



*"We are the bearers of the desires of Nature.  
As soon as we counteract that, we get the same  
counteraction, and evil leaves its fingerprints. "*  
Peter Dunov

## **LIFESTYLE AND THE GENOTOXIC STRESS**

### *The Seven guardians of energy balance*

#### *Chapter 7:*

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Molecular biology, genetic engineering and other advanced scientific fields in medicine are constantly observing and studying the complex process of genesis of pathogenic processes and diseases in human and other animal organisms. Whatever the cause of various metabolic disorders and severe diseases, in the end, research concludes that it always leads to a physiological condition that can at any time initiate pathogenesis at the cellular level: the generation of high levels of toxic metabolites in the body, or so-called genotoxic stress.

A healthy body is able at any time to neutralize and eliminate these toxic metabolites, and to restore the disturbed balance.

#### **How and when does genotoxic stress appear in our body?**

Most of the activities we perform or do not perform in our daily lives can cause the retention of toxic metabolites in the body. Most often this can happen with: sedentary lifestyle; irregular and unbalanced diet; regular overeating; excessive use of alcohol and cigarettes; stress, negative emotions; regular sleep deprivation; prolonged work with a computer; regular excessive physical and mental strain; in certain hazardous occupations in contact with carcinogenic chemicals or radioactive radiation; regular inhalation of exhaust gases from cars, or residential heating; chronic inflammation that weakens the immune system; excessive use of antibiotics or drugs that suppress the immune system or deplete the body's natural antioxidants, etc.

#### **How do toxic metabolites work?**

The most direct way in which our body gets rid of toxins is through: respiration, liver and kidney function, the excretory system. (p.52) On the other hand, the main sources of toxins are polluted air and water, an unbalanced diet rich in processed foods, fats and meats, the natural processes of digestion and metabolism in the body. (p.64)

Toxic metabolites, with their positive ionic charge, have the properties to: deplete oxygen in cells, disrupt cellular metabolism, deplete natural antioxidants, vitamins and minerals, cause genotoxic conditions of acidosis, alkalosis, hypoxia, dehydration, oxidative stress. (p.60,76,128) When our body systematically generates high levels of toxins, the oxygen in the blood and the natural antioxidants (p.62), which stimulate metabolism and detoxification, are depleted very quickly. An environment is created in which our cells are nourished and purified with increasing difficulty. Toxins begin to be deposited in the soft tissues, bones and lymph. Cholesterol, toxic bile, lactic and uric acid levels in the blood increase. Atherosclerotic plaques begin to accumulate in the blood vessels due to lipid peroxidation of cholesterol. Cellulite and varicose veins are forming. (p.55,57-58,162)

With an irregular lifestyle (pp. 27,47-48,143,165) the natural process of detoxification begins to be disrupted, which is expressed by the appearance of constipation, indigestion, fatigue, tiredness, headaches, insomnia and other unpleasant conditions. It is these conditions that tell us that our body is intoxicated, ie. toxemia has occurred – a contamination of body fluids and tissues. (p.112)

Attempts to control these symptoms of genotoxic stress with various diuretics, sedatives, vasodilators, anti-inflammatory and other drugs, further increase toxicity in the body, and do not in any way affect the causes of these disorders. (p.23,54)

When we systematically fall into this unfavorable physiological status, toxic conditions are created in our body that disrupt the functions of DNA, and hence the inefficiency of the immune system to fight the "challenges". (p.85-87)

In such a toxic biochemical environment, further potentiated by emotional and mental stress, chronic inflammation, viral or bacterial infections, cellular DNA is difficult to maintain normal genetic functions. This is often expressed by the appearance of hormonal imbalance, aging and degeneration of cells and tissues (nerves, bones, skin, hair, organs, etc.). Such processes often drive the mechanisms that activate a particular disease. (p.22,44,61,66,70,80,112,162)

Genotoxic stress in the body is the basis for the development of chronic metabolic disorders, such as: insulin resistance, diabetes, hepatic steatosis, biliary insufficiency, cholestasis, cholelithiasis, psoriasis, gout, cardiovascular disease, arthritis, rheumatoid arthritis -psychiatric disorders, depression, Alzheimer's, onco-hematological neoplasms, etc. (p.190)

### **Effective measures against genotoxic stress**

Prevention is extremely important for health. Prevention does not simply mean guarding against the causes of disease, or applying a set of measures when the disease has come, but acquiring the knowledge, culture and habits to protect us from pathogenic imbalances in the body. Prevention, in the most direct sense of the word, means not only to stay healthy, but also to be able to restore the healthy balance of our body when it is disturbed for one reason or another. (P.86,88)

A major step in prevention of genotoxic stress is:

- **timely management of metabolic disorders**, such as: fatigue, constipation, headache, joint pain, stiffness, bloated abdomen, edema, overweight, lymphatic stagnation, cellulite, etc. (p.47) primarily through: