

# The Hot Knowledge of Nutrients

Optimal Health Starts with a Solid Foundation

Your gut microbiome is your “second genome”

## Did you know?



★The human body is not an independent entity, but rather a super-organism composed of symbiotic microbial communities and human cells



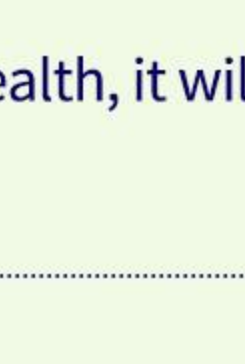
★Many physiological functions in the human body require the collective participation of microorganisms



The human genome are divided into two types:

### The first genome

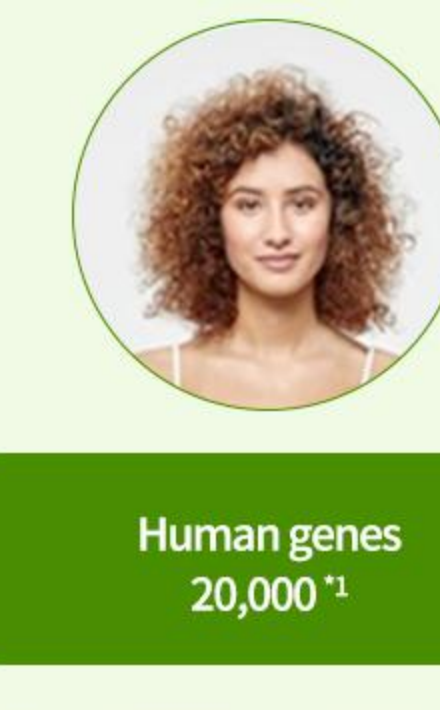
(A congenital hereditary gene that cannot be changed)



Biologically inherited genome. Each parent contributes half of it = **cannot be changed**

### The second genome

(Gut microbial genes, which are formed after birth, can be changed)

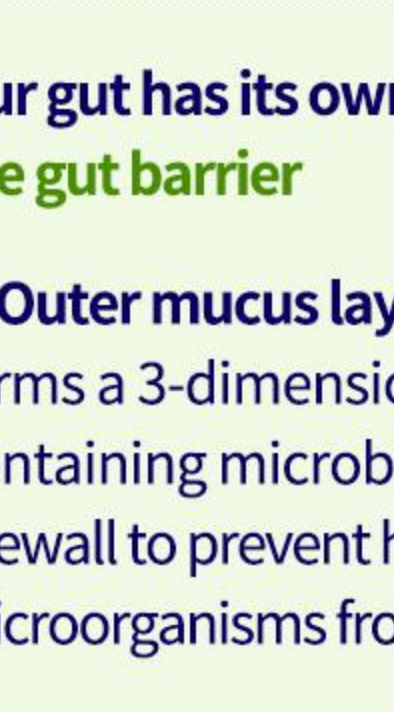


Influenced by many environmental factors = **can be changed**

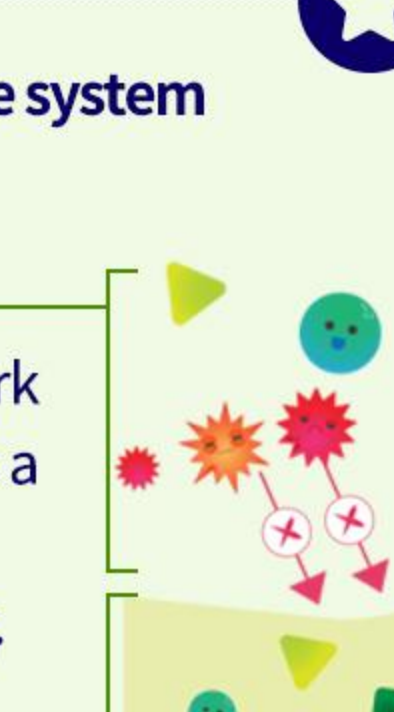
You can't change your DNA, but you can change your gut microbiome.

When there is a change in your gut health, it will impact your overall health.

The number of gut microbial communities is beyond your imagination.



VS



Human genes  
20,000 <sup>\*1</sup>

Microbiome in the human body  
2,000,000 - 4,000,000 Genes <sup>\*2</sup>

Source: \*1 Piovesan A et al., (2019) \*2 Tierney, Braden T. et al. (2019)

Healthy Gut, Healthy You.  
The key is maintaining a balanced and diverse gut microbiota.



A healthy gut is the foundation for achieving optimal health.



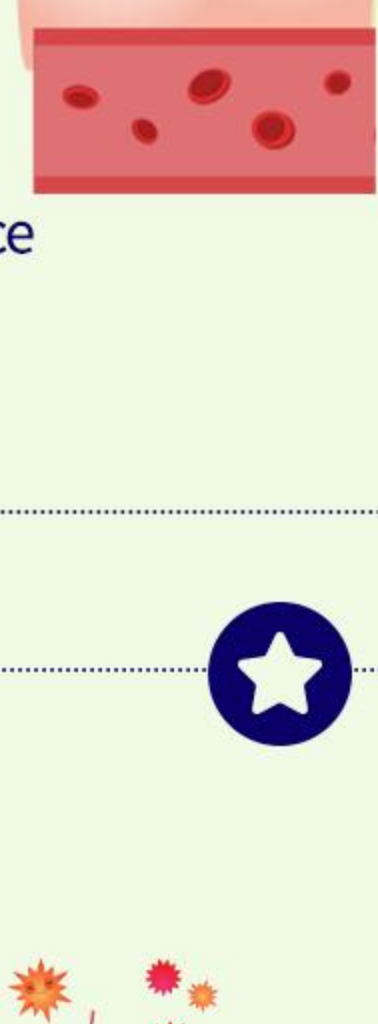
Our gut has its own protective system

### the gut barrier

◎Outer mucus layer forms a 3-dimensional network containing microbiota acts as a firewall to prevent harmful microorganisms from invading.

◎Inner mucus layer contains antimicrobial proteins produced by the intestinal mucosa preventing the adhesion and penetration of harmful bacteria.

◎Intercellular junction can seal the gaps beneath the surface of epithelial cells and resist the invasion of harmful substances.

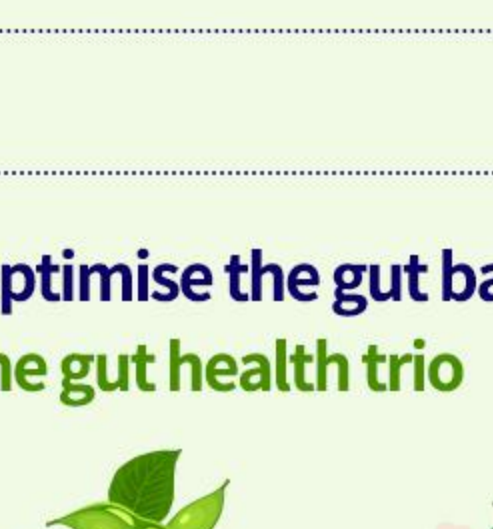


Epithelial cells

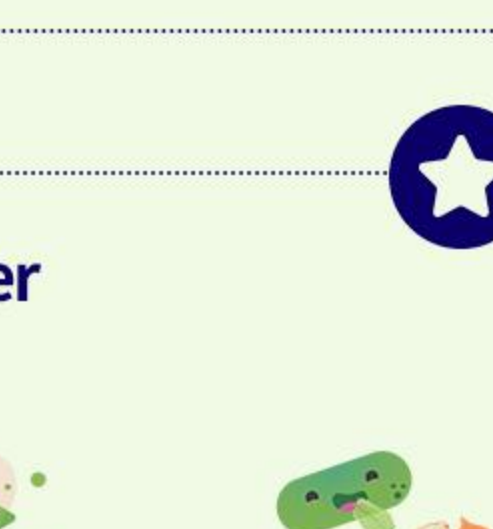


Gut barrier damage can cause

### “leaky gut” problem



A health gut



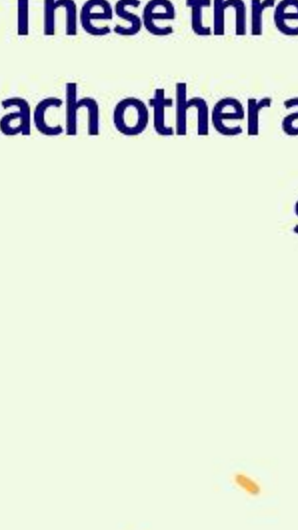
A leaky gut

Healthy cells tightly bind together, forming a protective "barrier". Unhealthy cells, on the other hand, leave gaps that allow toxins and pathogens to enter the bloodstream, leading to inflammation.



Optimise the gut barrier

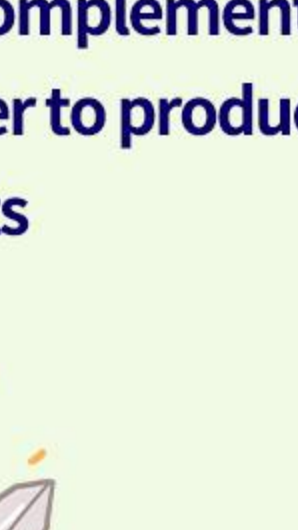
### the gut health trio



protein



probiotics



prebiotics

**Supports** overall cell repair & regeneration, strengthening the gut lining

**Replenish** gut bacteria to maintain a balanced gut microbiome

**Nourish** gut bacteria so it can multiply and grow

These three components complement each other and work together to produce synergistic effects



“Optimal Health with 7 Key Nutrients”