
Description of the GF Complex

General Overview of Humic and Fulvic Acids

Humic and fulvic acids are natural organic compounds formed during the decomposition of plant residues in soil, peat, and leonardite. They are often grouped together under the term **humic substances**.

Below is an overview of how these substances affect the human body and how they differ from each other.

Humic and fulvic acids are obtained from natural organic raw materials formed through the long-term decomposition of plant residues.

Main Natural Sources (General Information)

1. Peat

- The most common source
- Formed in wetlands from decomposed plant material
- Contains a high percentage of humic substances

2. Brown Coal (Leonardite)

- Especially rich in humic acids
- Leonardite is an oxidized form of brown coal
- Widely used in industrial production of humates

3. Soil Humus

- The organic component of fertile soil
- A natural source of humic and fulvic acids
- Rarely used for industrial extraction due to low concentration

4. Sapropel

- Bottom sediments of freshwater reservoirs
- Contains humic substances and trace elements
- Used in agriculture and medicine

How These Acids Are Extracted

- **Humic acids** are extracted using alkaline extraction (NaOH, KOH), then precipitated with acid.

- **Fulvic acids** remain soluble at any pH level and are separated at the next purification stage.

Key Differences

Humic Acids

- Larger molecular size
- Mainly act in the intestines
- Poorly absorbed into the bloodstream

Fulvic Acids

- Small molecular size
- Highly soluble in water
- Able to penetrate cellular membranes

Main Effects on the Human Body

1. Detoxification

They bind and remove:

- Heavy metals (mercury, lead, cadmium)
- Toxins and mycotoxins

Humic acids are especially effective as **natural sorbents**.

2. Digestive Support

- Improve intestinal microflora
- Protect the gastrointestinal mucosa
- May reduce inflammation and irritation

Beneficial for:

- Irritable bowel syndrome
- Diarrhea
- Dysbiosis

3. Improved Mineral Absorption

Fulvic acids form **chelated complexes**, increasing the bioavailability of:

- Magnesium

- Iron
- Zinc
- Calcium

This helps minerals enter cells more efficiently.

4. Antioxidant Activity

- Neutralize free radicals
- Protect cells from oxidative stress

Helpful for chronic fatigue and inflammatory conditions.

5. Immunomodulatory Effect

They may:

- Reduce excessive inflammation
- Enhance non-specific immune response

The effect is mild compared to pharmaceutical drugs.

6. Antimicrobial Properties

They may inhibit the growth of:

- Certain bacteria
- Fungi
- Viruses (based on laboratory studies)

They are **not antibiotics**, but can support the body's defenses.

Important Limitations

Humic substances **should not be taken simultaneously with medications**.
A **2–3 hour interval** is recommended.

Who May Benefit

Humic and fulvic acids may be beneficial for:

- Chronic intoxication
- Mineral deficiencies
- Gastrointestinal disorders
- Recovery after antibiotic use

- Increased physical and mental stress
- Type 2 diabetes
- Skin conditions
- Chronic fatigue
- And other conditions

Effects of Humic–Fulvic Acids

A **concentrated humic–fulvic complex with high bioavailability** is easily absorbed by the body.

It serves as a natural source of minerals, trace elements, and natural amino acids in a balanced alkaline state.

Humic–fulvic acids deliver a large amount of beneficial micronutrients into cells. Working inside the cells, they positively affect the immune system and the entire body.

Humic–Fulvic Acids

They help the body:

- Fight many viral infections (ARVI, influenza, herpes, and other infections)
- Eliminate viruses from the body
- Remove allergens
- Detoxify the body by eliminating heavy metals, nicotine and alcohol metabolites, pesticides, and substances accumulated during radiation or chemotherapy
- Restore and protect liver cells
- Increase physical and mental endurance
- Improve resilience during stress and fatigue
- Normalize gastrointestinal function and reduce discomfort after antibiotics
- Enhance the absorption and bioavailability of nutrients
- Provide alkalizing minerals to help normalize the body's pH balance

Properties of Humic Substances

Humic substances possess the following properties:

- Antiviral
- Bactericidal
- Adaptogenic
- Anti-inflammatory
- Detoxifying
- Antihypoxic
- Immunomodulating
- Blood-thinning

- Regenerative
- Anti-allergic

Natural Dietary Supplement HumiCell

Based on humic substances and kombucha

Humic Complex for the Whole Family

HumiCell Humic Complex

- **100% organic dietary supplement** based on natural ingredients
- **100% produced in Kazakhstan**
- Free from flavorings, GMOs, gluten, pesticides, and soy
- A balanced source of health, energy, and longevity
- Unique composition: **63.5% fulvic acids**
  (Most global analogues contain no more than 40%)

Who HumiCell Is Suitable For

- Adults and children
- Elderly individuals
- Women planning pregnancy
- Pregnant women
- Breastfeeding mothers

Effects of the HumiCell Humic Complex

Digestive System Support

Normalizes stomach and intestinal microbiota, improves metabolism, and enhances the absorption of macro- and micronutrients.

Increased Energy and Endurance

Boosts vitality and endurance, improves physical activity, and promotes faster recovery.

Detoxification

Acts as a natural hepatoprotector that enhances liver detoxification and reduces oxidative stress.

Immune System Support

Helps the body cope with illnesses, allergic reactions, and stress.

Improved Cognitive Function

Supports better sleep, memory, attention, and concentration.

Positive Effects on Skin and Hair

Penetrates deep layers of skin and hair, helping retain moisture and prevent dehydration.

Customer Feedback on HumiCell

Users report that it:

- Normalizes sleep and bowel function
- Stabilizes blood sugar levels
- Increases energy and improves digestion
- Strengthens immunity and improves skin condition
- Helps eliminate digestive problems and accelerates wound healing
- Reduces symptoms of colds and viral infections
- Improves skin and hair condition and helps reduce acne

What Is HumiCell (Briefly)

HumiCell is a natural dietary supplement based on humic substances and kombucha with a very high concentration of fulvic acids — **63.5%**, which is significantly higher than most analogues.

Key Active Components

- Fulvic acids
- Humic acids
- Kombucha metabolites (organic acids, enzymes, postbiotics)

How the Product Works Step by Step

At the Digestive Level (First Contact)

After ingestion, HumiCell is not digested like ordinary food but acts as a **bioactive matrix**.

What happens:

- Fulvic acids have very small molecular sizes
- They easily pass through the intestinal mucosa
- They bind toxins, heavy metal salts, and decomposition products

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- They improve the intestinal microbiota

Result:

- A cleaner intestinal environment
- Reduced inflammation
- Improved nutrient absorption

Transport of Trace Elements

Fulvic acids act as **biological transporters**.

At the molecular level:

- Fulvic acids form chelated complexes with minerals (Mg, Zn, Fe, Ca, etc.)
- These complexes are recognized by cellular membranes
- Minerals can more easily enter the cell

Unlike many supplements, micronutrients **reach the cells rather than being lost in the gastrointestinal tract**.

Cellular-Level Action (Most Important)

Cell Membrane

Fulvic acids:

- Increase membrane permeability
- Improve ion exchange (Na^+ / K^+ / Ca^{2+})

As a result, cells “breathe” and receive nutrients more effectively.

Mitochondria (Cellular Energy Centers)

Fulvic acids:

- Reduce oxidative stress
- Improve the efficiency of the respiratory chain
- Increase ATP production

Result:

- Increased energy
- Improved endurance
- Faster recovery

Antioxidant Protection

Humic and fulvic acids:

- Bind free radicals
- Reduce DNA damage
- Protect cellular proteins and lipids

This contributes to slowing aging processes and protecting organs.

Detoxification (Liver and Blood)

HumiCell acts as a **natural sorbent** but in a gentle way:

- Does not remove beneficial nutrients
- Enhances liver enzyme systems
- Reduces toxic load

This supports liver health and reduces intoxication.

Immune System

At the cellular level:

- Improves macrophage function
- Normalizes immune cell responses
- Reduces hypersensitivity reactions (allergies)

The immune system becomes **balanced rather than overactive**.

Skin, Hair, and Tissue Regeneration

Fulvic acids:

- Help retain water at the cellular level
- Improve nutrition of fibroblasts
- Accelerate tissue regeneration

This results in:

- Improved skin condition
- Reduced breakouts
- Faster recovery from tissue damage

Why the Effect Is Systemic

HumiCell is:

- Not a hormone
- Not a stimulant
- Not a symptom suppressor

Instead, it **improves the fundamental functioning of cells**.
When cells function properly, the entire body begins to recover and rebalance.

Important

- The effect is **cumulative**
- Best taken in **courses**
- Suitable for adults, children, elderly individuals, pregnant women, and breastfeeding mothers (according to the presentation)