



**Anticancer**  
LIFESTYLE PROGRAM

# FOOD PAIRING:

COMBINING FOODS TO  
IMPROVE YOUR HEALTH

OATMEAL  
IRON



STRAWBERRIES  
VITAMIN C

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# ABOUT ANANDA

Ananda is passionate about all things food and health. She is a Registered Dietitian/Nutritionist (RDN) and a recipe developer with the Anticancer Lifestyle Program. Ananda is a classically trained chef with a Grand Diplôme from the French Culinary Institute and has over 10 years' experience in the culinary industry. To expand her knowledge and understanding of nutrition, she also received her M.S. in Clinical Nutrition from New York University. Her passion for wholesome ingredients and healthy cooking has led to a career as a culinary dietitian, recipe developer and restaurant consultant.

In her free time, Ananda enjoys playing with her pup Che, cooking and sharing meals with friends and family, surfing, visiting farms for local produce, and experiencing the world through art, food, and travel.





Have you ever wondered whether some food combinations work better for your body? In this eBook, we discuss food pairings that are not only tasty, but also support your health and well-being by increasing nutritional benefits with every flavorful bite. Some food pairings are best combined at the same meal; others work if combined on the same day.

Certain food combinations can provide nutritional and health benefits. For example, different food combinations can:

- ❖ increase nutrient absorption
- ❖ improve gut health
- ❖ boost antioxidant intake

At the end of each food-pairing category, we link to a couple of recipes that demonstrate that particular food pairing. You will find these recipes—and many more—on the Anticancer Lifestyle Program [blog page](#).



## VITAMIN C AND PLANT-BASED IRON

**Vitamin C** supports your immune and nervous systems, builds collagen, and works as a powerful antioxidant to reduce free radicals and inflammation.

**Iron** allows for adequate oxygen to be provided to the body and is a critical component of energy production and the functioning of red blood cells. In addition, iron is essential for proper immune function, and plays a role in the production of neurotransmitters and collagen.

**There are two forms of iron: heme** (animal-based), which is easily absorbed; and **non-heme** (plant-based), which is not easily absorbed.

**The absorption of non-heme (plant-based) iron is enhanced by Vitamin C**, which helps break down iron into a more absorbable form. **This nutrient pairing is best consumed at the same time to have the greatest effect.**<sup>[1]</sup>

**Foods high in Vitamin C** (highest in the raw form) include: lemons, oranges, tomatoes, beets, red peppers, berries (especially strawberries), pink grapefruit, sweet potatoes, broccoli, pineapple, kiwi, mango, cantaloupe, and cauliflower.

**Foods high in non-heme iron** include: lentils, chickpeas, beans, tofu (and other whole, soy-based foods), cashews, chia seeds, hemp seeds, dark green leafy vegetables (such as kale and spinach), pumpkin seeds, quinoa, millet, oatmeal, and other whole grains.



*Chickpeas*



*Kale*



*Pumpkin Seeds*

### Easy combo ideas

*Add a squeeze of lemon to spinach, quinoa, chia seeds, lentils, oatmeal, soybean foods, white beans or kale.*

*Add strawberries to your oatmeal or make a fresh strawberry and peanut butter sandwich.*

*Pair sweet potatoes with beans, lentils, kale or spinach. Or make sweet potato hummus since tahini and chickpeas are both great sources of plant-based iron.*

# Recipes



*Lentil Soup*



*Quinoa and Millet Spring Salad*



*Blueberry Chia Pudding*

## TOMATOES: FAT AND HEAT

Within each beautiful red and orange gem of a tomato lies a powerful disease-fighting antioxidant called **lycopene**. (Note that yellow tomatoes have high amounts of beta-carotene, but not lycopene.) Lycopene not only gives tomatoes their vibrant red and orange color but it is also a potent antioxidant that has been shown to be effective in the prevention and treatment of prostate cancer. Lycopene reduces inflammation, scavenges free radicals, and prevents oxidative damage to our DNA.<sup>[2]</sup>

**There are two ways to make the lycopene in tomatoes more available as a nutrient. The first is heat:** Just 2 minutes of cooking a tomato will increase the available lycopene content by 54%, while cooking for 30 minutes increases the available lycopene by a whopping 164%! In addition, when a tomato is cooked for 30 minutes, overall antioxidant activity significantly increases, by 62%.<sup>[3]</sup>

**Second, since lycopene is a fat-soluble nutrient, cooking tomatoes in a little healthy fat can enhance absorption.**<sup>[4]</sup>



# Recipes

## Easy combo ideas

*Roast tomatoes with garlic and onions sprinkled lightly with olive oil.*

*Sauté tomatoes in olive oil and add shiitake mushrooms or crunchy seaweed snacks. (Properties in these ingredients have been shown to promote a change in lycopene structure that greatly increases its absorption.)<sup>[5]</sup>*



*Garlic and Herb Roasted Tomato, Zucchini and Onion*



*White Bean and Tomato Stew*



## BALANCING PLANT-BASED PROTEINS

You are probably unaware that our bodies make thousands of different proteins! Protein is required for the structure, function, and regulation of the body's tissues and organs. Twenty different amino acids provide the “building blocks” of all our proteins.

**Our bodies are able to manufacture eleven of the twenty amino acids required, but nine of them — the so-called “essential” amino acids — must come from our diet.** To make proteins, we need to consume foods containing these nine essential amino acids in the course of each day — though thankfully we don’t need to do so at every single meal!

While plant foods collectively contain all nine essential amino acids, **it is uncommon for one single plant-based food to have all nine essential amino acids in one serving.** Animal sources of protein — such as meat, fish, poultry, dairy and eggs — DO provide all nine essential amino acids,<sup>[6]</sup> but research supports the health benefits of reducing consumption of animal products and increasing plant-based eating. So, what’s a plant-based eater to do?



**Happily, a varied plant-based diet can easily supply all nine essential amino acids on a daily basis.** Consuming a variety of legumes, lentils, nuts, seeds and whole grains throughout the day will guarantee that your body receives all nine essential amino acids needed to create protein. **People who eat a well-balanced plant-based diet and avoid animal protein entirely are fully able to consume adequate proteins and essential amino acids on a daily basis.**

**A helpful general guideline for those who avoid all animal proteins is to consume at least 3+ servings of legumes** (beans, peas, lentils, peanuts, and soybeans) **a day to ensure adequate protein intake.** (A serving of cooked beans, peas, lentils, tofu or tempeh is considered  $\frac{1}{2}$  cup. A serving of peanuts is  $\frac{1}{4}$  cup, and 2 tablespoons of peanut butter is considered a serving.)

*Tofu*



*Chia Seeds*



*Peanut Butter*



### Some Plant-Based Foods High in Protein<sup>[7]</sup>

1. Tempeh (13 grams/3 ounces)
2. Tofu (8 grams/3 ounces)
3. Lentils (18 grams/1 cup cooked)
4. Chickpeas (14 grams/1 cup cooked)
5. Black Beans (10 grams/1 cup cooked)
6. Hemp or Pumpkin Seeds (9 grams/3 Tbsp)
7. Nuts or Chia Seeds (5-6 grams/1/4 cup)
8. Peanut Butter (7 grams/2 Tbsp)
9. Quinoa (8 grams/1 cup cooked)
10. Oats (4 grams/1 cup cooked)

Some other plant-based foods that provide protein include soybeans, other beans and legumes (aside from the ones mentioned above), whole grains, and spinach.

## Easy combo ideas

### ***Eat whole grains and legumes in a meal together or separately throughout the day.***

This pairing is a true dynamic duo, with respect to both flavor and health benefits. The protein and heart-healthy fiber in the beans slow down the absorption of the sugars found in the starch of the grains. Slower absorption helps stabilize blood sugar. Balanced blood sugar helps reduce insulin resistance and metabolic syndrome.<sup>[8]</sup>

Also, the grain-bean combination provides our body with a mixture of soluble fiber (beans) and insoluble fiber (grains), which helps us feel fuller longer, supports digestive regularity, has cardiovascular protective effects, and promotes a healthy gut microbiome.



### **Try:**

- Rice and beans
- Peanut butter or almond butter and whole wheat or gluten-free bread
- Quinoa and chickpeas
- Popcorn and nuts
- Bean soup and whole grain crackers
- Pasta mixed with peas
- Hummus: chickpeas blended with sesame seed paste (tahini)

# Recipes



*Spring Pesto Pasta*



*Beet Hummus*



*Pumpkin Spice Kettle Corn*

## FAT AND FAT-SOLUBLE VITAMINS

**Vitamins A, D, E and K are all fat-soluble, meaning that they are absorbed along with fats in the diet, and are stored in fat tissue.** Our bodies require an adequate amount of these vitamins to prevent deficiencies and provide important nutrients.

**The body absorbs these vitamins when it absorbs dietary fats, so when we consume foods that are rich in fat-soluble vitamins but naturally low in fat, we need to add a healthy fat source to increase absorption.**<sup>[9]</sup> Healthy fats will also bring out flavor and create mouthwatering, creamy, rich, and smooth textures.

**Examples of healthy fat sources:** coconut, nuts, seeds, avocado, olive oil, peanuts, sunflower oil, flax, sesame oil, olives, nut butters, and small amounts of high-quality (organic and/or grass-fed preferable) dairy products such as yogurt, butter, and/or ghee.



**Vegetables high in fat-soluble vitamins include:** dark leafy greens (kale, collard greens, turnip greens, beet greens, spinach, arugula, chard, mustard greens) cabbage, sweet potato, carrots, broccoli, brussels sprouts, red/orange/yellow bell pepper, pumpkin, squash, tomatoes, and more.

**Fruits high in fat-soluble vitamins include:** watermelon, cantaloupe, mango, apricots, red grapefruit, papaya, tangerine, guava, passion fruit, prunes, kiwi, blueberries, pomegranate, figs, and grapes.



Papaya



Mango



Sweet Potato

### Easy combo ideas

*Massage kale with olive oil to create a tasty salad.*

*Add shredded coconut to a fruit salad of watermelon, cantaloupe, mango and kiwi.*

*Top a spinach and arugula salad with some nuts or seeds for added crunch.*

*Make a scrumptious yogurt parfait with blueberries and pomegranate, drizzled with nut butter.*

*Add tomatoes and colorful bell peppers to guacamole.*

# Recipes



*Carrot Ginger Soup*



*Cauliflower Mash with  
Mushroom Chickpea Gravy*



*Apricot Bites*



## TURMERIC, BLACK PEPPER, AND A HEALTHY FAT

Turmeric and black pepper are powerful, flavorful spices on their own. Both offer anti-inflammatory, anti-bacterial, and antioxidant benefits<sup>[10]</sup> that may help ease or prevent inflammatory conditions, relieve pain, support liver function, and reduce free-radical damage. When combined, these two spices not only create a lovely flavor blend, but **the black pepper also serves to increase the bioavailability of curcumin, which is the key anti-inflammatory compound in turmeric, by a whopping 2000%!<sup>[11]</sup>** Along with black pepper, a source of fat (such as the healthy fats listed earlier) enhances the absorption of curcumin.

# Recipes

## Easy combo ideas

*On a cold fall or winter night, snuggle up with a cup of golden milk (originally from India, where it is known as haldi doodh). This warming drink is typically made with unsweetened milk of choice, plus ground turmeric, ginger, a pinch of black pepper, 1 tsp natural sweetener of choice (such as raw honey), and a source of fat (such as coconut oil).*

*Enjoy roasted veggies tossed with ground turmeric, black pepper, and avocado oil.*

*Add turmeric and black pepper to soups, such as a vegetable, lentil, or bean soup.*



**Tofu Scramble**



**Mango Turmeric “Nice” Cream**



**Spiced Hot Chocolate**

## COOKED CRUCIFEROUS VEGETABLES AND MUSTARD POWDER

Cruciferous vegetables (like broccoli) are nutritional powerhouses. **Regular intake of cruciferous vegetables not only provides an array of delicious tastes but also has been shown to help reduce the risk of many forms of cancer.** One important beneficial compound in cruciferous vegetables is called sulforaphane, which has been shown to kill precancerous cells or block their proliferation. It also can reduce inflammation, help rid the body of toxins, protect the body from oxidative stress, and promote neurological health.<sup>[12]</sup>

**In order for sulforaphane to form in your body, it requires an enzyme, myrosinase. Unfortunately, cooking destroys the myrosinase enzyme.** One way to restore the myrosinase is to eat raw cruciferous vegetables (such as radish, watercress, daikon, arugula, broccoli, cauliflower, cabbage, etc.) along with cooked cruciferous vegetables. Another option is to add just ½ teaspoon of mustard seed powder to as much as seven cups of cooked cruciferous vegetables. **These combos can provide enough myrosinase to activate the sulforaphane.**



*\*Cooking tip, cool trick: Chop or cut your cruciferous veggies well in advance (such as at least 40 minutes before you cook them or even earlier in the day) and let them sit to produce sulforaphane. Even though the myrosinase enzyme will be destroyed when cooked, you will have already produced the sulforaphane! In other words: the myrosinase already did its job.*



**Cruciferous vegetables include:** brussels sprouts, cabbage, cauliflower, mustard greens, bok choy, turnips, radish, kohlrabi, rutabaga, broccoli, kale, arugula, watercress, romanesco, rapini, daikon radish, and collard greens.

# Recipes

## Easy combo ideas

*Add mustard powder to any salad dressing to top shredded cabbage, shaved brussels sprouts, kale and arugula.*

*Combine mustard powder with honey and tamari to drizzle over sauteed bok choy and broccoli.*

*Stir mustard powder into a cauliflower mash.*

*Give your braised collard greens a punch of flavor by adding some stone ground mustard.*



*Warm Brussels Sprouts and Delicata Squash Salad*



*Creamy Cauliflower Alfredo with Roasted Broccoli*



## MEAT AND MARINADES

Cooking meat over high heat can increase the amount of “advanced glycation end products” or AGEs. High consumption of AGEs can lead to increased inflammation and oxidative stress in the body, which contributes to an increased risk of cancer, cardiovascular disease and diabetes.<sup>[13]</sup>

**Fortunately, marinating meats in a delicious mixture utilizing an acidic substance such as wine, vinegar or citrus juice can significantly reduce the formation of harmful AGEs.** For example, beef marinated for an hour in a mixture of lemon juice and vinegar will produce fewer than half the AGEs when cooked compared to non-marinated meat.<sup>[14]</sup>

Three rules to follow when marinating:

1. Use an acidic ingredient to tenderize the meat: lemon or lime juice, vinegar, wine or yogurt.
2. Add flavor with herbs, spices, citrus zest, fruit, garlic, or onions.
3. Allow enough time for the marinade to work its magic. Optimal time is to marinate overnight but if you're short on time, at least an hour.

# Marinade Recipes



*Citrus Berry Marinade*



*Chimichurri Marinade*



*Garlicky Lemon Oregano Marinade*

# Recipes



*Chimichurri Chicken and Greens*



*Citrus Berry Roasted Chicken with Eggplant*



*Grilled Lemon Oregano Chicken with Grilled Broccoli Spears*

## PREBIOTICS AND PROBIOTICS TOGETHER

Many people confuse prebiotics and probiotics. **Prebiotics are naturally occurring, non-digestible food plant fibers that help feed probiotics (good bacteria) in your gut.** Consuming both prebiotics and probiotics in your diet can help support a healthy gut microbiome by increasing microbial diversity. Increased microbial diversity can help improve digestion, reduce inflammation, boost the immune system, and help prevent disease. **Prebiotics are necessary for the survival of probiotics.** In other words, prebiotics are breakfast, lunch, and dinner for probiotics and help them do their job.

**Prebiotics and probiotics do not need to be consumed at the same time but when they are, the beneficial bacteria have an increased survival rate.** When consumed together, prebiotics can help probiotics survive through the upper gastrointestinal tract and reach the colon<sup>[15]</sup>. The two together also have a synergistic effect that combines to restore and improve gut health at a faster rate<sup>[16]</sup>. **Note that prebiotics can be consumed on their own and will still provide food for the good bacteria already in our gut<sup>[17]</sup>.**



**All fruits, vegetables, beans and whole grains contain prebiotics. Prebiotics that are in food are stable and will survive the cooking process.** They can be consumed in whatever way they taste best. Foods like beans, grains, and some root vegetables are better digested when cooked. (Beans and potatoes should always be cooked.)

**In contrast to prebiotics, probiotic sources should always be raw. Probiotics do not survive the cooking process.**

**High Prebiotic Sources:** garlic, onions, asparagus, bananas, oats, apples, flax seeds, artichokes, beans, barley, cabbage, broccoli, root vegetables (sweet potatoes, carrots, turnips, jicama), bran, tomatoes, rye, soybean, peas, chicory, wheat, honey, mushrooms, dragonfruit.



**Probiotic Sources:** fermented foods including yogurt, kefir, aged cheeses, kimchi, sauerkraut, miso, tempeh, kombucha, cultured non-dairy yogurts.



# Recipes

*Black Bean Burger with Herb Yogurt Sauce and Sauerkraut Slaw*



## Easy combo ideas

*Add a banana to yogurt.*

*Sauté asparagus with tempeh.*

*Top any dish with kimchi or sauerkraut.*

*Banana Bread Smoothie*



## POTASSIUM AND SODIUM

**Sodium is an essential mineral needed to maintain fluid levels and blood circulation in the body.** But excess sodium interferes with the natural ability of blood vessels to relax and expand. This can cause a decrease in blood circulation which may lead to increased blood pressure. An abundance of sodium in the body will promote water retention, which can leave us feeling heavy and sometimes lead to more serious health consequences.<sup>[18]</sup>

**One of the easiest ways to combat water retention and increase blood circulation is by increasing the amount of potassium.** Like sodium, **potassium** is an essential mineral. **Foods with potassium can help control blood pressure by blunting the effects of excess sodium.** These two minerals work together to create an equilibrium in our cells.



**Please note that you don't need to stop seasoning your food with a little salt to enhance flavor. The real culprits in terms of adding excess sodium to our diets tend to be packaged and processed foods** — such as bread, pizza, chips, cookies, cakes, popcorn, pickles, sauces, deli meats, soups, cheese, and salad dressings. These items are typically loaded with sodium. It is ideal to reduce the consumption of these foods, but when consuming these items, make sure to pair them with high potassium foods to help your body balance the sodium levels.

**High potassium foods include:** avocado, potato, dark leafy greens, mushrooms, beans, peas, tomato, oranges, grapefruit, prunes, apricots, raisins, yogurt, halibut, tuna, salmon, molasses, banana, and sweet potato.

**Fun fact:** Potassium is found in many foods, especially fruits and vegetables. By eating enough fruits and veggies throughout the day, you will ensure you are getting enough potassium in your diet!



## Easy ways to add potassium

*Top any pizza with dark leafy greens and mushrooms (spinach, arugula, kale.)*

*Add avocado and tomato to a grilled cheese.*

*Cut that piece of cake in half and have a banana with it.*

*Have a couple prunes with a piece of toast for breakfast (it will also keep you regular).*

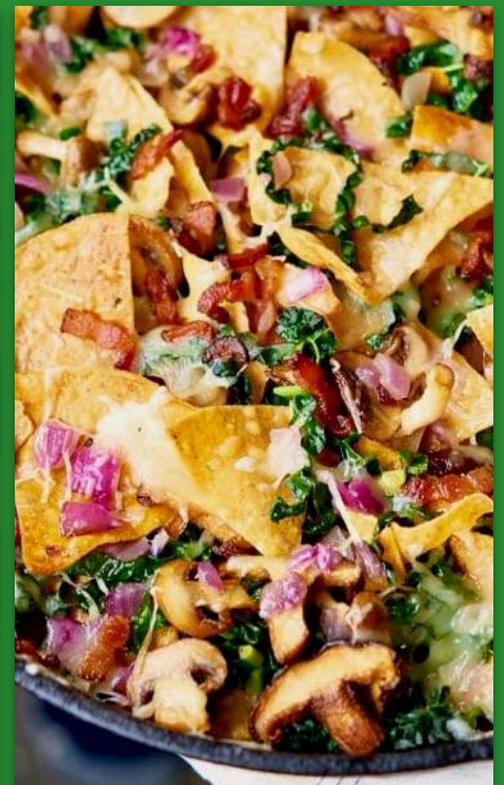
## Recipes



*Avocado Toast with  
Tomato and Sprouts*



*Lemon Bars*



*Mushroom and  
Spinach Nachos*



## In conclusion...

**Familiarity with food pairings can be a great way to ensure that the nutrients you are consuming are optimally absorbed and balanced.**

It can also help to ease certain ailments. For example, if you have an inflammatory condition like arthritis, you may want to incorporate turmeric (combined with black pepper and a healthy fat) into your daily routine. If you are anemic, be sure to pair plant-based iron with Vitamin C for enhanced absorption. For digestive disorders, try to consume prebiotics with your probiotics.

**The best part about food pairings is that it can make cooking fun and more flavorful!**

When we add more variety to our meals and our diet, we can actually increase the amount of satisfaction we get from eating. Enjoy trying new combinations to create colorful, diverse meals and snacks that will provide your body with all the nutrients it needs.

**Think of these pairings as best friends. They don't always have to be together but when they are, magic happens.**

Knowledge of the benefits of specific pairings can be interesting and useful, but in general, if you consume a mostly plant-based diet, reduce processed foods, and include all colors of the food rainbow, you are on the right track!

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