



## ***Nutri-tidei* . Nucleotide nutritional formula**

The food supplements Nucleotide Nutrition produce contain our exclusive and innovative *Nutri-tidei* nucleotide nutritional formula. This major advance in dietary nutrition ensures the ready availability of nucleotides at the times when the body most requires them.

*Nutri-tidei* contains all 5 nucleotides (from the pyrimidine and purine groups) that are required for the formation of DNA and RNA. The extensive research conducted by Pro Bio $\phi$  scientists and dieticians, has enabled us to formulate *Nutri-tidei* to contain the appropriate relative levels of each nucleotide to

## **Research & development**

Nucleotide Nutrition has a strong commitment to ongoing research & development and the products have been developed following the award of several UK government-awarded research grants. All our products undergo rigorous clinical studies and these are then backed up by health practitioner case studies.

Our customers can already reap the benefits of our continued investment in research and development within the exciting field of nucleotide nutrition and with more great products already in the pipe-line the future looks very healthy indeed!  
complement modern diets.

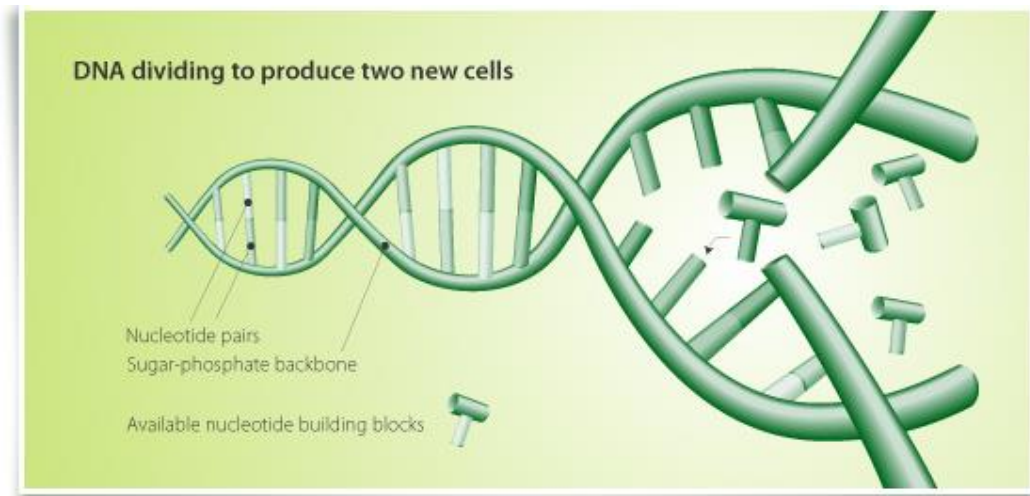
## **Have you heard of nucleotides before?**

If not, you $\phi$  be interested to know that they are in all living organisms. In fact, every cell in your body contains them . over a billion per cell!

There are 5 different nucleotides, and each is comprised of a base, a sugar and a phosphate group. The 5 nucleotides fall into two groups; Pyrimidines (Cytidine  $\mathcal{C}$ q Thymidine  $\mathcal{T}$ q Uridine  $\mathcal{U}$ q), and Purines (Guanosine  $\mathcal{G}$ q Adenosine  $\mathcal{A}$ q).

## What do nucleotides do?

Nucleotides are important for many biological functions, including their role as the building blocks of DNA and RNA.



**DNA**, which you may already be aware of, contains all the genetic information that determines the structure, function and behaviour of each cell in the body. DNA is a double-stranded molecule held together by weak bonds between base pairs of specific nucleotides (see diagram above).

**RNA** is a single-stranded molecule concerned with protein synthesis, and like DNA is found in all living cells.

## Why are nucleotides so important?

The body has an on-going demand for new cell production. Adults must create new cells at a rate at least sufficient to replace the cells that die.

To do this the cell and its DNA divides to form two new cells. This cell proliferation is a lengthy and complicated process, dependant on energy and the supply of all five specific nucleotide building blocks to build the DNA and the RNA molecules in the new cells.

## How does my body make these nucleotides?

The body can make them itself or salvage them from dying cells, whilst certain types of cells require supplementary nucleotides provided in a person's diet.

## Dietary nucleotides are essential for which types of cells?

- Gut lining cells
- Good gut bacteria
- Immune cells
- Red blood cells

The body has a great demand for a rapid turnover of all these types of cells. Many factors, including our lifestyles, state of health, and stress levels will determine how rapidly our body requires these new cells to be produced to keep it healthy and the associated biological processes working efficiently.

### Why should I supplement my diet with nucleotides?

Supplementary nucleotides help the body produce cells rapidly as required during times of stress and when it is challenged by infection or disease. At these times the body's requirement for nucleotides from dietary sources is much greater, and some people's diets could be deficient.

### How does *Nutri-tide* help the body's cells?

Nucleotide Nutrition's exclusive *Nutri-tide* nucleotide nutritional formula supports the cells of the intestinal tract, the gut's good bacteria, and certain immune cells and helps the body's normal maintenance and repair processes.

Adequate availability of nucleotides from the diet is necessary to help to maintain the optimum rate of cell replacement.

### What are nucleotides?

Nucleotides are the building blocks of DNA and RNA. DNA alone consists of 3 billion nucleotides!

Your body must create new cells to continue living. Cell division is an important part of this process. With the help of nucleotides and RNA, a typical cell divides, unzipping the DNA and creating two new cells. For example, in an adult human, millions of cells divide every second just to maintain the body!

### Are nucleotides natural?

Nucleotides are completely natural. Nucleotides are found naturally in certain food groups such as liver, tripe, pate, yeast extract, lean meat, fish and mushrooms.

### Is *Nutri-tide* natural?

The unique highly concentrated powder form of nucleotides in *Nutri-tide* have been extracted from a sustainable source - brewer's yeast. The extraction of the nucleotides from the yeast uses processes that require no organic solvents.

### If I can obtain nucleotides from food sources, why do I need to take this supplement?

Although nucleotides can be found in some food sources, today's diets often mean we do not eat enough of the foods that are rich in nucleotides such as offal and tripe. In the 1950s it was traditional to find such food types on the nation's dinner tables.

Although our modern diets have become more varied, these foods have slowly moved out of fashion and are sometimes even considered unhealthy. Some people also resort to excluding some foods from their diet.

Nucleotide Nutrition recommends that people consult a professional dietician or nutritionist before deliberately excluding any food group, but understands some food groups may not be appealing.

Our exclusive *Nutri-tide* nutritional formula is a food supplement that not only provides the nutrients missing from most modern diets but actually provides them in a concentrated form allowing the body to build up and maintain its natural levels of defence.

For more independent information on the power of Nucleotides, please visit [www.nucleotides4health.org](http://www.nucleotides4health.org)