

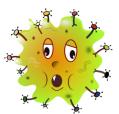
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Our May 2025 Newsletter for Healthy Living

A s you age, your body changes, and so do your defenses against illness. This defense system is known as your immunity, and it's essential for fighting off infections and staying healthy. Unfortunately, immunity tends to weaken with age, making older adults more susceptible to various health problems. But here's the good news: vitamin E, a powerful nutrient found in many foods, helps boost immunity in seniors.

Your immune system is a complex network of cells and organs that work together to protect your body from harmful invaders like bacteria and viruses. It has two main parts: innate immunity and adaptive immunity. Innate immunity is your body's first line of defense, providing a general response to any invader. Adaptive immunity is a

more specific response, targeting particular invaders that your body has encountered before. One aspect of adaptive immunity is cell-mediated immunity, where spe-



cific cells directly attack and destroy infected cells.

As you get older, your immune system doesn't function as effectively as it used to. This decline is due to several factors, including changes in the number and function of immune cells. Consequently, older adults become more vulnerable to infections, chronic diseases and slower healing. A strong immune system is important for preventing illness, promoting longevity and maintaining a good quality of life.

Vitamin E and Immunity

When your immune system is weakened, you're more likely to get sick, and it takes longer to recover. This significantly impacts your daily activities, energy levels and overall well-being. The food you eat plays a key role in supporting your immune system. A balanced diet provides the necessary building blocks for immune cells and processes. Micronutrients, such as vitamins and Think of oxidative stress as a process that causes "rusting" in your body, damaging cells and contributing to aging and disease. Vitamin E acts like a "rustproofing" agent, neutralizing harmful molecules called free radicals and protecting your cells from damage. This antioxidant activity helps maintain a healthy immune system, especially as you age.

"Micronutrients, such as vitamins and minerals, are particularly important for optimal immune function."

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Vitamin E is one such micronutrient that has garnered attention for its immune-boosting properties, especially in the elderly. Vitamin E is a fat-soluble vitamin that exists in eight different forms. The most common and biologically active form is alpha-tocopherol.

You can find vitamin E in various foods like nuts, seeds and vegetable oils, but these foods also have a high linoleic acid (the "bad fat") content. Beans, another food rich in vitamin E, are also problematic to some people due to their high lectin content. Good natural vitamin E sources that do not have negative effects on your health include fresh fruits and vegetables, such as pumpkin, asparagus, red bell peppers, tomatoes, kiwi and mango. Grass fed ruminants, such as beef or lamb, are also excellent sources. Vitamin E is also available in supplement form, though it's always best to get nutrients from whole foods first.

One of vitamin E's primary functions is to act as an antioxidant.

Studies have shown that vitamin E enhances immune response, particularly cell-mediated immunity. It does this by improving the function of various immune cells, including T cells, which are essential for fighting infections. For example, research has demonstrated that vitamin E increases the proliferation of T cells. This means that vitamin E helps your body produce more of these infection-fighting cells, making your immune system stronger and more responsive.

In older adults, vitamin E supplementation has been found to increase immune response and protect against infections. Specifically, one study found that vitamin E supplementation significantly enhanced the response of T cells to stimulation. This means that the immune systems of the elderly individuals in the study were better equipped to recognize and fight off infections after taking vitamin E supplements.

This is particularly important for older adults who often experience a decline in T cell function, making them Continued on page 3

What's Inside This Issue

- 2025 Organic Farm Box Info
- Organic Produce Club Subscription
- Vitamin E and Immunity, continued

May Monthly Coupon

All articles in this newsletter are for the purpose of nutritional information only and should not be considered a substitute for professional medical advice.

2025 Organic Farm Boxes



Michigan Organic Family Farms



Farming Practices

Healthy food starts with promoting life in the soil.

Our growers are certified organic. Every year these farms are inspected by a third party and certified in compliance with National Organic Program Standards. This is to assure you that no harmful chemicals, pesticides or genetically-modified organism (GMO) seeds are used in the production of your food. In the rare circumstance that an item in your box is not certified organic, we will include details and an explanation.

What's It About?

When you subscribe, you become a patron of organically-grown produce. Our CSA/club has supported small Michigan family farms for over 10 years. In doing so, we have seen that the unpredictability of the seasons can significantly impact the variety, quality and value of the boxes. Simultaneously, weather variations and the availability of farm help (or not) can create problems for a single farm(er). To provide more value and variety in your weekly box, we will be working with several Michigan family farms in the 2025 season. These will include the growers from previous years, Green Valley Organics, Pleasant Lane Farm, and Homer Organic Family Farms. We will also welcome new growers Daniel Detweiler, Yost Stutzman and their neighbors in Blanchard. You will find a weekly update in your box with info about the harvest.

What are the benefits?

By subscribing to our club you are supporting Michigan Organic family farms. Not only are members getting the freshest food, but they are also using their dollars to assist and ensure that these farms remain "certified organic". In appreciation of your patronage, you also receive: a *10% discount on any "in-store" produce purchases, any day,* for the duration of the season (June 18 - October 4); your choice of three different pickup days, and a pickup location that is super-convenient. Grab and run or choose to shop a well-stocked grocery while you're here.

What might I see in my weekly box?

Early Season: June - mid-July	Summer Season: July/August	Late Season: September
Early Season: June - mid-July	Summer Season: July/August	Late Season: September
Asparagus,	Lettuce, Broccoli, Cabbage,	Any remaining
Leaf Lettuce,	Cauliflower, Radishes, Beans,	summer crops,
Swiss Chard,	Zucchini, Cucumbers,	Red Peppers,
Kale varieties,	Hot Peppers, Garlic,	Hard Squash,
Collards,	Carrots, Peas, Tomatoes,	Spinach, Pie Pumpkin,
Zucchini,	Sweet Potatoes, Basil, Garlic,	Late Greens, Turnips,
Peas: Snap and Shell,	Kale, Potatoes, Green Onions,	Eggplant, Parsnips,
Salad Greens,	Sweet Corn, Onions, Beets,	Cabbage, Brussels
Rhubarb	Summer Squash, Watermelon,	Sprouts, Watermelon,
Strawberries	Blueberries	Cantaloupe

Enroll now through May 31st

Be a Patron of Organic Produce in Michigan

Vitamin E and Immunity, continued from page 1

more susceptible to illness.

While vitamin E is clearly beneficial for immune function, its benefits extend far beyond boosting your defenses against infection. Think of vitamin E as a guardian of your cells, protecting them from damage and helping them

to stay young at heart and enjoy a vibrant and active life.

The best way to get your daily dose of vitamin E is through a healthy diet. However, many people don't get enough vitamin E from their diet alone. This is because the typical Western diet

"Think of vitamin E as a guardian of your cells, protecting them from damage and helping them function..."

function at their best. This is particularly important as you age, because your cells become more vulnerable to wear and tear

One of the major culprits behind this cellular damage is oxidative stress. Imagine your cells as apples. When you cut an apple and leave it exposed to air, it starts to turn brown. This browning is caused by oxidation, a process similar to what happens in your body when free radicals damage your cells. Vitamin E acts like a protective layer, preventing the "browning" of your cells and keeping them healthy.

This protective effect has farreaching benefits, contributing to the health of various organs and systems in your body. For example, vitamin E's antioxidant action helps maintain healthy blood vessels. Think of your blood vessels as a network of pipes that carry blood throughout your body. Just like rust damages pipes and restricts water flow, oxidative stress damages



blood vessels and impedes blood circulation. Vitamin E helps keep these "pipes" clear and functioning smoothly, reducing your risk of heart disease. In addition

to heart health, vitamin E also protects against cognitive decline. Imagine your brain as a complex computer. As you age, the "wiring" in your brain becomes damaged, leading to memory problems and cognitive decline. Vitamin E helps protect this "wiring," keeping your brain sharp and functioning optimally.

Furthermore, vitamin E supports eye health. Think of your eyes as cameras that capture images of the world around you. Just like a camera lens becomes cloudy and distorted, the lens in your eye is also damaged by oxidative stress, leading to vision problems. Vitamin E acts like a lens cleaner, protecting your eyes and preserving your vision.

By protecting cells and promoting their optimal function, vitamin E helps seniors maintain their independence and quality of life as they age. It's like giving your body the tools it needs

is high in LA, an omega-6 fatty acid that increases your body's need for vitamin E. Therefore, taking vitamin E supplements is beneficial for counteracting the effects of oxidative stress.

If you keep your LA intake below 5 grams per day for approximately three years, you might find that you no longer need to take vitamin E supplements regularly, or you may only need them occasionally. And, if you do have a meal high in LA, taking a vitamin E capsule afterward helps protect your body from the effects of that specific meal.

Once your LA levels are lower, you'll only need around 2 milligrams (mg) of vitamin E for every gram of LA you consume. With a recommended daily LA intake of 5 grams or less, this translates to about 10 mg of vitamin E daily, which is a relatively small amount. Since vitamin E is fat-soluble, it's stored in your fat tissue for a period of time, providing ongoing benefits. For best absorption, it's ideal to take vitamin E with a healthy fat source, like coconut oil.

While vitamin E offers numerous health benefits, excessive intake poses some risks. High doses of vitamin E increase your risk of bleeding and interfere with certain medications. Therefore, follow the recommended dosage and talk to your doctor about any interactions with your current medications.

When choosing a vitamin E supplement, it's important to select a natural form, as synthetic versions are less effective and may even pose health risks. Synthetic vitamin E is often labeled as "alpha-tocopherol acetate," with the word "acetate" indicating its synthetic nature. Additionally, many synthetic vitamin E supplements are "racemic," meaning they contain both beneficial and ineffective isomers. Only the "D" isomer provides health benefits, while the "L" isomer does not. Synthetic vitamin E supplements are also typically less potent than natural options. This is because they often contain a mixture of both isomers, with the ineffective "L"

isomer diluting the potency of the beneficial "D" isomer. Additionally, the ester form of vitamin E used in some synthetic supplements is less potent than natural vitamin E.

To ensure you're getting a natural and effective vitamin E supplement, look for "d-alpha-tocopherol" on the label, which indicates the pure and beneficial "D" isomer. Avoid supplements labeled "dl-alpha-tocopherol," as this

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indicates a synthetic form. For optimal benefits, choose a supplement that includes the full spectrum of vitamin E isomers, including tocotrienols (beta, gamma and delta types), in their effective "D" forms. These different forms of vitamin E work synergistically to provide a wider range of health benefits.

Look for a supplement with multiple forms of vitamin E that is free from soy, soybean oil and genetically engineered (GE) ingredients. Common GE ingredients in supplements often come from corn, soy or cottonseed. Choosing a clean, natural source ensures you're getting the highest quality vitamin E supplement possible. Overall, vitamin E is a potent antioxidant that significantly enhances cell-mediated immunity, especially in older adults. By incorporating healthy vitamin E-rich foods into your diet, you support your immune system, reduce your risk of infections and improve your health. Remember, a strong immune system is one of your best defenses against illness and a key to a long and healthy life.

Reference: Nature Medicine 2019, Volume 25:1822-91. Nutrients 2020, 12(1):236. Redox Experimental Medicine, November 3, 2023; Issue 1. Immunology Review, June 2005; 205(1):269-84. The American Journal of Clinical Nutrition, September 1990; 52(3):557 -63. Cureus, November 2023; 15(11):e48142. Ophthalmology, Volume 120; 8(1604-11). National Institutes of Health, Office of Distort & Une Journet Clinewic F. Dietary Supplements, Vitamin E.







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2025 Organic Farm Boxes Michigan Organic Family Farms

Duration: 16 weeks/ June 18 - October 4

Cost: \$500

Share Size: 1/2 Bushel box (2-person size, about 7-8 lbs will vary w/ seasonal contents)

Subscriber Information

Name(s)	Phone #	
Address	 Phone #	
City/Zip	 E-mail	

Choose your Pickup Time: (circle one)

Wednesdays @ 7:30AM

or

Thursdays @ 2:30PM

Saturdays @ 7:30AM

Boxes are clearly marked with surname of subscriber and are placed on the dedicated pickup rack adjacent to the main entrance, outside the store under our canopy. You will be able to park, pick up your box, and be on your way in as little as 60 seconds! Boxes not picked up within 36 hours will be donated to Food Gatherers. If you will be unable to make your pickup, please e-mail info@arborfarms.com the week prior to change your day. You may also gift your box to a neighbor or friend willing to pick it up. E-mail info@arborfarms.com with questions.

Choose your Payment Schedule: (circle one) Please make checks payable to Arbor Farms

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