There is a lot that we still do not know about the novel coronavirus. However, we do know that people with pre-existing conditions are the most vulnerable to the infection. These pre-existing conditions include heart disease, chronic lung disease, diabetes, and cancer. There are no miracle foods or diets to prevent or treat the virus. But there are numerous lifestyle choices that can support the body’s natural defenses. We will discuss the role of diet on our immune health here.

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Diet

Many of us are cooking and eating at home more frequently due to stay-at-home orders. How and what we cook can help support our health. Food can support a healthy immune system¹ and decrease the risk of heart disease² and diabetes.³

A whole foods, plant-rich approach such as the Mediterranean Diet can provide a good framework for how best to eat to support health and well-being. This diet includes higher intakes of colorful fruits and vegetables, whole grains, plant proteins (such as beans, nuts, and seeds) and healthy fats (such as olive oil and fish). It involves a lower consumption of animal products and saturated fat. The Mediterranean Diet may lower inflammation, as noted by decreases in the inflammatory markers NF-kB and IL-6.⁴,⁵

The Diet Rx

Eat whole food

Aim for high consumption of...
• Vegetables
• Fruit
• Whole grains (e.g. oats, brown rice, quinoa, amaranth)
• Beans and legumes
• Nuts and seeds
• Olive oil

Make sure to include culinary spices such as ginger, turmeric, oregano, and rosemary.

Moderate consumption of plain yogurt, cheese, poultry/chicken, eggs.

Avoid or minimize...
• Refined starches (including white breads and pastas, potato chips, breakfast cereals, white rice)
• Added or concentrated sugars (found in soda, fruit juice, flavored yogurts, pastries, candy, granola and other sweetened cereals)
• Red and processed meats
• Alcohol

Fruits and vegetables

Now more than ever, having a strong immune response to any virus or bacteria is important. Getting plenty of colorful fruits and vegetables is essential to our immune response. They give us many vitamins and minerals that our body needs to maintain immune health, reduce inflammation, and aid in healing and recovery.⁶,⁷ A study of fruit and vegetable consumption found a stronger antibody response to the Pneumovax II vaccine in older adults who ate more than five portions of fruit and vegetables per day compared to those who ate less than two.⁸ Another study showed that adults who consumed cranberry regularly had stronger immune defenses against the common cold and flu with fewer symptoms reported.⁹ We can attribute some of this benefit to the pigments in our produce. These colors are created by flavonoids, carotenoids, and isothiocyanates, among others. The bottom line is to “eat the rainbow.” This ensures you are getting the breadth of beneficial plant-based nutrition.

The entire fresh produce section of the grocery store can offer you great nutritional choices. However, if you are attempting to minimize grocery store visits, frozen produce still maintains its nutritional value.
The microbiome connection

How we eat can also impact the balance of microbial organisms living in our digestive tracts. These organisms have far-reaching impacts beyond the gut, including metabolism and immune status. A high fiber, whole foods diet is associated with a healthier gut and less disease. Of particular note, we see fewer allergy symptoms, respiratory infections, and improved lung function in people who consume a diet linked to an improved gut environment.

Healthy gut organisms can be taken in the form of a probiotic supplement and can be found naturally in fermented foods such as yogurt, kefir, sauerkraut, and kimchi. However, supplying the body with healthy prebiotic fiber is the most beneficial way to adjust your microbiome. Prebiotics act as food for these bacteria, stimulating their growth. Fiber is found in all plant-based foods, but is most abundant in legumes (lentils, chickpeas, black beans, etc.), whole grains (oats, quinoa, brown rice, etc.), and seeds (chia, pumpkin, sunflower, ground flax, etc.).

Hydration

Don’t forget to hydrate (but not too much)! Both dehydration and over-hydration are associated with worse health outcomes. Generally, that means between 10-12 cups per day for most people. Plain water (and tea) should be the liquid of choice for optimal wellness. If you currently drink juice or soda frequently, switching to sparkling water like Spindrift, La Croix, or Bubly may help with the transition to plain water. Often when sick, we do not eat or drink as much, which when paired with a fever can cause dehydration. Once symptoms develop, it is more critical to ensure adequate hydration. COVID-19 has also been associated with gastrointestinal complaints including diarrhea. This can further contribute to dehydration. Warm clear broths and teas are very beneficial to aid in hydration. Adding electrolytes to plain water can help prevent dangerously low sodium as well as dehydration. This is particularly the case if somebody is not regularly consuming solid food during prolonged illness. Grocery stores generally have electrolyte powders such as Nuun, Liquid IV, and Pedialyte in the supplement section.

Sample Meal Plan

Breakfast – 1 cup plain oats with 2 tbsp sunflower seeds, 2 tbsp walnuts, ½ cup blueberries, spiced with cinnamon and ginger. *You can add natural sweetness by crushing the blueberries into the oats.

Lunch – 2 cups salad greens with 3 oz salmon (or can of tuna), chopped tomatoes and cucumber, slivered almonds, with olive oil and balsamic vinegar.

Snack – Clementine. Avocado with lime juice salt and pepper. Apple dipped in nut butter. Bell pepper and cucumber slices with hummus.

Dinner – Tempeh and vegetable stir-fry with onion, carrot, broccoli, mushrooms, and ginger. Served with peanut sauce (plain peanut butter, olive oil, soy sauce or bragg’s liquid aminos, dash of maple syrup) over black bean noodles or whole grain soba noodles. Garnishes: green onions, sesame seeds, cilantro.

Dessert – Chia seed pudding. Soak ¼ cup chia seeds in a can of coconut milk. Mix in cocoa powder, vanilla extract, 1 tbsp honey, and a dash of salt. Pudding will thicken over 30 minutes.

Recipe Resources

- Cook For Your Life – www.cookforyourlife.org/recipes
- 100 Days of Real Food – www.100daysofrealfood.com
- Blue Zones – www.bluezones.com/recipes
- Nourishing Meals – www.nourishingmeals.com
- The Mediterranean Dish – www.themediterraneandish.com
- Whole New Mom – www.wholenewmom.com
- Cookie and Kate – www.cookieandkate.com
References