THE SPIKE PROTEIN EFFECT

TRUTH, RISKS, AND RECOVERY

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The views expressed herein do not necessarily reflect those of government agencies, public health organizations, or vaccine manufacturers. Readers are encouraged to critically evaluate the sources and consult multiple perspectives when making health decisions.

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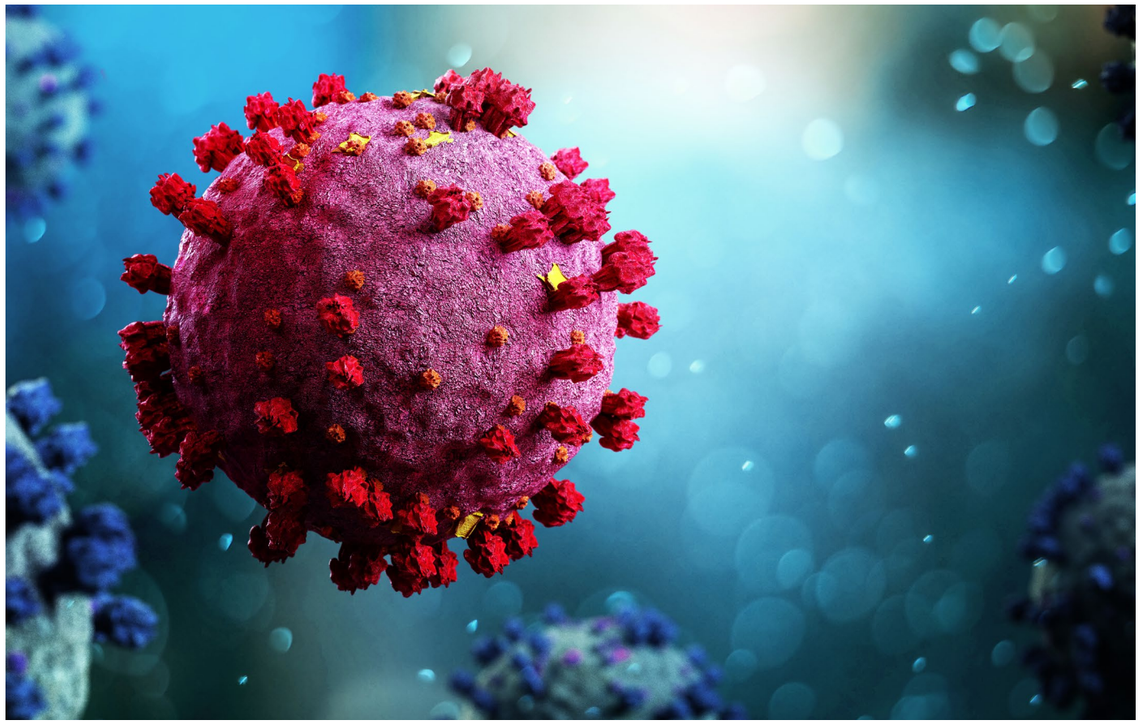


CHAPTER 01

COVID-19 Guide

Unraveling the Spike Protein: What Science Now Reveals

At no other time in history has the world faced a pathogen quite like SARS-CoV-2. Emerging from laboratory research in Wuhan, China, this virus — and its unique spike protein — has led to widespread and lasting health challenges.

Today, millions are still suffering not only from viral infection but also from the effects of mRNA-based COVID-19 vaccines, which instruct the body to produce a version of the spike protein.

This guide focuses on the spike protein — the component responsible for much of the virus's pathogenicity — and how it contributes to disease, both after infection and vaccination.

OUR BODIES ARE NOT MACHINES— WE CAN'T JUST REPLACE THE "BROKEN PART(S)."

By understanding how the spike protein damages tissues and organs, you can make informed, evidence-based decisions to help regain your health and support those you love.

In this guide, you'll learn:

- How the spike protein harms the body
- Why symptoms can persist long after recovery or vaccination

- What side effects are linked to mRNA vaccination
- Research-backed supplements, therapies, and holistic strategies for recovery

Unlike a machine that can have a broken part simply replaced, the human body is an intricate system of organs, fluids, and tissues working in harmony. Healing from spike protein-related injury requires a multi-faceted, holistic approach — there is no single "magic pill."

This guide offers science-backed tools to support your recovery journey and help you feel more like yourself again.

Spike protein

What is the Spike Protein?

The spike protein is a structural component found on the surface of the SARS-CoV-2 virus. It plays a key role in allowing the virus to infect human cells.

In addition to natural infection, the spike protein is produced by the body after receiving mRNA-based COVID-19 vaccines. These vaccines contain genetic instructions (mRNA) packaged in lipid nanoparticles that instruct human cells to make spike proteins.

Importantly, research shows that the spike protein itself — independent of the whole virus — can cause serious side effects, including blood clotting and inflammation of the heart (myocarditis)..[1]

How is the Spike Protein Different From a Virus?

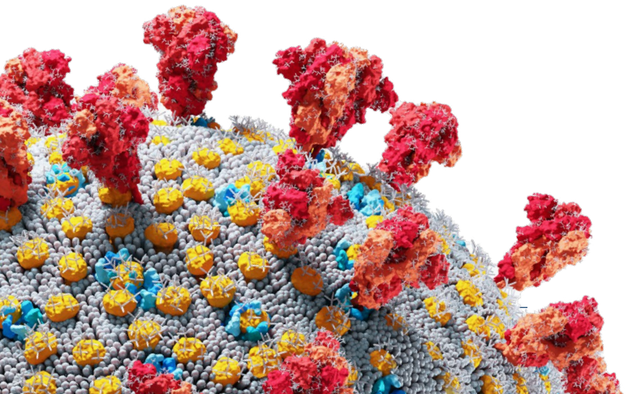
The spike protein is a part of the SARS-CoV-2 virus, not the entire virus itself. However, research indicates that the spike protein alone is highly toxic and can cause damage even without the presence of the full virus.

How Does the Spike Protein Enter the Body's Cells?

The spike protein binds to a molecule on human cells called the ACE2 receptor, which acts like a doorway.

Once attached, the spike protein allows the virus — or spike protein itself — to enter the cell and begin causing harm.[2]

Role of ACE2 Receptors in COVID and Vaccination — And Where They're Found in the Body



ACE2 receptors act as the entry point — or "doorway" — for both the SARS-CoV-2 virus and the spike protein to enter human cells. These receptors are not isolated to one area; they are widely distributed throughout the body.

They are especially concentrated in critical organs and tissues, including:

- The lungs
- The heart
- The kidneys
- The gastrointestinal tract
- The lining of blood vessels

When the spike protein binds to these receptors and gains entry into cells, it can trigger a cascade of harmful effects — including inflammation, blood clotting, tissue damage, and disruption of normal organ function.[3]

This widespread presence of ACE2 receptors explains why spike protein-related injury can affect multiple organ systems and lead to a broad range of symptoms.

Why Are Some Individuals More Susceptible to Severe Disease?

Several factors influence an individual's risk of developing severe illness after infection or vaccination, including:

- Age (older adults are at higher risk)
- Overall health status
- Pre-existing conditions such as diabetes, heart disease, or obesity
- Environmental exposures
- Access to effective early treatment[4]

Lab-Origin Spike Protein vs. Vaccine-Generated Spike Protein

The spike protein found on the outer coat of the SARS-CoV-2 virus has a unique feature that has never been observed in naturally occurring viruses. This feature is known as **a polybasic furin cleavage site,** also referred to as a **multi-basic cleavage site (MBS).**

The presence of this feature strongly suggests that the spike protein found in SARS-CoV-2 was **lab-generated** and did not arise naturally.

By contrast, the earlier SARS-CoV-1 virus, which caused an outbreak from 2002 to 2004, **did not contain** this cleavage site.

The spike protein produced by the human body after receiving the mRNA shot is **almost, but not exactly,** identical to the spike protein found in the virus.

The mRNA shot contains:

- Synthetic mRNA, PEG, and Lipid nanoparticles
- A genetic code that instructs human cells to produce the full length Spike protein but held open in the prefusion conformation with a double prole insert. This is distinct from the Spike protein on the surface of the virus.

However, the spike proteins produced after mRNA vaccination have two amino acid substitutions that are not found in the viral spike protein. [5 6 7]

The role of glycans in spike protein

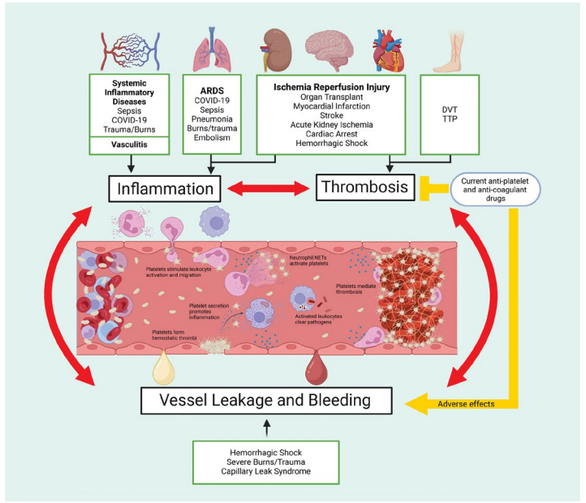
Glycans are sugar molecules that attach to the surface of the SARS-CoV-2 spike protein, forming what's known as a **"glycan shield."** This sugary coating plays a critical role in helping the virus evade the immune system.

Here's how:

- **Immune camouflage:** By covering large portions of the spike's surface, glycans hide key protein regions that would normally be detected and targeted by the immune system. This makes it harder for neutralizing antibodies to recognize and attach to the virus, reducing the immune response.
- **Mimicry of human molecules:** The virus hijacks the body's own cellular machinery to build and attach these glycans. As a result, some of the sugar structures closely resemble those naturally found in the human body. This "molecular mimicry" fools immune cells into ignoring the virus, mistaking it for something familiar.
- **Enhanced infectivity:** Certain glycans also help stabilize the spike protein's "open" conformation — the shape it needs to bind more easily to human cell receptors. In this way, glycans increase the efficiency of viral entry into host cells while simultaneously reducing immune detection.
- In short, glycans both **protect the spike protein** from immune attack and **enhance the virus's ability to infect cells,** making them a key component in the virus's strategy for survival.[8,13]

CHAPTER 02

Spike Protein distribution in body systems



Over **320 peer-reviewed studies** have now confirmed how damaging the spike protein can be to the human body. These studies are compiled in the following comprehensive reference:

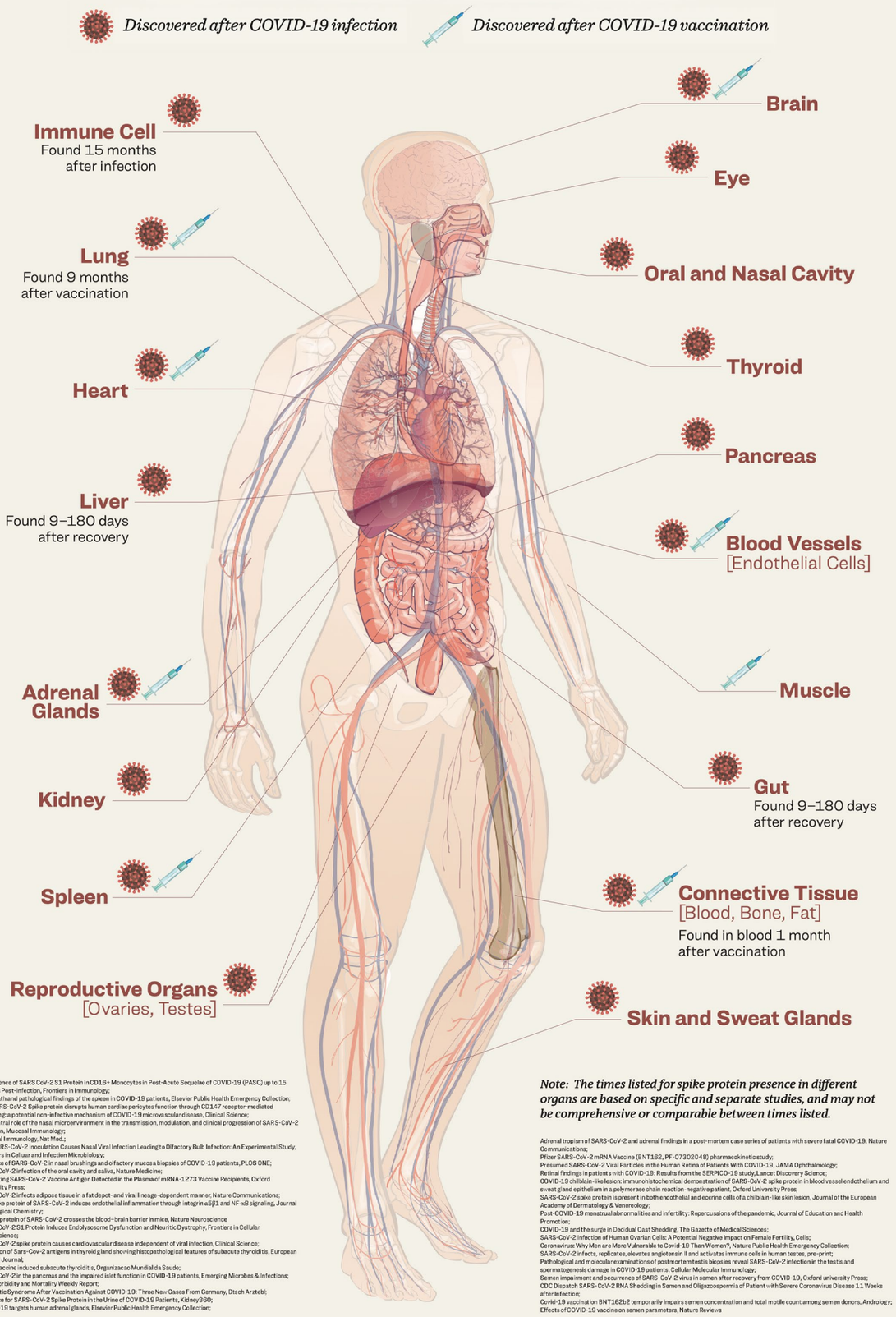
SARS-CoV-2 Spike Protein Pathogenicity Research Collection (Zenodo)[14]

This growing body of evidence highlights the spike protein's role in damaging the cardiovascular, neurological, respiratory, and immune systems — both following infection and after mRNA vaccination.

Vaccine injury

Injury related to COVID-19 vaccination varies significantly in severity and in the organ systems affected. Reactions can range from mild, short-term symptoms to serious and long-lasting conditions.

Spike Protein Distribution



Note: The times listed for spike protein presence in different organs are based on specific and separate studies, and may not be comprehensive or comparable between times listed.

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CDC Dispatch SARS-CoV-2 RNA Shedding in Semen and Oligozoospermia of Patient with Severe Coronavirus Disease 11 Weeks after Infection;
Covid-19 vaccination BNT162b2 temporarily impairs semen concentration and total motile count among semen donors, Andrology;
Effects of COVID-19 vaccine on semen parameters, Nature Reviews

Image source

Immediate or early-onset symptoms may include:

- Pain, redness, or swelling at the injection site
- Fever, chills
- Headache, nausea or vomiting
- Muscle and joint aches
- Fatigue

More severe adverse reactions individuals experience are allergic reactions, including anaphylaxis — a life-threatening condition that can occur within minutes of injection. Symptoms include hives, swelling, shortness of breath, racing heart, dizziness, and — if untreated — progression to shock, coma, or death.

Delayed or more serious adverse effects — which may appear weeks or months after injection — include:

- Myocarditis (heart inflammation)
- Pericarditis (inflammation of the heart lining)
- Pulmonary embolism
- Deep vein thrombosis (DVT)
- Stroke
- Guillain-Barré syndrome
- Cognitive impairments, such as memory loss and difficulty concentrating[1]

The elephant in the room: myocarditis disinformation

You may have heard the widely circulated claim:

"SARS-CoV-2 infection causes more myocarditis than COVID-19 vaccination."

This claim is **false.** Here's why:

Many studies that make this assertion rely on hospital coding data, where COVID-19 patients are given myocarditis-related ICD-10 codes based on elevated troponin levels — a nonspecific marker of cardiac stress. However, these cases are not clinically confirmed with proper evaluation tools such as:

- Physical exam
- Electrocardiogram (ECG)
- Echocardiography
- Cardiac MRI

In contrast, autopsy studies of fatal COVID-19 cases have not found evidence of myocarditis, nor have they shown the virus directly damaging heart tissue. [2]

Spike Protein Distribution

Whether introduced through infection or vaccination, the spike protein has been found in multiple tissues and plays a central role in disease mechanisms.

Research has shown that the spike protein can:

- Enter the **nucleus of human cells,** where it may interfere with normal DNA repair mechanisms[3]
- **Bind to fibrin,** a key protein involved in blood clot formation, contributing to abnormal clotting observed in both COVID-19 and post-vaccine complications[3]

What Happens After Vaccination?

After injection, the **mRNA or spike protein-containing components** are designed to remain at the injection site. However, studies have shown that the spike protein is not **confined to the deltoid muscle.** Instead, it can:

- Enter circulation
- Distribute to organs and tissues throughout the body[4]
- Persist longer than initially believed

Despite this, the CDC has claimed the spike protein is "harmless."[5] However, as presented throughout this guide and supported by over 300 peer-reviewed studies, the spike protein is far from benign — and its toxic effects are well documented.

Viral Infection and the Spike Protein

SARS-CoV-2 is primarily spread through:

- Inhalation of aerosolized droplets or particles from an infected person

- Touching the eyes, nose, or mouth after contact with contaminated surfaces

Once inside the body, **spike protein**—whether from infection or vaccination—can bind to fibrin or enter cells, where it may contribute to harmful processes.

What Is Fibrin?

Fibrin is a **key protein in blood clotting,** formed from its precursor **fibrinogen,** which is produced by the liver and normally circulates in the bloodstream in an inactive state. Upon tissue injury, fibrinogen is activated into fibrin, which forms a mesh-like structure that helps seal wounds and stop bleeding.[6]

Spike Protein's Interaction with Fibrin

When the spike protein binds to fibrin, it appears to trigger a series of damaging immune and vascular responses, including:

- **Thromboinflammation:** This involves inflammatory blood clot formation throughout the body, which can contribute to neuropathology—damage to the nervous system[7]
- **Suppression of natural killer (NK) cells:** NK cells are essential for destroying infected or abnormal cells. Reduced NK cell activity may impair the body's ability to fight infection[7]
- **Increased viral replication:** By interfering with immune response pathways, spike protein binding to fibrin may contribute to **higher viral loads** in SARS-CoV-2 infection[7]

Spike Protein Inside the Cell

The spike protein has also been found **inside the nucleus of human cells.[3]**

- **Disruption of DNA repair mechanisms**
- **Premature cellular aging and death (senescence and apoptosis)**

While ongoing studies continue to investigate the full impact, the presence of spike protein in the nucleus is a finding with potentially profound implications for long-term health.[3]

How the Spike Protein Enters Cells

The spike protein enters human cells by binding to **ACE2 receptors** (angiotensin-converting enzyme 2), which are found on many cell types throughout the body.

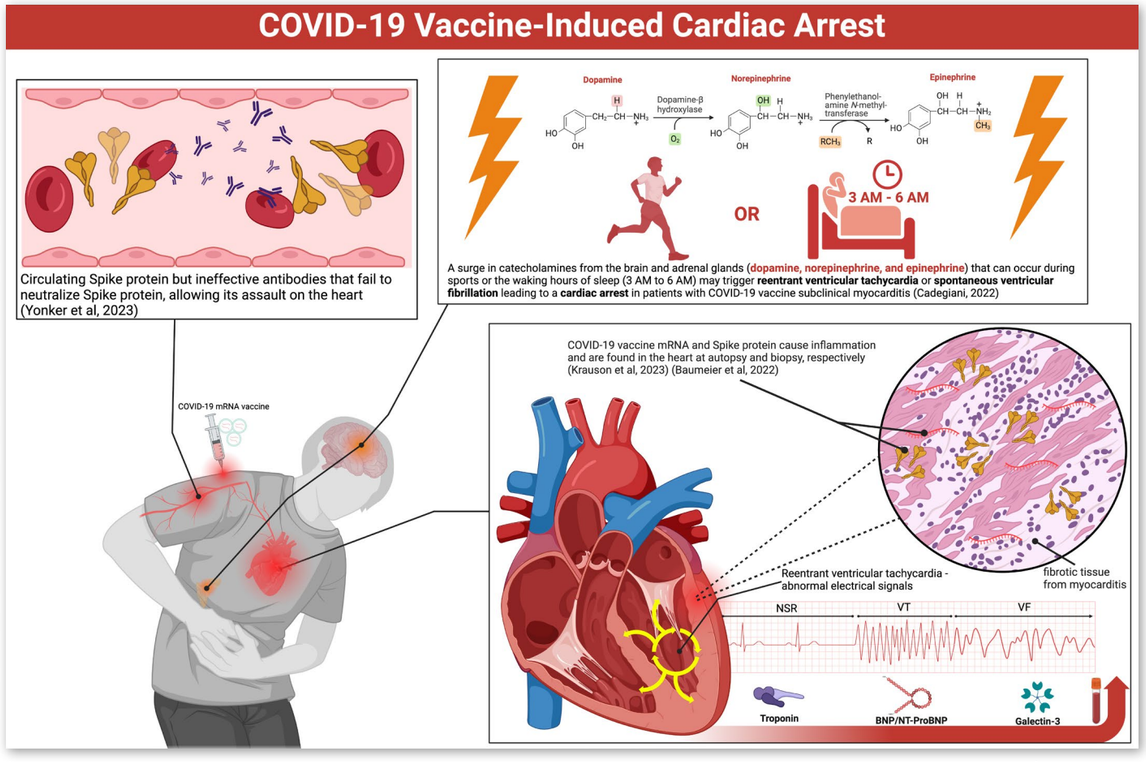


Image source

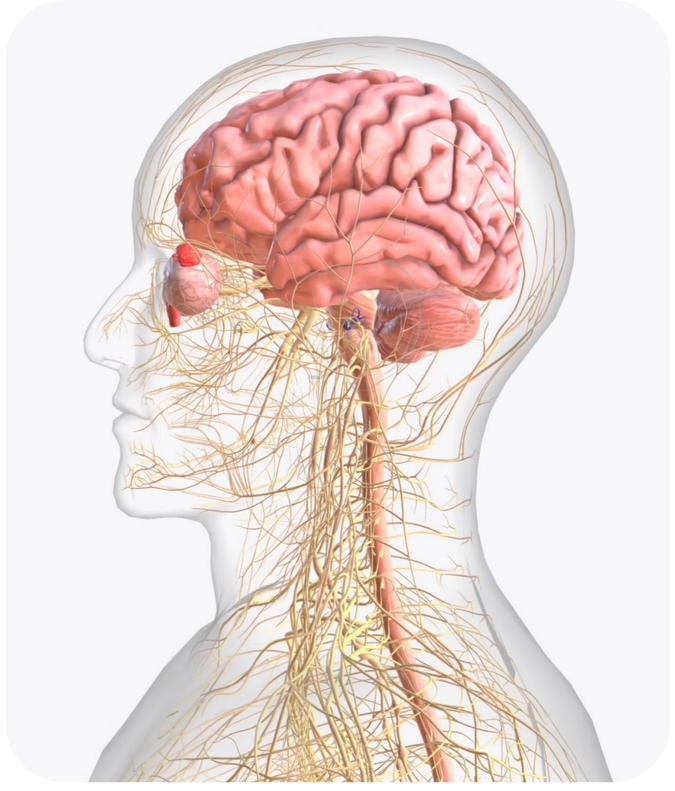
These receptors are especially abundant in the **lungs (particularly in the alveoli),** but are also present in the **heart, blood vessels, kidneys, liver, gastrointestinal tract,** and even in **epithelial cells of the nose and mouth.**

ACE2 plays a vital role in the body's regulation of **blood pressure, wound healing, and inflammation.** One of its primary functions is to break down **angiotensin II,** a protein that can promote inflammation and blood vessel constriction. It is the **overactivity of angiotensin II,** triggered by SARS-CoV-2 and its spike protein, that contributes to the virus's harmful effects.[8]

Body Systems Affected by Spike Protein

Blood

The spike protein has been linked to **Macrophage Activation Syndrome (MAS)**—a condition marked by an excessive and uncontrolled immune response. MAS has been observed following both SARS-CoV-2 infection and vaccination, though data suggests **a stronger association with vaccination.[9]**



Brain and Central Nervous System

Spike protein can cross into the **brain and meninges,** leading to neuroinflammation and a wide range of neurological symptoms. These include **anxiety, depression, brain fog, cognitive impairment, and autoimmune encephalitis.[10]**

Studies suggest that the spike protein—whether from the virus or mRNA-based vaccination—may increase the risk for **neurodegenerative diseases**, including:

- Prion disease
- Alzheimer's disease
- Amyotrophic lateral sclerosis (ALS)
- Huntington's disease
- Parkinson's disease
- Spinal muscular atrophy
- Multiple sclerosis

Persistent spike protein has been detected in the **skull-meninges-brain axis** following COVID-19 vaccination. This accumulation is associated with statistically significant increases in risk for the following conditions:[11]

- Ischemic stroke (+44%)
- Hemorrhagic stroke (+50%)
- Transient ischemic attack (+67%)
- Myelitis (+165%)
- Myasthenia gravis (+71%)
- Alzheimer's disease (+22.5%)
- Cognitive impairment (+137.7%)
- Depression (+68.3%)
- Anxiety disorders (+43.9%)
- Sleep disorders (+93.4%)
- Transverse myelitis (+141%) — inflammation of the spinal cord[13]

Immune System

Both **infection with SARS-CoV-2 and COVID-19 vaccination** have been associated with the **onset or exacerbation of autoimmune diseases.[12] [14]** These conditions arise when the immune system mistakenly attacks the body's own tissues.

Examples of autoimmune diseases include:

- Vasculitis
- Rheumatoid arthritis
- Type 1 diabetes mellitus
- Systemic lupus erythematosus

- Inflammatory bowel disease
- Polymyalgia rheumatica
- Connective tissue diseases
- Autoimmune thyroiditis (including both **Graves' disease** and **Hashimoto's thyroiditis**)
- And others

Digestive System

The spike protein, whether introduced through infection or vaccination, has been shown to affect the **digestive system** in a variety of ways:[16] [17]

- Acute liver disease
- Acute acalculous cholecystitis
- Intestinal obstruction
- Acute colon pseudo-obstruction
- Enterocolitis
- Nausea, vomiting, diarrhea
- Anorexia
- Abdominal pain

Acute pancreatitis, which can lead to the onset of **type 1 diabetes (autoimmune diabetes)** following infection or vaccination.[18] [19]

Eyes

- **Retinal inflammation** has been reported following spike protein exposure.[20]

Lungs

- Studies report **extensive alveolar damage,** injury to lung tissue, and fibrotic **accumulation,** impairing respiratory function.[21]

Kidneys

- Spike protein-related injury has been observed in the kidneys, with reports of **kidney damage** and **kidney failure post**-vaccination.[22]

Cardiovascular System

Elevated antibody levels following vaccination were associated with **major adverse cardiac events,** including recurrent heart attacks and cardiac death.[23]

- **Cardiac mortality** was found to be elevated during the **28 days following COVID-19 vaccination.**[24]
- COVID-19 vaccines have been associated with a **higher risk of myocarditis** than infection itself, due in part to spike protein-induced **mitochondrial damage** within heart muscle cells.[25]
- The spike protein has been shown to **damage blood vessel walls,** contributing to **blood clots, stroke, deep vein thrombosis (DVT),** and other clotting disorders—more frequently after vaccination than infection.[26]

After **COVID-19 mRNA vaccination,** spike protein has been found in the **heart tissue** of individuals diagnosed with **myocarditis.** In these cases, the immune system may generate i**neffective antibodies,** allowing spike protein to circulate and attack heart tissue, resulting in i**nflammation and scarring.** This damage can leave behind **patches of dysfunctional tissue,** which interfere with the heart's **electrical signaling** and may trigger **abnormal heart rhythms**—notably **reentrant ventricular tachycardia,** which can rapidly deteriorate into **ventricular fibrillation and cardiac arrest.**

The risk is further heightened by **surges in stress hormones** (epinephrine, norepinephrine, and dopamine) that naturally occur during **intense physical activity** or in the **early morning hours.** These physiological changes can **destabilize the heart** and help explain the reported **increase in sudden cardiac arrests** observed among vaccinated individuals since the beginning of the **mass vaccination campaign.**

Endocrine System

- **New-onset thyroid disorders** have been commonly reported following COVID-19 infection.[27]
- Spike protein has been detected in the **pituitary gland,** which governs hormone production in many other endocrine organs.[28]
- It has also been found in the **adrenal glands,** contributing to **elevated cortisol levels.**[29]
- Among children aged 10–19, there is an **increased risk of developing type 2 diabetes** following COVID-19 infection, compared to children who had other respiratory infections.[30]

Reproductive System

Males

Semen:

Vaccine-derived spike protein has been detected in semen.[31]

- **COVID-19 virus particles** have also been found in sperm **months after infection,** suggesting long-term reproductive tract involvement.[32]

Females

Menstrual changes:

A reported **78% of women experienced menstrual irregularities** after COVID-19 vaccination.

One study found that women in **daily close proximity (within 6 feet)** to vaccinated individuals (outside their household) had:

- a **34% higher risk** of heavier bleeding,
- a **28% higher risk** of menstruation starting more than 7 days early, and
- a **26% higher risk** of bleeding lasting over 7 days.[33] [34]

Placental and pregnancy outcomes:

- **Placental damage** was observed in women who received inactivated virus COVID-19 vaccines such as **Sinopharm.**[35]
- Women vaccinated with **Pfizer, AstraZeneca, or Moderna** also showed **increased rates of miscarriage, abnormal placentas, low amniotic fluid levels, and abnormal birth weights.**[35] **CDC guidance** currently recommends COVID-19 vaccination at any stage of pregnancy.[36]

Dr Thorp, Dr. McCullough and group are calling for an immediate halt to vaccination during pregnancy due to all 37 adverse events post vaccination breached: miscarriage, developmental abnormalities neonatal hemorrhage, hemorrhage in pregnancy, fetal cardiac arrest, placental abruption and many more adverse events. (35)

Additional Findings

- **Estrogen receptors:** The spike protein has been shown to **bind to estrogen receptors,** raising concerns about hormonal interference. [37]
- **Spleen:** As the spleen stores platelets, concerns have been raised about **vaccination-induced thrombocytopenia** (a dangerous drop in platelet count).[38]
- **Muscles:** Both infection and vaccination have been linked to **muscle damage and weakness.**[39]
- **Skin:** The spike protein has also been implicated in **inflammatory skin lesions.**[40]

CHAPTER 03

Spike Protein Antibody Testing: Interpretation, Clinical Meaning, and Actionable Next Steps

Addressing the Central Patient Question

One of the most common and consequential questions encountered in clinical practice is:

"Have I been exposed to the SARS-CoV-2 spike protein through infection, shedding, or vaccination—and what should I do about it?"

Spike protein antibody testing now offers individuals a practical means of assessing cumulative spike protein exposure, even in the absence of active infection. Commercially available assays (e.g., Labcorp Labs On Demand) measure circulating anti–SARS-CoV-2 spike antibodies, which serve as an indirect but durable marker of prior and ongoing spike protein burden.

Unlike viral PCR or antigen tests, spike antibody levels do not fluctuate rapidly and therefore reflect longer-term biological exposure, persistence, and immune engagement rather than transient infection status.

Interpretation of Spike Antibody Levels

While spike antibodies are an indirect measure of spike protein presence, accumulated clinical observations allow for a risk-stratified interpretive model:

Risk Level Guide

< 1,000 U/mL	**Very Low-Level Past Exposure** Negligible clinical risk in most individuals.
1,000– 5,000 U/mL	**Moderate Exposure** Symptoms or organ-specific issues may be related to spike protein activity.
< 5,000 U/mL	**High Persistent Spike Protein** Increased concern for inflammatory, vascular, and immune sequelae
10,000– 25,000 U/mL	**Very High-Risk Range** Associated with substantially risk for cardiac injury, thrombosis, neurologic dysfunction, autoimmunity, and oncogenic signaling.

Because antibody titers change slowly, repeat testing is generally not recommended more frequently than annually, unless clinically indicated.

Reductions in antibody levels over time have been observed in patients experiencing resolution of spike-associated syndromes following targeted detoxification and supportive care.

What Can Be Done?

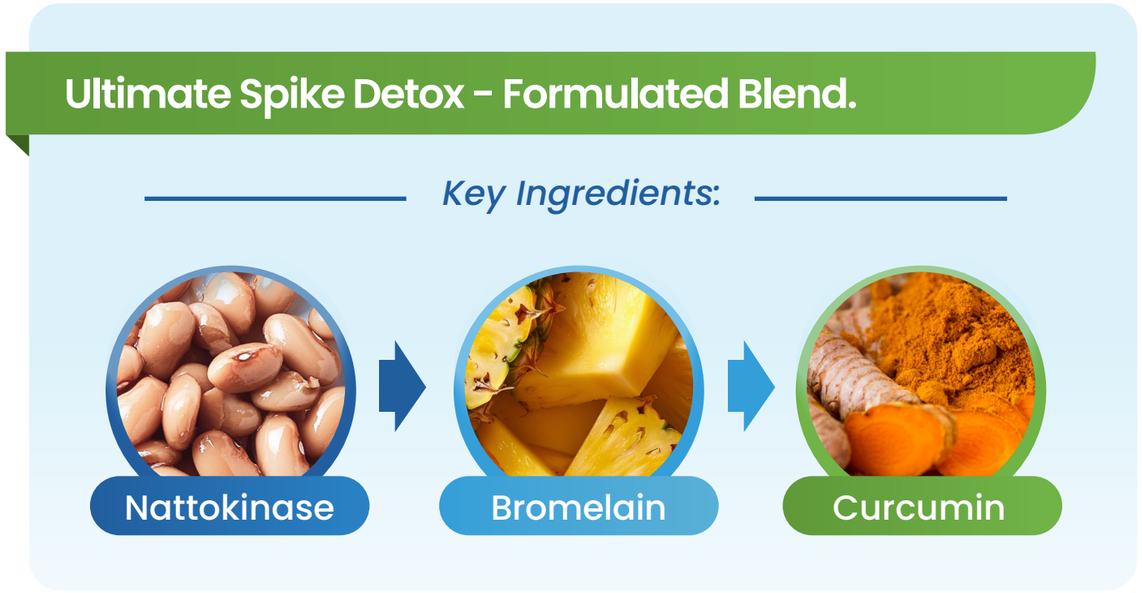
About Elevated Spike Antibody Levels.

Management of elevated spike antibody levels is not based on immune suppression or passive observation, but rather on active biological support aimed at reducing spike protein burden, mitigating downstream injury, and supporting resiliency.

A mechanistically grounded detoxification regimen, such as the McCullough Protocol™ base spike detoxification, emphasizes three key enzymatic and anti-inflammatory agents — nattokinase, bromelain, and curcumin — that have putative actions including:

High Spike Antibodies - What Can Be Done?

- Proteolytic degradation of spike protein and its fragments
- Inhibition of spike-induced inflammation in tissues
- Dissolution of microthrombi and support of fibrinolysis
- Modulation of ACE2 receptor interactions and inflammatory pathways



Ultimate Spike Detox

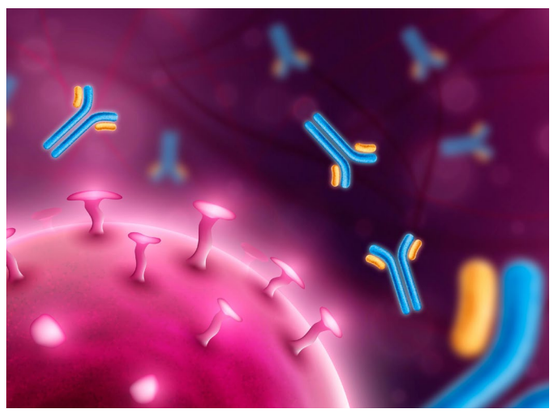
a blend formulated by *The Wellness Company* — incorporates these same principles into a supplemental support product containing:

- **Nattokinase** — an enzyme with fibrinolytic activity proposed to help break down spike protein complexes and support circulatory clearance
- **Bromelain** — a proteolytic enzyme that may assist with protein breakdown and promote healthy inflammatory responses
- **Curcumin (from turmeric)** — a bioactive compound with anti-inflammatory properties that may complement proteolytic activity and immune modulation
- **Additional supportive ingredients** (e.g., black seed extract, dandelion root, selenium) aimed at immune balance and cellular detoxification.

Practical Application: Detox Stratification

- Individuals with spike antibody levels ≥ 1,000 U/mL and ongoing symptoms
- Consideration of a comprehensive spike detoxification strategy consistent with mechanistic principles and tailored clinical evaluation
- Individuals with antibody levels < 1,000 U/mL but concern for ongoing exposure or inflammation
- Supportive, maintenance-level mitigation may be appropriate

In clinical practice, structured support protocols incorporating agents like **nattokinase, bromelain, and curcumin** have been associated with **gradual symptom improvement and declines in antibody levels over extended periods** in some patients, consistent with enhanced biological clearance rather than acute pharmacologic suppression.



CHAPTER 04

Vaccine types and how they are made, injuries, safety profile, effectiveness

Types of vaccines and manufacturers

There are currently three pharmaceutical companies manufacturing COVID-19 vaccines that are available in the United States. Two of these use mRNA technology, and one is a protein adjuvant vaccine.

Pfizer-BioNTech

Marketed under the brand name **Comirnaty,** this was the **first COVID-19 vaccine** to receive **Emergency Use Authorization (EUA)** from the FDA in **December 2020.** It uses **mRNA technology,** which was relatively new and previously untested in large populations.

The vaccine works by delivering genetic instructions to the body's cells to **produce spike proteins** that resemble those found on the surface of the SARS-CoV-2 virus.

The goal is to trigger an immune response that produces **antibodies targeting the spike protein** to help prevent infection.

Moderna

Marketed as **Spikevax,** it received EUA from the FDA **one week after Pfizer, in December 2020.** It operates similarly to Pfizer's vaccine, using **mRNA instructions** to prompt the body to produce the spike protein and elicit an immune

response. The CDC for **everyone aged 6 months and older,** including those who have had COVID-19 and recovered.[1]

Novavax

Marketed under the brand names **Nuvaxovid and Covovax,** this is the o**nly non-mRNA COVID-19 vaccine** currently available in the U.S. It is a **protein adjuvant vaccine,** meaning it contains the **actual spike protein (not mRNA)** combined with an **adjuvant**—an ingredient meant to **enhance the immune response.**

The spike protein is formulated as a **nanoparticle** that cannot cause disease but helps train the immune system to recognize and attack SARS-CoV-2. Unlike mRNA vaccines, **Novavax does not cause the body to manufacture spike proteins.** The CDC recommends Novavax only for individuals aged **12 and older.**[2] [3]

How are vaccines different than natural infection?

Both vaccination and natural infection trigger an immune response, but there are important differences:

- **Natural Immunity** occurs after recovery from COVID-19 infection.
- **Vaccine-Induced Immunity** is generated in response to vaccination.
- **Hybrid Immunity** occurs in those who have both had the virus and received the vaccine, either before or after infection.

Natural immunity

Studies have shown that natural immunity **protects against reinfection** and reduces the severity of illness upon reinfection. Protective **antibodies and memory B cells** have been found to persist for **12–18 months** after infection.

One study even reported **95% protection** against reinfection after **20 months.**[4] [5] [6]

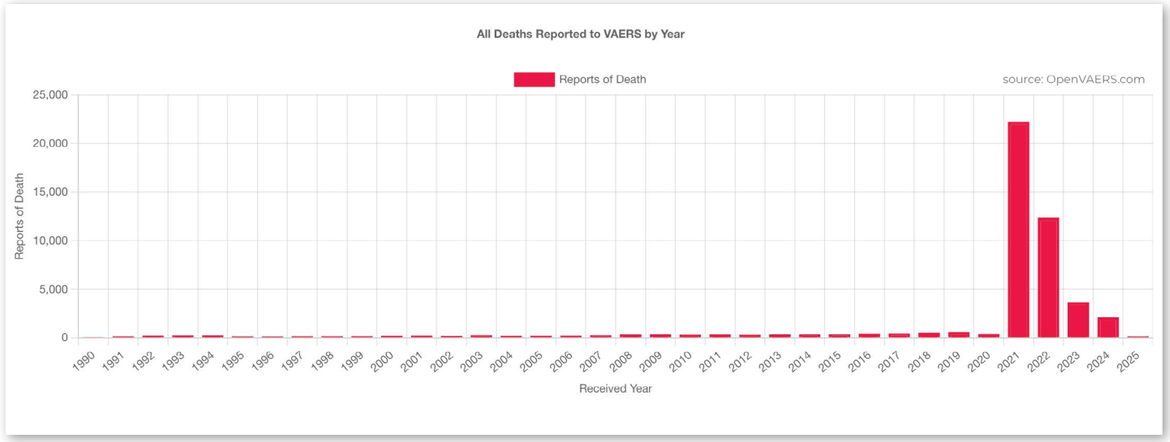


Image source

Vaccine induced immunity

Vaccine-induced immunity provides good protection after 14 days have elapsed after completing the vaccine schedule." The point is that all vaccine efficacy studies excluded the first 10-14 days post vaccination, during which time the efficacy was likely negative.

However, **antibody levels decline rapidly,** often disappearing by **6 to 7 months** post-vaccination.

Vaccines use **only the spike protein,** whereas natural infection exposes the immune system to the **entire viral particle.** Natural immunity also results in higher levels of **IgA antibodies,** which have shown superior neutralization capability compared to **IgM** and **IgG.** Several studies suggest that receiving the COVID-19 vaccine **after recovering** from infection provides **minimal additional protection.**[7]

Safety profile of vaccines vs infection:

The CDC, FDA, American Medical Association, and vaccine manufacturers continue to claim that the COVID-19 vaccines are "safe and effective." However, data from the **Vaccine Adverse Event Reporting System (VAERS)** reveals a different and concerning picture.

As of **December 27, 2024,** VAERS has recorded 1,658,330 reports of injury following COVID-19 vaccination—an unprecedented volume in the history of vaccine reporting[8]

- In **2021,** during the height of vaccination campaigns and when many states were offering incentives to get the COVID-19 vaccine, there were **22,247 deaths** reported in connection to vaccine injury.

This surge stands in stark contrast to other years:

- In **2020,** before widespread vaccine rollout, just **240 deaths** were reported from all vaccines combined.
- By **2024,** that number had dropped to **1,840 deaths**—still significantly higher than pre-pandemic levels, but far lower than during the initial vaccination push.[8]

These numbers have led many to question the transparency and credibility of organizations once trusted for public health guidance.

Risks of COVID-19 Infection

COVID-19 infection can also be serious and, in some cases, fatal. However, the overall estimated risk of death in the general population averages 0.2-0.25%, and this varies significantly by age and underlying health conditions. [15]

- Individuals with comorbidities such as **diabetes** and **obesity** face a higher risk.
- In the U.S., **81% of COVID-19-related deaths** occurred in individuals **over the age of 65.**
- In contrast, the risk of death is **substantially lower in younger, healthier populations.** [9]

Vaccine injured

How long after receiving shot can injury show up?

Vaccine injury following a COVID-19 shot can vary widely in both severity and timing. Most commonly, adverse events develop within the **first week** after vaccination. However, some symptoms may persist or emerge later and evolve into chronic conditions resembling **long COVID**. In fact, **long COVID symptoms may, in some cases, result from vaccine injury,** lasting from several months to years.

Long COVID: What It Is and How It Differs from Vaccine Injury

Long COVID is a chronic condition that persists **for at least 3 months** after infection with SARS-CoV-2. It encompasses a broad range of symptoms that may improve, worsen, or remain constant over time. These include:

- **Chronic fatigue**
- **Shortness of breath**
- **Neuropsychiatric symptoms** (e.g., brain fog, anxiety, depression)
- **Cognitive dysfunction**
- Other systemic complaints

Initially, it was believed that long COVID only affected those who experienced **severe infections,** but growing evidence now shows it can occur **regardless of initial**

symptom severity.

The two **most common long COVID symptoms** are:

- Persistent fatigue
- Cognitive dysfunction ("brain fog")

The **spike protein** is believed to play a central role in long COVID. Individuals who have recovered from infection and then received a COVID-19 vaccine are exposed to **additional spike protein**, potentially compounding the risk of long COVID. Furthermore, **virus-mimicking anti-idiotype antibodies,** which appear after infection or vaccination, may also contribute to lingering symptoms.[9]

Vaccine Injury vs. Long COVID

Vaccine injury shares many clinical similarities with long COVID, especially in symptoms like fatigue, neurological issues, and immune dysregulation. However, vaccine-injured individuals appear to have a higher incidence of:

- **Myocarditis**
- **Pericarditis**[10]

In both conditions, the **spike protein** is believed to be the primary culprit. Repeated exposure to the spike protein—through infection, vaccination, and especially boosters—may increase the **likelihood of long COVID or vaccine injury symptoms.** [11,13]

Spike Protein as a Potential Allergen

There is emerging evidence that the **SARS-CoV-2 spike protein** may behave like an **allergen,** triggering allergic-type immune responses in some individuals.

In a 2022 study, individuals with **severe COVID-19** had significantly elevated levels of:

- **Anti-spike S1 protein-specific IgE**
- **Anti-nucleocapsid protein-specific IgE**

- Elevated IgE levels indicate a hypersensitive immune response, typical of allergic reactions.

- Mast cells—immune cells activated during allergic responses—were also found to be elevated in severe cases.[14]

These findings suggest that the spike protein may not only cause inflammation but may also provoke **allergic-type immune dysregulation,** contributing to both **long COVID and vaccine injury** in susceptible individuals.

THE WELLNESS COMPANY™

CHAPTER 05

Conclusion: Clarity Through Science

At The Wellness Company, we believe access to clear, evidence-based information is a fundamental part of health freedom. In a world where confusion often overshadows facts, our mission is to provide you with accurate, science-backed knowledge — so you can better understand the world around you, and what's happening within your own body.

This guide was created to help you navigate the complex and often overwhelming topic of the spike protein — what it is, how it behaves, and why it matters. Our goal is not to overwhelm you with technical jargon, but to make leading-edge research accessible, practical, and grounded in reality.

We work closely with experts across disciplines to bring you the most up-to-date insights on topics like spike protein persistence, immune response, and inflammation — all presented in a way that prioritizes transparency and trust.

While we do offer products developed with this research in mind, this guide exists first and foremost to inform — because you deserve to understand the science that impacts your health.

We're honored to be part of your learning journey.

The Wellness Company

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