attracted over 2000 participants. With less face to face interaction, there are more options and demand for telehealth services. Check your online insurance portal or search WebMD to see if you can find any telemedicine links or seek topics to help you improve your health or answer your questions. Certified Diabetes Educators (RNs and/or RDs) may be able to offer individual counseling. 6
- 2. Continue social distancing.** Let other people go to the store for you or take advantage of grocery delivery if it’s available. Wear a mask when you are out and about and continue to wash your hands frequently.
- 3. Get moving.** Go for a walk, take your bike for a spin or do a video at home. Physical activity improves insulin sensitivity, reduces stress, aids in weight management, and improves sleep -- all of which improve blood sugar.
- 4. Keep a regular meal schedule.** It’s easy to slip into grazing all day when we’re working from home and don’t have the regularity of a normal office schedule. But planning and spacing out meals will help keep blood sugar and weight in check while you’re home.
- 5. Get enough sleep.** Adequate sleep reduces cortisol levels and keeps cravings for sweets in check. Cortisol levels rise in response to stress and poor sleep and are linked with poor blood sugar control, hypertension and heart disease.

*By Lisa Andrews, MEd, RD, LD*

*References at <https://foodandhealth.com/>*

# What Are Anti-Nutrients?

Anti-nutrients are a natural part of some plant foods, and while you might not have heard much about them before, they are not a new phenomenon. Most are destroyed through processing and cooking, and many of the foods have great health benefits. By eating a variety of foods you offset any losses.

## Nutrient Glossary

To understand anti-nutrients we first need to understand *nutrients*.

**Nutrients** are substances in food that our bodies need to grow and thrive.

**Macronutrients** are needed in larger amounts: protein, carbohydrate, and fat.

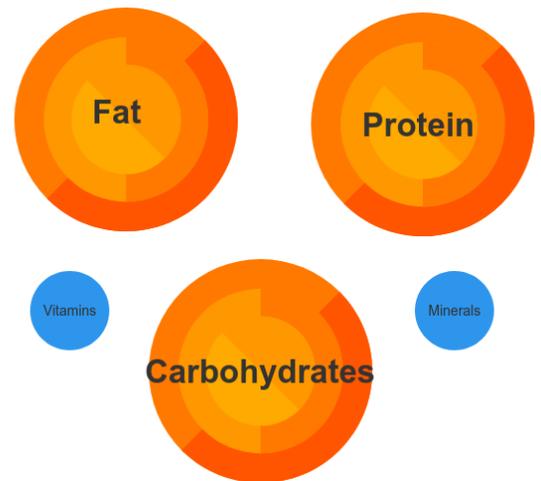
**Micronutrients** (including vitamins and mineral)s are just as important as macronutrients; we simply need them in smaller amounts. Think of nutrients as building blocks, with each block a crucial component necessary to build a strong structure.

**Anti-nutrients** are a natural part of some plant foods that the plants have developed to protect themselves from being eaten by insects and damaged by infections.

While helpful for plants, these anti-nutrients can decrease the absorption of some nutrients in our body.

However **anti-nutrients don't decrease the amount of nutrients stored in our body**, or somehow cause more nutrients to be excreted.

**In fact, some anti-nutrients also provide health benefits!**



# Anti-Nutrient Guide

Class of Antinutrients	Source	Benefits	Concerns	Advice
<b>Glucosinolates</b>	Cruciferous vegetables like broccoli, Brussels sprouts, kale, and cabbage	Decreased risk of cancer	Could cause iodine deficiency, otherwise no negative effects	This is only a concern if you have hypothyroidism. Eating seafood provides iodine.
<b>Lectins</b>	Whole grains, legumes, peanuts	Many health benefits from these phytonutrients	Can interrupt absorption of calcium, iron, phosphorus, zinc	Cooking or even soaking in water inactivates the lectins in legumes. Sprouted grains have less too.
<b>Oxalates</b>	Dark green leafy vegetables like spinach, kale, and beet greens; almonds and tea		Causes lower absorption of calcium in leafy greens versus milk	Steaming dark leafy greens decreases oxalate content while boiling decreases more.
<b>Phytates</b>	Whole grains, wheat bran, rice bran, brown rice, seeds, legumes such as pinto and navy beans, soybeans, and peanuts	An antioxidant that may protect from kidney stones and cancer.	Phytates can also decrease the absorption of iron, zinc, magnesium, and calcium	Unless you consume whole grains, rice or legumes raw, the amount of phytates in these foods is not a concern
<b>Tannins</b>	Tea, coffee, and legumes	Tannins have many benefits such as anticarcinogenic, antioxidant, antimicrobial, reduce blood pressure, and more.	Decreases iron absorption	Drink water versus coffee and tea when taking iron supplements.
<b>Saponins</b>	Legumes and whole grains	beneficial phytochemicals with anti-inflammatory, antibacterial, and immune-boosting effects	Blocks overall nutrient absorption	

# SUMMER CREATIVITY WITH FRUITS & VEGETABLES

The coronavirus pandemic has created an era of home cooking like no other in this newsletter editor's lifetime. The cooking part is a good thing! The more you cook, the easier it gets. PLUS we are not as socially busy, so we have more time. Take advantage of it. Expand your cookbook library, shop at farmer's markets, and don't be afraid to try new things. Here are a few of our favorite creations.



**Pizza baked fries:**  
Cut potatoes in wedges, spray with oil, and top with pizza seasonings like paprika, garlic, and oregano. Bake at 400F until crispy, about 20 minutes.



**Fruit cake:**  
Slice the rind off the watermelon. Cut into round discs. Top with fruits. Cut like a cake. Or serve wedges of watermelon and let everyone top their own with fruit and nuts.



**Strawberry sparklers**  
Dip strawberries in yogurt and then into chopped nuts and chopped fresh or dried fruits. They make a delicious and healthy snack or dessert.



**Loaded watermelon:**  
Cut watermelon into long strips. Load the plate in between with berries,, fruits, nuts, and yogurt.



**Pan roasted tomato salad:**  
Sauté cherry tomatoes with olive oil and herbs. Serve hot with arugula.