

Special Report: **Protect Your Lungs from Coronavirus**

With ProPectin® — Your Butyrate Source



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Special Report: Protect Your Lungs from Coronavirus

**Coronavirus Is A Deadly Threat
Protect Yourself and Your Family
With ProPectin® — Your Butyrate Source**

Butyrate. For most people it's an unfamiliar name for something that plays an important role in maintaining a healthy environment in the gut. Butyrate is a molecule referred to as a short-chain fatty acid (SCFA) that occurs naturally in the body. Fatty acids are considered the building blocks of fats, or lipids, which the body and its cells cannot live without. Butyrate is made by the bacteria, called Firmicutes, living in our gut, mostly by foods high in fiber.

And while butyrate has been shown to benefit the body in many significant ways—from colon health to mitochondrial function—cutting-edge research over the past decade has shown that short-chain fatty acids (SCFAs) derived from bacterial fermentation of dietary fiber have anti-inflammatory properties via direct modification of immune cells to fight off virus attacks like the Coronavirus.

What Coronavirus Does to the Body?

The disease can cast a storm over the whole human body. Unlike their common-cold-causing cousins, these emergent coronaviruses can spark a viral-induced fire throughout many of a person's organs, and the new disease—dubbed "COVID-19" by the World Health Organization—is no exception. For most patients, COVID-19 begins and ends in their lungs, because like the flu, coronaviruses are respiratory diseases that lead to Acute Respiratory Disease Syndrome (ARDS).

They spread typically when an infected person coughs or sneezes, spraying droplets that can transmit the virus to anyone in close contact. Coronaviruses also cause flu-like symptoms.

Patients might start out with a fever and cough that progresses to pneumonia or worse.

The World Health Organization reported that the disease typically attacks the lungs in three phases: viral replication, immune hyper-reactivity, and pulmonary destruction.

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Coronavirus attack on the lungs

In the early days of an infection, the novel coronavirus rapidly invades human lung cells. It loves to infect and kill cilia cells, which then then fill patients' airways with debris and fluids. Early studies on COVID-19 have shown that many patients develop pneumonia in both lungs, accompanied by symptoms like shortness of breath.

That's when phase two and the immune system kicks in. Triggered by the presence of a viral invasion, our bodies step up to fight the disease by flooding the lungs with immune cells to clear away the damage and repair the lung tissue. When working properly, this inflammatory process is tightly regulated and confined only to infected areas. But sometimes your immune system goes haywire and those cells kill anything in their way, including your healthy tissue. So, you then get more damage instead of less from the immune response. Even more debris clogs up the lungs, and pneumonia worsens.

This causes damage to the lungs, which leads to fluid leaking from small blood vessels in the lungs. The fluid collects in the lungs' air sacs, or alveoli. This makes it difficult for the lungs to transfer oxygen from the air to the blood. In severe cases, the lungs become flooded and the patient can no longer breathe.

During the third phase, lung damage continues to build—which can result in respiratory failure.



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According to the WHO, other coronaviruses like SARS created holes in the lungs, giving them “a honeycomb-like appearance”—and these lesions are present in those afflicted by coronavirus COVID-19, too. This then creates scars that stiffen the lungs.

There isn’t any specific medical treatment for ARDS. Medical attention is just to support the person through this process as best they can, allowing their bodies to heal and their immune system to address the underlying events.

With any infection, the body’s immune system responds by attacking the foreign virus or bacteria. While this immune response can rid the body of the infection, it can also sometimes cause collateral damage in the body.

Cytokines are proteins used by the immune system as alarm beacons—they recruit immune cells to the site of infection. The immune cells then kill off the infected tissue in a bid to save the rest of the body. This can come in the form of an intense inflammatory response, sometimes called a “cytokine storm.” The immune cells produce cytokines to fight infection, but if too many are released, it can cause problems in the body.

During a runaway coronavirus infection, when the immune system dumps cytokines into the lungs without any regulation, this culling becomes a free-for-all. Cytokine storms create inflammation that weakens blood vessels in the lungs and causes fluid to seep through to the air sacs.

A lot of [the damage in the body during COVID-19] is due to what we would call a sepsis syndrome, which is due to complex immune reactions. The infection itself can generate an intense inflammatory response in the body that can affect the function of multiple organ systems. The lungs are the main organs affected by COVID-19. But in serious cases, the rest of the body can also be affected. In patients who become severely ill, a good proportion of those patients also develop dysfunction in other organ systems.

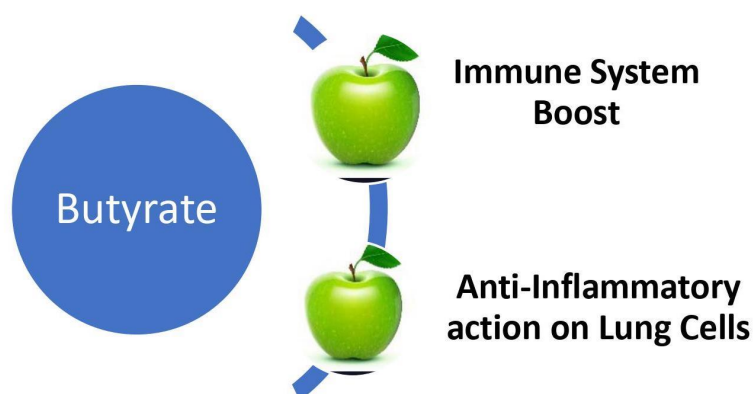


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**Superhigh-Fiber ProPectin Helps to Support Butyrate Levels that
Boost Your Immunity and Deliver Anti-Inflammatory Protection
to Your Alveoli Lung Cells**

Butyrate and the bacterial organisms found in your gut have a dynamic relationship. As a short-chain fatty acid, butyrate is most commonly produced by probiotics (the good bacteria) found in the colon. To have enough butyrate you need to eat plenty of dietary fiber. That's because certain probiotics use dietary fiber as their food source for producing butyrate and other beneficial substances.

Butyrate is used for energy, especially by mucosal cells that line the wall of the colon. These cells get about 70 percent of their energy needs from butyrate. High fiber diets have been shown to increase butyrate circulating in the bloodstream, therefore supporting two core functions of protection against Coronavirus:



As an HDAC inhibitor, butyrate adjusts the immune system in a number of ways. HDAC inhibitors improve the abilities of immune cells like T cells.

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The overall anti-inflammatory effects are already an immune benefit – inflammation is an immune response, and controlling inflammation helps keep the immune response properly regulated. Butyrate helps regulate the production and development of regulatory T-cells. Regulatory T-cells help your body distinguish between itself and everything else. Butyrate suppresses the activity of cells and proteins that drive inflammation.

In a study by Zimmerman MA and Martin PM (American Journal Physiology) on human cells, butyrate drastically reduced the activity of interleukin-12 (IL-12), an inflammatory cytokine, while increasing interleukin-10 (IL-10), which is generally anti-inflammatory.

In a separate study, butyrate-producing dietary fibers counteracted inflammation and illness caused by bacterial toxins. The inflammatory cytokines inhibited by butyrate included interleukin-1 (IL-1), tumor necrosis factor-alpha (TNF-alpha), and interferon gamma (INF-y). The summary by Trompette indicates that a high-fiber diet resulted in increased bone marrow formation of blood cells, leading to the accumulation of constructive processes (alternatively activated macrophages – AAM) like wound healing and tissue repair, and those that turn off damaging immune system activation by producing anti-inflammatory cytokines like IL-10 in the lungs.

Researcher
Aurélien Trompette
(Faculty of Biology and Medicine,
University of Lausanne)
states:

“In summary, our data demonstrate that dietary fiber and SCFAs can protect against severe infection by reducing lung tissue damage and by boosting adaptive anti-viral immunity”.

Trompette goes on to say that, “By tuning down excessive innate responses, promoting tissue-protective mechanisms, and stimulating specific adaptive immunity, dietary fiber and SCFAs can create an immune balance that ultimately protects against

This is where we need to support the natural protective function of our body with a functional supplement like ProPectin.

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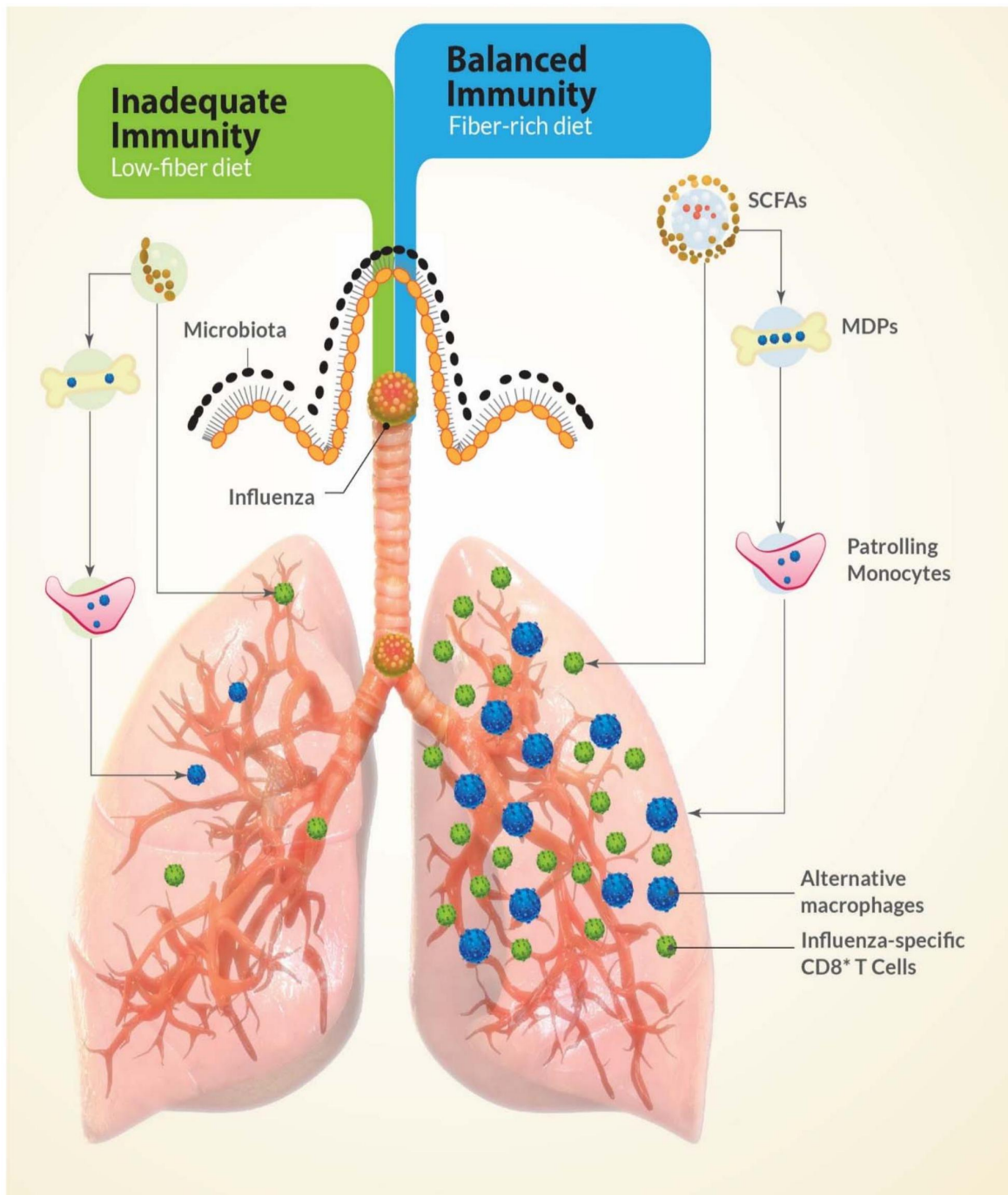
These macrophages produced less cytokines, effectively protecting the airways and, hence, avoiding tissue damage within the lungs. Diet-derived SCFAs boosted CD8+ T cell function by enhancing cellular metabolism. Hence, dietary fermentable fiber and SCFAs set an immune equilibrium, balancing innate and adaptive immunity so as to promote the resolution of infection while preventing immune-associated pathology.

Additional researchers have discovered that butyrate shows to have multiple modes of action within immunity and anti-inflammatory actions against viral infections:

- Butyrate and other short-chain fatty acids as modulators of immunity - *Meijer K1, de Vos P, Priebe MG*
- Impact of gut colonization with butyrate-producing microbiota on respiratory viral infection following allo-HCT - *Bastiaan W. Haak, Eric R. Littmann*
- Inhibition by Certain Polysaccharides of Hemagglutination and of Multiplication on Influenza Virus - *Green RH1, Woolley DW*

The seriousness is not just the risk of death. Transmission rates of COVID-19 across all age groups exceed that of any other respiratory disease we have encountered. This means a large population of people will be exposed and infected. Even for those that are not in the high-risk age group of mortality, simply by contracting COVID-19 and recovering can lead to permanent lung damage without necessarily experiencing the full severity of COVID-19.

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Dietary fermentable fiber and SCFAs set an immune equilibrium, balancing innate and adaptive immunity



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Many aspects of supporting a **healthy respiratory system that is under attack** by the Coronavirus — especially a healthy and regulated immune system — can be attributed to the amount of butyrate in your body. And increasing the amount of fiber you consume is one way to do it. One of the best sources of fiber is apple pectin. And one of the best sources of apple pectin is ProPectin®.

The ProPectin Advantage as Your Pure Butyrate Source

ProPectin has four important advantages over any other apple pectin product:

- It is the only product that is pharmaceutical-grade apple pectin.
- It is the only product that can provide a daily dose of up to 9 grams of high-grade apple pectin due to a 6-step patented process and formula.
- It is the only product that is 100 percent soluble, which results in a significantly higher absorption rate.
- And, it tastes great—like delicious mild apple nectar.

Currently there are no other apple pectin products available that are soluble; apple pectin is most effective when dissolved and consumed in liquid form. ProPectin's 6-step **patented process** turns pharmaceutical-grade apple pectin (derived from the highest quality and purity of apples identified after extensive research) into a highly soluble powder that dissolves immediately in water for quick and easy consumption.

According to the U.S. Department of Agriculture, an apple contains about five grams of fiber. It takes 250 kilos of apples to make one kilo of ProPectin, and each sachet of ProPectin contains three grams of fiber. By consuming three sachets of ProPectin a day, you can receive up to nine grams of fiber in the form of pharmaceutical-grade apple pectin that can **help support healthy butyrate levels**.



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ProPectin also helps to remove harmful toxins from your body, such as dangerous heavy metals found in more and more food and water sources around the world. In addition, the apple pectin contained in ProPectin helps to reduce inflammation associated with bowel disease, assists in reducing overall cholesterol and LDL, supports healthy weight control and is effective in promoting a healthy digestive system, especially intestinal function.

ProPectin is 4.5 times more effective than any other pectin product on the market. Made from the highest quality apples, ProPectin's formulation process is very involved and requires a high degree of esterification. Manufactured in micro batches to ensure maximum concentration and potency, each batch of ProPectin contains ingredients in their most potent state minus all unnatural or harmful compounds.



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250kg
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Consuming

Per Day

You'll receive
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of Fiber

In the form of pharmaceutical-grade
apple pectin that "can help support
healthy butyrate levels"

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References & Medical Studies:

<https://www.sciencedirect.com/science/article/pii/S1074761318301912>

<https://www.sciencedirect.com/science/article/pii/S1074761318302097>

<https://www.ncbi.nlm.nih.gov/pubmed/19871655>

https://www.rug.nl/research/pathology/medbiol/pdf/currentopinion_meijer2010.pdf

<https://www.frontiersin.org/articles/10.3389/fmicb.2015.01085/full>