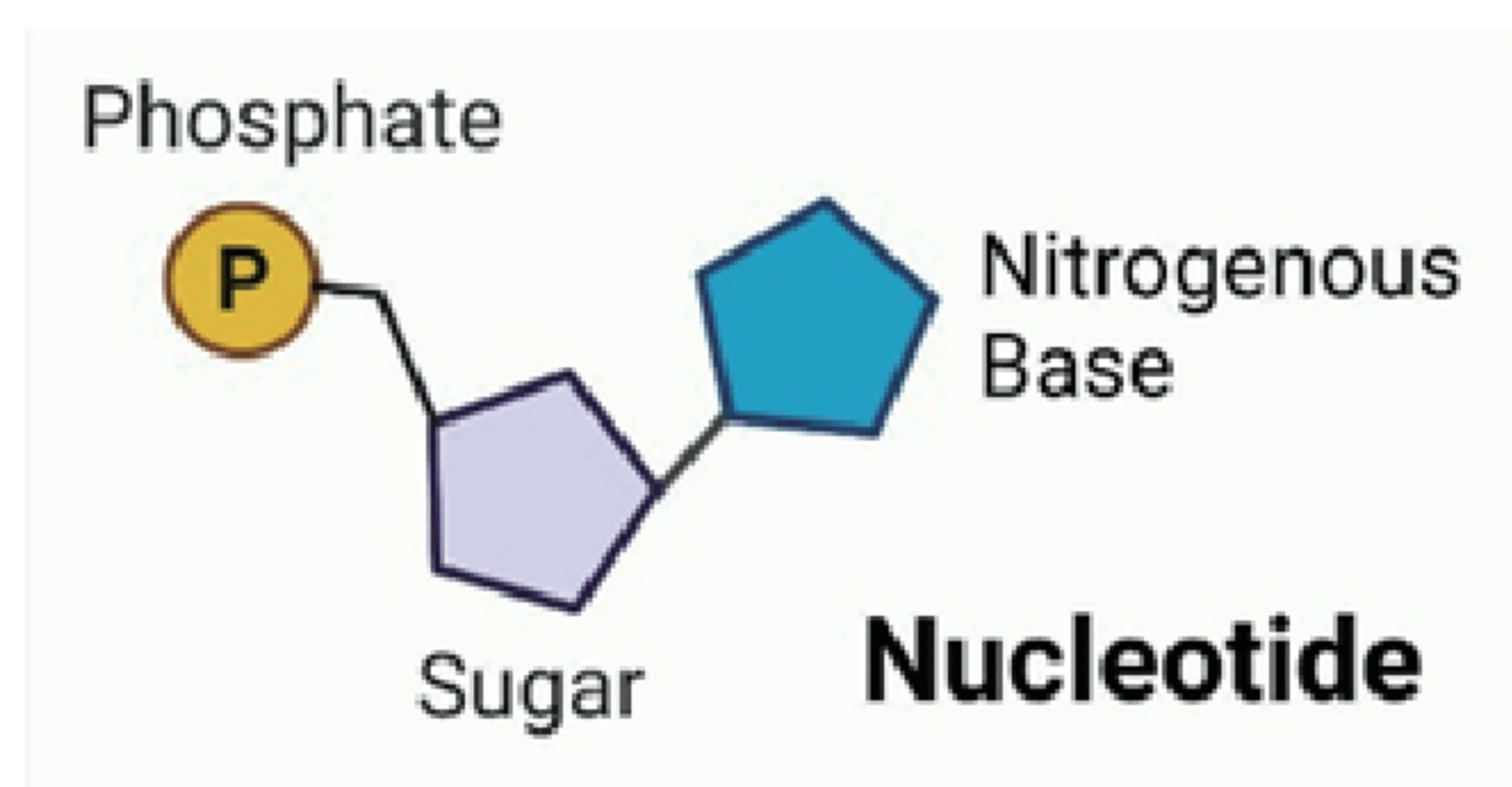


# Nutaplex

## Super Nucleotide Nanoparticle

Nucleotides are abundant in all living organisms and play a crucial role in supporting important processes involved in storing and transmitting genetic information in cells. They help facilitate the transmission and expression of information necessary for cellular functions, both inside and outside the cell nucleus, and ultimately promote the transfer of genetic information to the next generation. Nucleic acids, including deoxyribonucleic acid (DNA) and ribonucleic acid (RNA), which are constantly damaged by stress, toxins, and malnutrition, produce enzymes and hormones that sustain life. When these nucleic acids are damaged, normal enzymes and hormones cannot be produced, leading to abnormal levels of inflammation, cellular failure, and tumors. Nutaplex is an innovative nucleotide supplement extracted from both animals and plants and designed to support healthy nucleic acids, such as DNA and RNA, which are made up of nucleotides. This supplement also promotes natural processes that address damaged genetic material, including DNA, RNA, and modified histones, which are nuclear proteins, thereby aiding normal gene activity.

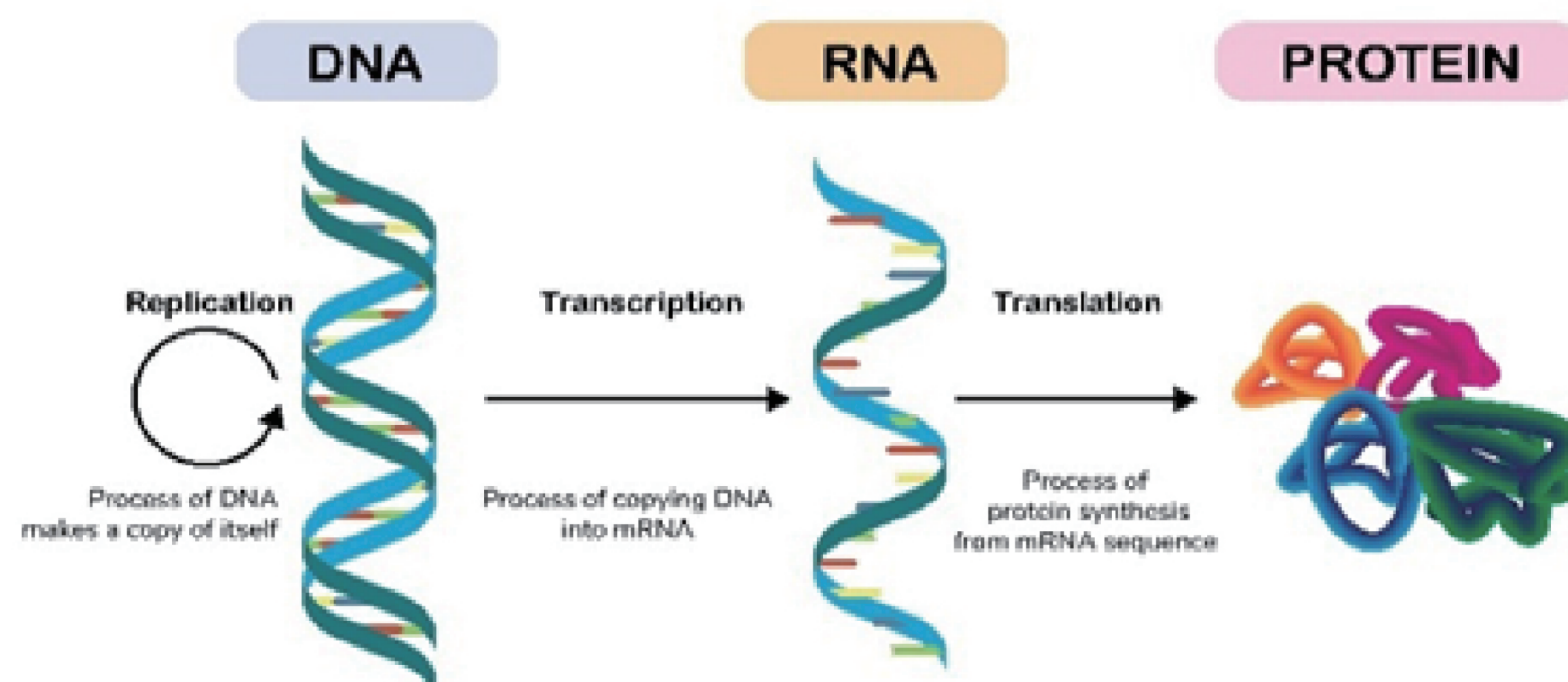


### **\*\*Nucleotide**

A nucleotide is composed of a nitrogen-containing base (adenine, guanine, thymine, and cytosine in DNA, and adenine, guanine, uracil, and cytosine in RNA), a phosphate group, and a sugar molecule (deoxyribose in DNA, and ribose in RNA). DNA and RNA are polymers consisting of many nucleotides.

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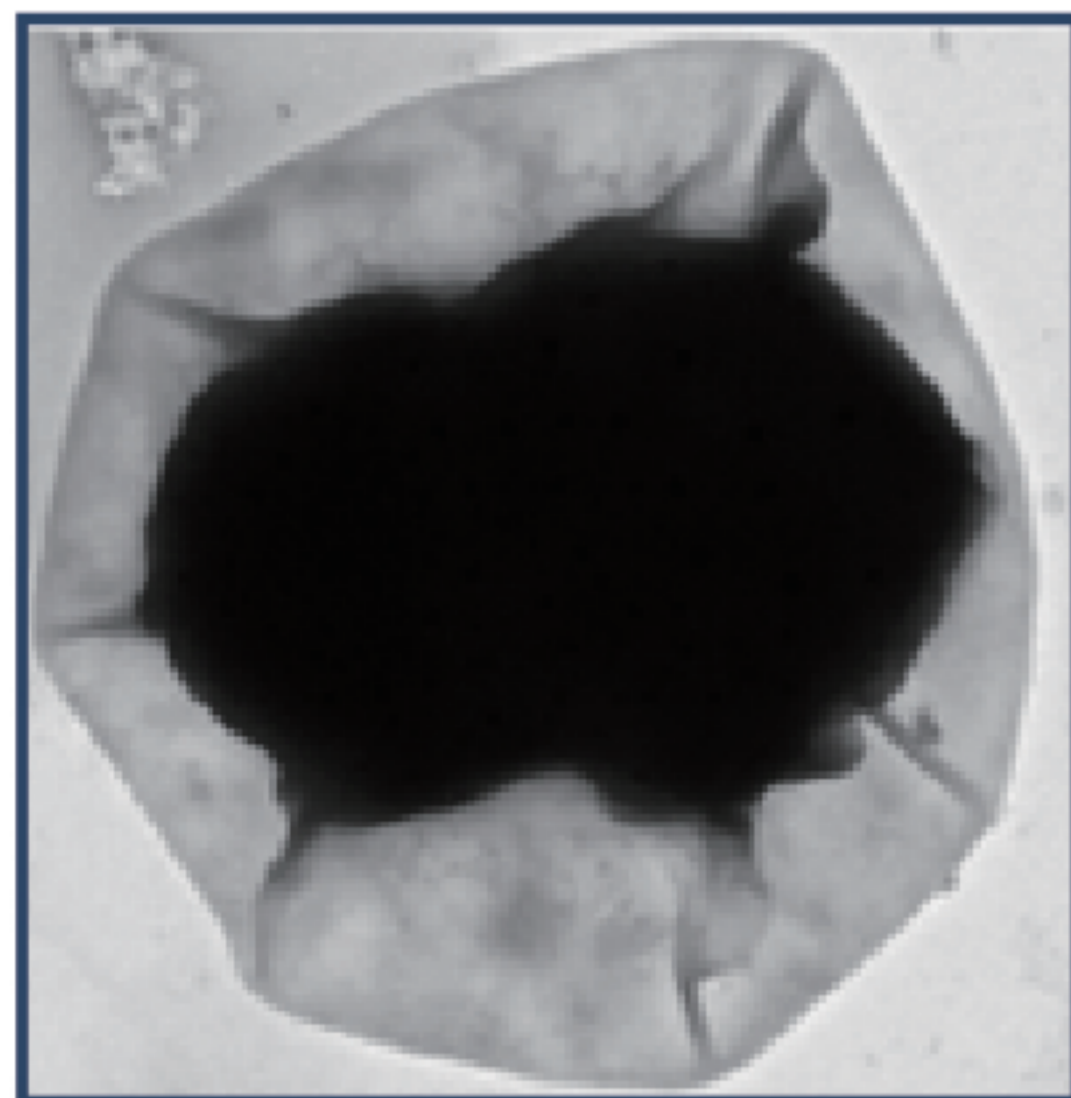
## Central Dogma



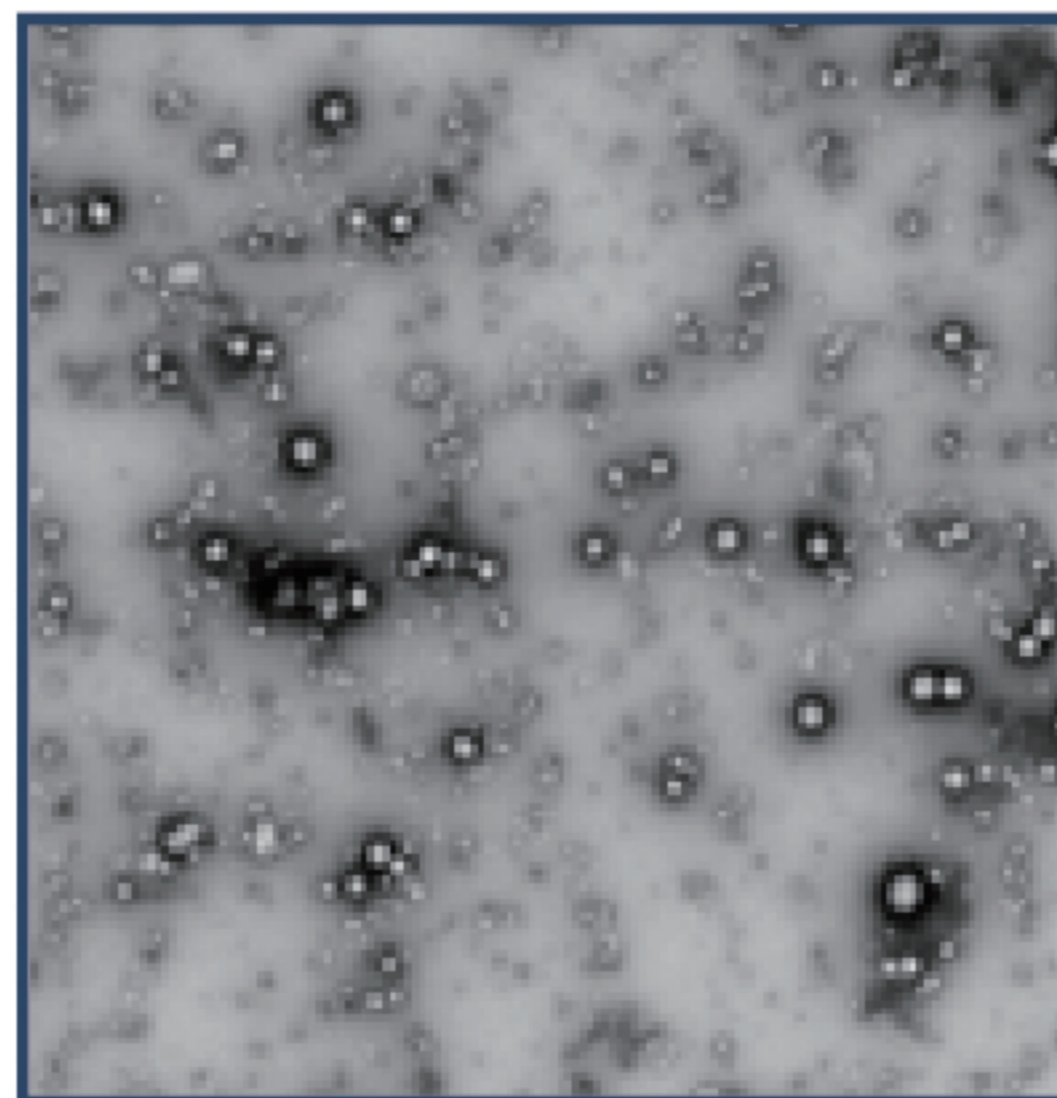
## Key Ingredients

### Nucleotide Nanonanoparticle (NNNP):

NNNP is a highly beneficial gene-targeting nutrient mainly sourced from chlorella, spirulina, barley sprout, and salmon milt. NNNP refers to a nucleotide complex that has been transformed into nanoparticles. The primary components of this complex are DNA, RNA, histones, and chlorophyll, which are reduced to nano-sized particles using a unique particle collision device. Typically, the cell walls of single cells and plant powders are not dissolved by digestive enzymes, meaning the nucleotides contained in the cell walls are minimally absorbed into the blood from the small intestine and are instead excreted from the body. However, NNNP, through nanoparticle transformation by a particle collision device, becomes an active nucleotide with maximized bioavailability, enabling rapid absorption in the small intestine.



◀ **Chlorella**  
10um



◀ **Nano-sized Chlorella**  
100nm

## Key Materials

### Nano-sized Chlorella

Chlorella is a type of green algae with spherical cells about 2 to 10  $\mu\text{m}$  in diameter. It photosynthesizes with high efficiency and has a hard, indigestible cell wall. This nano-scale chlorella, however, is quickly absorbed from the small intestine into the blood vessels, regardless of digestive enzymes. It also has a unique lipopolysaccharide on its cell surface that contributes to its immune-strengthening and immune-influencing properties.

### Nano-sized Spirulina

Spirulina is a type of cyanobacteria, recognized as the oldest living organism discovered to date. It has gained noteworthy attention as a health food due to its rich content of essential human nutrients, including protein, and its potent antioxidant activity. Spirulina has been introduced as a health food by the World Health Organization (WHO) and has been designated as a superfood by NASA.

### Nano-sized Barley Sprout

Barley sprout refers to the young leaves of barley, approximately 10 days after germination. At this stage, the leaves are the most energy-rich and contain substantial amounts of DNA, RNA, histones, chlorella, and vitamins.

### Salmon Milt

Nucleotides (DNA and RNA) are present in the cells of all living organisms, including plants. Nucleotides extracted from salmon milt have a base composition that is most similar to the nucleic acids (DNA and RNA) biosynthesized in the human liver and kidneys.

## Details

Nutaplex is available in the following form and serving:

	Capsule
<b>Suggested use</b>	Take 2 capsules 2 times a day with water.
<b>Packaging unit</b>	120 capsules $\times$ 2 bottles
<b>Active ingredient amount per serving*</b>	2 capsules NNNP 990 mg

\* Daily Value not established

## Mechanism of Key Ingredients

### ※ Deoxyribonucleic acid (DNA)

DNA is the hereditary material in humans and almost all other organisms. Nearly every cell in a person's body contains the same DNA. The two DNA strands are known as polynucleotides as they are composed of simpler monomeric units called nucleotides. Each nucleotide is composed of one of four nitrogen-containing nucleobases (cytosine [C], guanine [G], adenine [A], or thymine [T]), a sugar called deoxyribose, and a phosphate group. Most DNA is located in the cell nucleus (where it is called nuclear DNA), but a small amount of DNA can also be found in the mitochondria (where it is called mitochondrial DNA or mtDNA). Mitochondria are structures within cells that convert the energy from food into a form that cells can use.

### ※ Ribonucleic acid (RNA)

RNA is a polymeric molecule that is essential for most biological functions, either by performing the function itself (non-coding RNA) or by forming a template for the production of proteins (coding RNA). RNA and DNA are both nucleic acids. RNA is assembled as a chain of nucleotides. Cellular organisms use messenger RNA (mRNA) to convey genetic information, utilizing the nitrogenous bases of guanine (G), uracil (U), adenine (A), and cytosine (C) to direct the synthesis of specific proteins.

### ※ Histone

Histones are the central proteins of a nucleosome, the basic unit of chromatin in biology. They help condense DNA by acting as a winding spool around the DNA chain and play a crucial role in impacting gene activity.

### ※ Chlorophyll

Chlorophyll is a plant pigment that absorbs light energy and converts it into chemical energy in most plants, including the algae protozoa Euglena and some photosynthetic bacteria. Chlorophyll heightens defenses for vital intracellular organelles, such as the nucleus and mitochondria, by targeting free radicals and toxins. When magnesium, a component of chlorophyll, is replaced with iron, it is converted into hemoglobin, which carries oxygen and helps minimize the risk of hypoxia.

## Benefits of Key Ingredients

1	Supports natural gene production and heightens defenses against gene damage <sup>1</sup>
2	Provides building blocks for DNA, RNA, and histones needed to address damaged genes and reinforce healthy genes <sup>2</sup>
3	Promotes optimal metabolism <sup>3</sup>
4	Promotes inflammatory balance and confers antioxidant activity on non-alcoholic liver damage <sup>4</sup>
5	Bolsters liver function <sup>5</sup>
6	Helps delay the signs of aging <sup>6</sup>
7	Aids in the natural cleansing and expulsion of toxins that cause inflammatory damage <sup>7</sup>
8	Supplies oxygen and energy to cells and tissues <sup>8</sup>

## Published Thesis

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### FDA Disclosure

\*These statements have not been evaluated by the Food and Drug Administration. \*This product is not intended to diagnose, treat, cure, or prevent any disease.



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