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Our April 2026 Newsletter for Healthy Living

Vitamin D - Your Best Friend

What if one of the most powerful tools for preventing breast cancer costs nothing, comes from sunlight, and is dangerously low in most American women? Decades of research now point to a specific blood level of vitamin D that cuts breast cancer risk roughly in half — yet the official intake recommendations leave most people far below this threshold.

Vitamin D serves as a fundamental regulator of human biology, acting as a master switch for immune balance and orderly cell growth. While conventionally associated with bone health, modern research focuses on its key role in tissues that divide rapidly — most notably the breast. Because your body is designed to synthesize this compound through sunlight, shifting modern lifestyles have created a widespread biological gap: many adults now carry blood levels far below what their cells require for optimal function.

Bridging this gap is a primary concern in cancer research. Breast cancer remains one of the most significant public health challenges in the U.S. To address this, investigators have pivoted from studying simple dietary intake to analyzing serum 25-hydroxyvitamin D — the definitive marker of how much vitamin D is actually circulating in the bloodstream and reaching tissues.

Serum 25-hydroxyvitamin D — often called 25(OH)D on lab reports — is the storage form of vitamin D circulating in your blood. This is the number your doctor measures because it reflects

your true vitamin D status over the past several weeks, not just what you ate yesterday. After synthesizing decades of data from major studies, researchers have identified a clear pattern: specific vitamin D blood levels consistently predict who develops breast cancer and who doesn't.

This evidence exposes a gap between official vitamin D recommen-

dations and the levels that actually protect breast tissue. The question is no longer whether vitamin D matters, but how much you need in your blood — and whether you're anywhere close.

In a study published in *Anti-cancer Research*, investigators examined whether blood levels of vitamin D relate to breast cancer risk, by pooling data from 11 studies conducted between 1966 and 2010. The data included women with very low vitamin D status and those with much higher levels, allowing researchers to compare breast cancer risk across clearly defined blood ranges. By grouping participants into groups based on vitamin D levels, the researchers could track how risk changed step by step as vitamin D increased, rather than treating deficiency as a simple yes-or-no condition.

Women with higher vitamin D levels had substantially lower risk — When researchers compared the highest vitamin D group with the lowest, they found an overall reduction in breast cancer risk of about 39%. This means that women

with higher circulating vitamin D were far less likely to develop breast cancer than those who were deficient. **Risk dropped in a clear, dose-related pattern**— The analysis showed a steady downward slope in risk as vitamin D levels increased. Each step up in vitamin D corresponded with less risk, rather than a random or inconsistent effect. The researchers estimated roughly a 10%

reduction in breast cancer risk for every 10 ng/mL increase in blood vitamin D. **A specific threshold stood out as especially protective** — The data showed that blood levels at or above about 47 ng/mL were associated with roughly a 50% lower risk of breast cancer compared with levels under 10 ng/mL. This finding explains why many women who meet minimal intake guidelines still fail to reach levels associated with meaningful protection.

Vitamin D acts directly inside breast tissue — The paper explains that normal breast cells contain vitamin D receptors that respond to the active form of vitamin D, called 1,25-dihydroxyvitamin D. This hormone-like compound enters cells and influences how they grow and mature. When vitamin D levels are adequate, these signals help keep cell growth orderly instead of chaotic.

Higher vitamin D supports normal cell behavior — Active vitamin D works like a cellular traffic controller. First, it promotes differentiation —

"The question is no longer whether vitamin D matters, but how much you need in your blood."

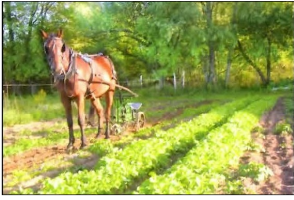
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2026 Organic Produce Club

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.

About Our Club

By joining our club, 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 2026 season. These will include the growers from previous years: Green Valley Organics; Joyful Harvest: Pleasant Lane Farm, and Homer Organic Family Farms. 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 17 - October 3); 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

Asparagus,
Leaf Lettuce,
Swiss Chard,
Kale varieties,
Collards,
Zucchini,
Peas: Snap and Shell,
Salad Greens,
Rhubarb
Strawberries

Summer Season: July/August

Lettuce, Broccoli, Cabbage,
Cauliflower, Radishes, Beans,
Zucchini, Cucumbers,
Hot Peppers, Garlic,
Carrots, Peas, Tomatoes,
Sweet Potatoes, Basil, Garlic,
Kale, Potatoes, Green Onions,
Sweet Corn, Onions, Beets,
Summer Squash, Watermelon,
Blueberries

Late Season: September

Any remaining
summer crops,
Red Peppers,
Hard Squash,
Spinach, Pie Pumpkin,
Late Greens, Turnips,
Eggplant, Parsnips,
Cabbage, Brussels
Sprouts, Watermelon,
Cantaloupe

Enroll now through May 31st

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pushing immature cells to "grow up" into specialized breast cells that do their job and stop dividing.

Second, it triggers apoptosis — your body's quality-control system that tags defective cells for removal, like a factory inspector pulling flawed prod-

ucts off the line before they ship. The researchers noted that no reproducible toxicity appears at blood vitamin D levels below 100 ng/mL, far above the range associated with reduced breast cancer risk.

Understanding the research is one thing — translating it into a personal

year gives you a clear target and objective feedback. Aim for a serum vitamin D range of 60 to 80 ng/mL (150 to 200 nmol/L), which aligns with immune balance, cellular regulation, and lower breast cancer risk. Treat this like a score you monitor over time rather than a one-time fix. Test in late winter (when levels are lowest) and late summer (when levels peak) to understand your personal range. If your levels are low, focus on

“This study reinforces that vitamin D status matters across life stages, not only after illness appears.”

ucts off the line before they ship. The researchers noted that no reproducible toxicity appears at blood vitamin D levels below 100 ng/mL, far above the range associated with reduced breast cancer risk.

The protective levels identified in the study sit well within established safety boundaries, giving you room to aim higher than deficiency without crossing into danger.

These findings raised an obvious question:

do the protective effects hold up across different populations, and what biological mechanisms explain them?

A comprehensive review in *Nutrients* set out to answer both. The studies analyzed involved adult women across different age groups, geographic regions, and health statuses, including women with newly diagnosed breast cancer and healthy controls. Across this diverse population, a consistent pattern emerged: women with higher blood vitamin D levels showed lower breast cancer risk, while deficiency appeared frequently among those diagnosed with the disease. This reinforces that vitamin D status matters across life stages, not only after illness appears.

Protective vitamin D levels clustered within a defined range — The researchers calculated an average blood concentration associated with protection against breast cancer of about 40 ng/mL, with natural variation across studies.

Deficiency aligned with worse outcomes and aggressive disease patterns — Several studies reviewed showed that women with very low vitamin D levels were more likely to have more aggressive breast cancer subtypes and cancers that behave more aggressively once they develop. This gives added weight to addressing deficiency before disease takes hold.

Lifestyle and biological differences influenced results — Factors such as body weight, sun exposure, skin pigmentation, diet, and physical activity

prevention strategy is another, and should be done in consultation with your health care provider. The challenge is that vitamin D biology is highly individual: your genetics, geography, body composition, and lifestyle all determine whether you're protected or at risk. The following are suggestions on how you can begin to improve your vitamin D levels:

Start with a healthy diet - If you're eating packaged foods made with additives, colorings and processed "vegetable oil," your body remains under constant metabolic stress. Removing these "foods" reduces oxidative burden at the cellular level and supports normal energy signaling that underpins cancer resistance. Replace them with fruits, vegetables, whole grains, nuts, seeds and stable fats like coconut oil, olive oil, ghee or grass fed butter.

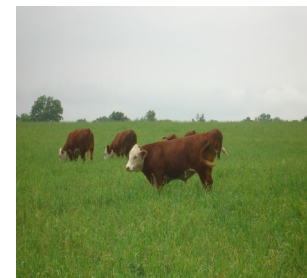
Use sunlight as a vitamin D source — Your skin is designed to produce vitamin D from sunlight, and that same sunlight exposure directly supports cellular energy production. Daily outdoor light exposure strengthens metabolic signaling that supplements can't replicate. Avoid harsh midday sun, and build exposure gradually. This lowers sun sensitivity while still restoring the biological benefits of light. Get started with daily sun exposure in the morning or later afternoon hours.

Supplement vitamin D strategically when sun exposure is limited — When consistent sun exposure isn't possible — during winter months, in northern latitudes, or for those who work indoors — vitamin D3 supplementation is often helpful. It works best when paired with magnesium and vitamin K2. Magnesium supports vitamin D activation, and vitamin K2 helps direct calcium into bones rather than soft tissues. Research shows that people not taking these helper nutrients needed more than twice as much vitamin D to maintain healthy blood levels.

Test and track vitamin D levels on a schedule — A simple blood test twice a

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daily sunlight and consistent D3 supplementation to restore them.

Use exercise to activate and protect vitamin D year-round — When sunlight fades in winter, your body's ability to make vitamin D drops sharply, especially if you live in northern regions or carry extra body fat. Vitamin D is fat-soluble, meaning it gets sequestered in fat tissue rather than circulating freely in your blood. Exercise helps offset this loss. Research shows that regular physical activity, even without supplements or weight loss, helps maintain healthy vitamin D activity during low-sun periods. Movement changes how fat tissue handles vitamin D by stimulating enzymes that convert stored, inactive vitamin D into its usable form while slowing breakdown. Exercise also independently lowers breast cancer risk, making it a double win. If winter sun is limited, use brisk walking, strength training, or daily movement breaks as a built-in way to support vitamin D, energy, mood, and immune defenses all season long.

