

# Chapter 8: **Detoxification** and the Twelve circles of the Toxemia

Detoxification is the body's natural ability to cleanse itself of toxins and waste metabolites generated as a result of digestion, metabolism, respiration, movement, tissue and cell regeneration, the action of free radicals (*p.* 60-65), the impact of the environment.

# Our body is constantly self-purifying on 12 different levels:

• At the cellular level of macrophages (*p.83*) - "cleansing" cells located in all specific tissues and organs, including blood cells. Their function is to absorb and assimilate waste products and pathogens, including dead cells.

• From the activity of the liver (*p.104*), which is not only responsible for the metabolism of all nutrients, but also for the transformation of these substances into useful elements for the body. This includes the disposal of their harmful metabolites, including xenobiotics (poisonous toxins), and waste metabolites from the activity of hormones. The liver controls the detoxification of the body through the synthesis and activation of various levels of detoxifying (liver) enzymes that neutralize and break down toxins, including bilirubin from old blood, and also help to remove them effectively through urine, sweat and feces.

• Through the detoxifying functions of gallbladder, (p.108), which supports the synthesis of detoxifying enzymes in the liver, eliminates waste cholesterol, bilirubin and toxic metabolites of bile acids.

• **Through the activity of the spleen**, (*p.121*), which purifies the old blood and stimulates the production of immune cells.

• **Through the lymphatic system**, (*p.84*), where mainly the immune cells circulate, which activate the immune defense when pathogens penetrate or prevent inflammation caused by free radicals, (*p.60*), toxins and poisonous metabolites.

• **Through the small intestines**, (*p.82,115,119*), which during digestion separate the pure from the impure. The small intestine and intestinal flora are most vulnerable to conditions of increased free radical generation stimulated by radiation and even ultraviolet solar radiation. (*p.61*)

• **By inhaled oxygen**, (*p*.45,74,92,132,135), which neutralizes excess acids in the blood, that can upset the pH balance in the body and potentiate the action of free radicals.

• **Through the kidneys**, (*p.95*), which act as a "filter" of the blood. Purify and excrete, through the urine, waste products of metabolism: **nitrogenous** waste from the catabolism of proteins in the form of urea; **uric acid**, which is released during the metabolism of nucleic acids (purines); **creatinine** from daily muscle activity; absorb and neutralize excess **bicarbonate** (*p.*73) formed during respiration and other metabolic activities.

• **Through hemoglobin**, (*p*.92,136,141), which helps to dispose the excess of **carbon dioxide**, (*p*.31,74,127), formed as harmful waste gas, due to the metabolism of fats, carbohydrates and amino acids.

• **Through antioxidants**, (*p.62,82*), which neutralize free radicals and toxins formed as a result of metabolism and other activities (*p.64-65*), or enter the body through the air, water, food, or through the skin.

• **Through the excretory system**, (p.101,139), which removes waste metabolites (excreted through the colon) and fluids (urine, sweat).

• **Through the skin**, (*p.81*), which is the main protective barrier against external contaminants, bacteria and viruses. The skin also neutralizes endogenous (internal) waste products and toxic metabolites, which in state of good circulation and metabolism are excreted through the sweat glands and pores. In slow metabolism, toxins are deposited in the deep fatty layers of the epidermis and form cellulite cells. (*p.29,55,57-58,149*)

## SIGNS OF DISTURBED NATURAL DETOXIFICATION IN THE BODY:

- impaired and insufficient bowel movements, constipation, diarrhea, hemorrhoids,
- accumulation of excess rings and fat (especially in the abdomen),
- gastrointestinal upset, bloated stomach, heaviness, heartburn,
- swelling in the limbs, heavy and swollen feet, painful and hard calves,
- appearance of cellulite, orange and hard skin in the thighs and hips,
- occurrence of systemic pain in the joints, back, neck and lower back (appearance of spikes)
  - frequent headache, irritability, fatigue, tiredness, depression.

#### Sources of pollutants and toxic metabolites in the body:

When waste products, that should present in trace quantities or should to completely absent in our blood, start depositing in our body, then occurs a state of contamination called toxemia.

This process begins to develop almost imperceptibly, but it is always associated with fatigue, tiredness and irritation. Toxemia can be caused by various causes that disrupt the natural process of detoxification:

• destructive emotions and demotivation; (*p*.12,21,33,47-48,57-58,112,148,159)

• chemicals that come with the food, water and cosmetics we use every day;

• sedentary, irregular or stressful lifestyle, which disrupts the natural rhythm of our body and potentiates the production of free radicals and toxins; (*p.64-65*)

• systemic overeating and excessive alcohol consumption, which cause stagnation of splenic energy (*p.121*) and impair liver function; (*p.104*)

- systemic intake of drugs that produce huge amounts of toxic waste during their metabolism;
- unbalanced or toxic diet. (*p*.79,127,160,143,165)

### **INTOXICATION or DAMAGE FROM IGNORANCE**

Intoxication is a gradual poisoning, causing fatal damage to the body, mind and psyche.

When we strive to restore our healthy balance, we tend to resort to a variety of methods, which we also decide to apply simultaneously, with the idea that the more, the safer and faster we will achieve the desired result. For example, while we are under medication, we decide to "support" it with miraculous herbs and supplements, without reading the leaflets and getting acquainted with the action of the drugs and substances we take. Another time we decide to make "detoxification of our body" and miss the fact that purification regimens, starvation, diets and methods of "melting fat" release a huge amount of toxins into the blood. Most toxins, including metabolites of: toxic bile, drugs, steroid hormones (including sex and emotional those) are eliminated by a detoxifying enzyme (CYP3A4) produced by the liver. Most drugs use this enzyme to have their intended physiological effect. Also, some herbs, spices and fruits have a blocking or activating effect on the receptors for this same enzyme, leaving the toxins circulating in the blood for a long time and being adsorbed into adipose tissue, colon, lymph and liver. Widely used medicines, spices, vitamins, supplements and harmless herbs can play a bad joke on us when we apply them uninformed and in inappropriate combinations with treatments or diets: black pepper, grapefruit, soda, valerian, St. John's wort, milk thistle, nettle, ginkgo biloba, coffee, salt, statins, calcium channel blockers, pills for high: blood pressure, blood sugar, uric acid, fatty vitamins: A, E, D, etc. Inconsistent drug interaction is often defined subjectively as a medical error. We are accustomed to automatically accept and irresponsibly use the given, without trying to know it essence. Thus we allow the Ignorance to nourishes the dark side of our lives and unlock the destructive energy in our bodies. (*p.29,34,62,111,190,193*)

#### Indicators of impaired detoxification and contamination of the body (toxemia)

#### **BLOOD INDICATORS FOR TOXEMIA:**

- high cholesterol over 5.2 mmol / L an indicator of impaired lipid metabolism (p.12,43,111,169)
- high uric acid over 430 μmol / L indicator of toxic / acid-forming diet, impaired daily routine and / or renal function, (p.47-48,53,62,64,74,95-99,127,143,165,169)
- increased bilirubin over 21 μmol / L indicator of increased toxicity in the liver due to obstructed bile ducts (cholestasis), toxic bile, (p.111)
- urea over 8.2 mmol / L an indicator of protein breakdown (muscle tissue); (cmp.34,53,61,73)
- increased creatinine to and above 120 μmol / L an indicator of difficulty in the kidneys to filter (purify) the blood from waste proteins, (p.73,77,95,127)
- elevated **liver enzymes**: alkaline phosphatase, ASAT, ALAT, GGT indicators of hepatotoxicity, often due to increased intake and / or retention of sodium and bicarbonate, impaired biliary and hepatic protection, (p.35,74,79,104-106,109,127,129,131,169)
- other blood indicators for increased toxicity in the body and decreased immune protection: triglycerides, C-reactive protein, lactate dehydrogenase, cortisol, albumin, iron, sodium, chlorides, lymphocytes, leukocytes, neutrophils, etc.(*p*.33,51,63,78,92,111,112,136,190)

When our body is attacked by so many toxic sources, and if we do not pay attention to this process of pollution, its natural ability to self-purify begins to slow down. (*p.* 55) With the further cyclicity of toxemia, diseases arise. Toxemia is associated primarily with the unlocking of destructive energy, which has different characteristic manifestations during different seasonal months. (*p.*21,57-58,94)