

EXCERPTS FROM:

PATHOLOGY AND NUTRITION

...A Guide for Professionals

written by...

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General therapeutic approach to disease:

As a rule of thumb, every time when you approach therapeutically an imbalance or a disease, please keep in mind that, ideally, you should take into consideration the following:

- Assess the individual, not the imbalance or disease;
- When you design a nutritional protocol, take into consideration all the factors that may have contributed to the apparition of the imbalance/disease, not only the etiologic factors (for example, acne is a skin infection, etiologically speaking, but the condition will be much worse when the client is exposed to stress or when the liver does not function properly);
- Do your best to approach the condition from two points of view: apply the proper protocol for the given condition and support the body at the same time (of course that vitamin C in increased dosage is very beneficial for the immune system, but if your client goes through stress at the same time, you will do well to remember to take care of his/her nervous system as well);
- Always begin with a general cleanse: *liver* (to make sure that toxins are being eliminated from the body), *digestive system* (to ensure proper nutrient digestion and absorption) and *blood* (metabolized toxins are being released in the blood stream);
- If your client is going through stress and/or they are suffering from a chronic disease, keep in mind *Adrenal support*;
- Approach your client from three points of view: *diet* (after all, you are nutritionists... who knows better than you?), *supplementation* and *other approaches* (stress management, exercise, meditation, support groups, walks in the park, etc.);

Try to respect the *Basic principles* of nutritional protocols:

1. **Synergy** of nutrients (vitamin C benefits from the presence of bioflavonoids);
2. **Completeness** (apply the correct dosages according to your client's needs);
3. **Biochemical individuality** (diabetes requires a certain nutritional protocol, that may be different from the one you apply for Rheumatoid Arthritis);
4. **Lifestyle dynamics** (you will need more antioxidants if you live in a polluted city as opposed to what you would need if you lived far away, where the air is very clean!);
5. **Precision** (apply the correct dosages taking into consideration toxicity and side effects)
6. **Physiological dynamics** (you will need a certain amount of proteins if you are a body builder that you would not need if you lead a sedentary life).

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EXCERPTS FROM CHAPTERS:

▣ CHAPTER 1: THE CELL AND THE CELLULAR ENVIRONMENT

Pathology is the study (from the Greek word “*logos*”) of suffering (*pathos*). It is actually a science that links the human physiological processes with the clinical practice and with the changes responsible for various diseases that occur at cellular, tissue and organ level.

The science of Pathology is divided into two main categories:

- *General pathology*, which studies the basic, general reactions of cells and tissues to various abnormal stimulations (i.e.: inflammation, cell death, free radical injury, etc.);

- *Special pathology*, which studies the reactions of specialized tissues and organs to various abnormal stimulations (specific disease processes: pneumonia, myocardial infarction, etc.).

A **disease process** will always be approached from four points of view:

1. **Etiology** (cause) of disease
 - Intrinsic (genetic)
 - Acquired (infectious, nutritional, mechanical, chemical, environmental, etc)
2. **Pathogenesis** (description of the pathological mechanisms responsible for the occurrence of disease)
3. **Morphologic changes** (the structural modifications at cellular, tissue and organ level)
4. **Clinical aspect** (the functional consequences of the structural modifications)

Definitions and terminology:

- **Homeostasis:** a tendency to balance, stability in the physiological processes;
- **Hypertrophy:** enlargement of an organ or part due to increase in size of its cells;
- **Atrophy:** decrease in size of cells;
- **Hyperplasia:** increase in cell number;
- **Dysplasia:** abnormal changes in the size and shape of cells;
- **Acute:** severe symptoms and a short course;
- **Chronic:** lasting for a long time (weeks, months);
- **Symptoms:** subjective evidence, as perceived by a person (headache, abdominal pain);
- **Sign:** objective, noticeable and /or measurable evidence pertaining to a person's status (rash, fever);
- **Onset:** beginning, debut;
- **Syndrome:** a set of symptoms occurring together, co-existing;
- **Generalized (systemic):** applied to the whole body;
- **Localized (organic):** applied to a specific organ/part;
- **Prophylaxis:** prevention;
- **Maintenance:** preserving what has been achieved.

▣ CHAPTER 9: THE LIVER AND THE BILIARY TRACT

LIVER DETOXIFICATION: PRINCIPLES AND PROTOCOLS

1. The first step in liver detoxification approach is to **remove dietary, environmental and lifestyle stressors** (as much as possible; by stressors we mean alcohol, coffee, smoking, environmental toxins, etc.); we can recommend the best foods and supplemental measures, but if the body continues to be bombarded with toxins, then there is not much that we can achieve.

2. The second step is to **improve the diet**; avoid all liver dietary stressors, and increase intake of fruits, vegetables, legumes, fish and nuts; do not forget increased water intake; do use the foods that have been listed above under Liver Support.
3. While you are working along with your client on steps number 1 and 2, employ a very simple and effective method: **lemon water cleanse**. Use a glass of pure, room temperature water in which you squeeze a few drops of fresh lemon juice (lime juice is as good). Drink it first thing in the morning. Wait for 30 minutes before you eat or drink anything else. Do not take any vitamins or other pills with your lemon water, and do not squeeze the lemon in fruit juice (as the liver will start working on that instead of detoxifying). The reason behind this cleanse is that the liver accumulates toxins in bile overnight, and the lemon juice stimulates gall bladder contractions, allowing the bile to flow into the duodenum. Do start your cleanse with only a few drops of lemon. If the liver is even slightly overloaded, you may end up having “side effects of detoxification”. If everything goes well for 3-4 days, you can add more lemon drops to your daily lemon water. The final quantity varies with the person’s tolerance.
4. **Dandelion root tea** greatly supports liver detoxification. Have a cup a tea everyday. Dandelion leaf tea will support the kidneys detoxification. **Milk thistle tea** is very helpful in regeneration of the liver tissue.

5. **Supplements:**

- Good multivitamin and mineral formula, as prescribed;
- Vitamin B complex, 50 mg/day;
- Vitamin C with bioflavonoids 1-2 g/day;
- Vitamin E 400 IU/day.

6. **Other measures:**

- **Fasts** are frequently used by people who wish to detoxify; there are many types of fasts, from water fasts, to juice fasts, to combinations of juices and vegetables fasts, and so on; they are very helpful, but keep in mind that every client is different and apply your approach to the case (a hypoglycemia case should not fast, for example). Even short termed fasts are helpful (some people do it for a half a day only);
- **Lymphatic drainage**, by rubbing vigorously the outside of the thighs (helps drainage from the large intestine); rubbing the inside of the thigh will stimulate the drainage of small intestine;
- Epsom **salts** or sea salt and baking soda baths are helpful for detoxification.

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■ CHAPTER 16: CARDIO-VASCULAR DISORDERS

Common symptoms/signs:

- pallor (pale skin and mucus membranes);
- cyanosis (blue colour of the mucus membranes);
- shortness of breath;
- tachycardia (fast heart beat);
- bradycardia (low heart rhythm);
- heart palpitations;
- chest pain;
- claudication (leg pain because of lack of oxygen supply to the leg muscles).

ASSESSMENT OF THE CARDIO-VASCULAR FUNCTION

MEDICAL ASSESSMENT	NUTRITIONAL ASSESSMENT
<ol style="list-style-type: none"> 1. Clinical aspect: based on symptoms/signs; 2. Physical examination: will include heart assessment from the heart sounds point of view; manually palpated pulse; also measures heart dimensions; 3. Laboratory testing: of cholesterol, LDL, HDL, Lipoprotein (a), Fibrinogen (coagulation factor), homocysteine; 4. X-ray: to assess heart's dimensions; 5. Phonocardiogram: to assess heart sounds; 6. EKG (Electrocardiogram): registers the electrical activity of the heart; 7. Echocardiogram: assessment of the strength of heart contraction (ejection fraction); assessment of heart chambers; 8. Stress testing: assessment of cardiac activity upon stress/exercise; 	<ol style="list-style-type: none"> 1. Nutritional status assessment based on the symptoms/signs mentioned above; 2. Liver function, as liver is responsible for lipid metabolism and transport; 3. Digestive system assessment: to identify possible causes of malnutrition/maldigestion, which will greatly impede the cardiovascular health, by depletion; 4. Free radical status assessment (as in exposure and antioxidant status); 5. Immune system assessment, as a weak immune system will not be able to deal with circulating toxins and harmful substances, rendering the possibility of free radical damage; 6. Stress levels assessment, as stress is a leading risk factor of cardiovascular diseases; 7. Adrenal gland assessment, as the adrenal gland is the one that reacts in stressful situations;

MEDICAL ASSESSMENT	NUTRITIONAL ASSESSMENT
<p>9. Doppler studies (echogram of the blood vessels): to assess the health of the blood vessels and eventual presence of obstacles in the vascular tree;</p> <p>10. Angiography: introduces a contrast substance intravenously, then an X-ray is being taken that allows the view of all blood vessels already filled with the contrast substance.</p>	<p>8. Chronic diseases presence; which constitutes a risk factor in themselves, because of the stress level that accompanies them;</p> <p>9. Presence of diabetes: refer to Diabetes and the role of glycosylation in the debut of cardiovascular disease;</p> <p>10. Assessment of physical activity level, as physical inactivity is a risk factor for cardiovascular disease.</p>

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▣ CHAPTER 19: GYNECOLOGY

ENDOMETRIOSIS

* *endometrial tissue migration outside of the uterus*; usually located in the pelvic cavity, along abdominal organs, on the pelvic floor and on the ovaries

Etiology: much discussed, but still in theory form:

- Weak immune system with a tendency towards autoimmunity (do assess food sensitivity in this context);
- Retrograde bleeding from vagina into the fallopian tubes and then in the pelvic cavity (the “Retrograde menstruation theory”);
- Embryonic defect;
- Environmental toxins exposure;
- Emotional aspect.

Clinical aspect:

- Pelvic pain, severe, may be cyclic or constant;
- Dyspareunia; (pain with intercourse)
- Dysmenorrhea; (pain with menstruation)
- Pain with bowel movement;
- Pain with urination;
- Pain on movement.

Diagnosis: these cases undergo multiple diagnosis procedures, starting with physical examination, ultrasound, which is not very helpful and ultimately, laparoscopy (the surgical opening of the abdomino-pelvic cavity) which proves the presence of endometriosis, often as “*chocolate cysts*” (dark cysts with blood).

Note: endometriosis is one of the main causes of infertility

Nutrition and holistic approach:

- Employ all measures under estrogen dominance, as it seems that endometriosis is one of the conditions that mirrors it;
- Increase fish and nuts intake for their anti-inflammatory effect;
- Seafoods and sea vegetables are rich in iodine, which seems to protect against endometriosis.

Supplements:

- Vitamin C 2-4 g/day, as it improves the vessel wall and protects against environmental toxins;
- Beta carotenes 25000-50000 IU/day, as they are vitamin A precursors and support the health of the mucus membranes;
- Vitamin E, 400 IU/day, as it inhibits the arachidonic acid formation;
- Evening Primrose Oil, 500 mg three times a day or flax seed oil, 1-2 tablespoons/day, for their anti-inflammatory effects;
- Vitamin B complex, 50 mg/day, as it benefits hormone balancing and supports the liver;
- Bromelain and papain, as they are anti-inflammatory and break down scar tissue (being enzymes);

Other measures:

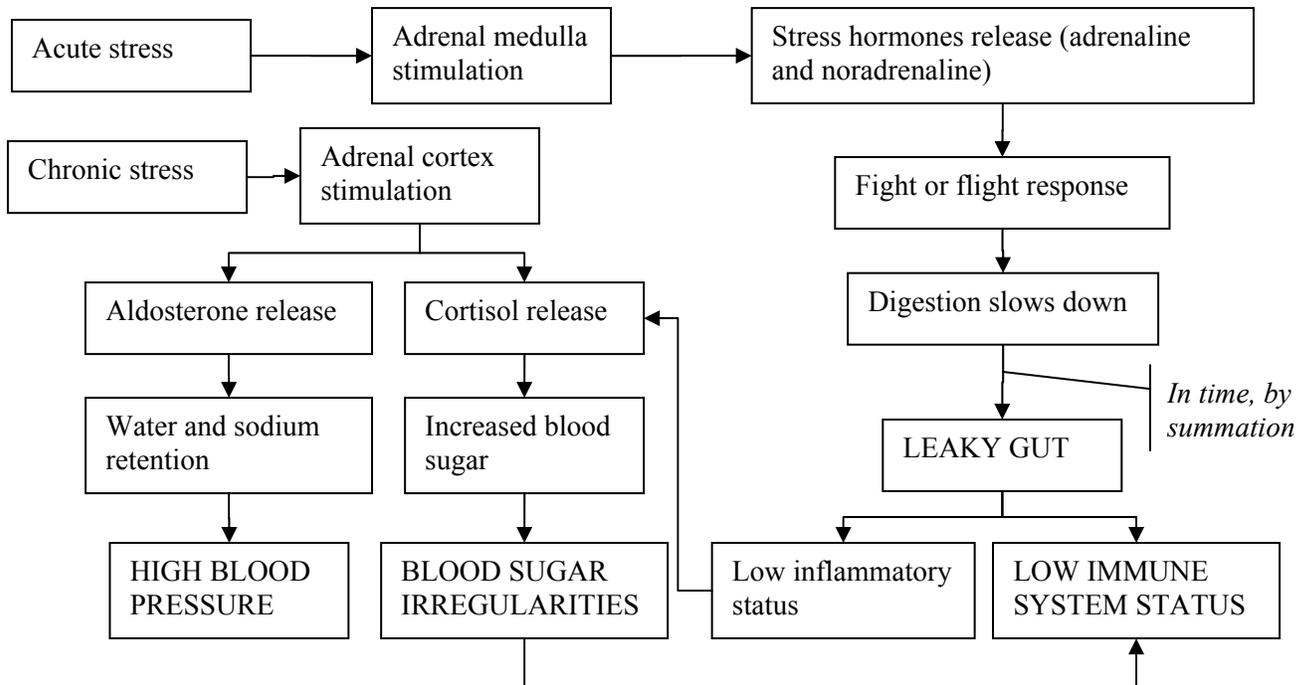
- Cramp bark diminishes the pain; Chaste tree helps balancing hormones;
- Valerian is relaxing and antispasmodic; so is motherwort;
- Shepherd's purse may help diminish the bleeding; Dandelion root is a very good liver detoxifier;
- Natural progesterone cream, as prescribed;
- Castor oil packs may help diminish the pain.

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▣ CHAPTER 13: THE ENDOCRINE SYSTEM

◆ ADRENAL GLAND DISORDERS

Let us take a look at the pathophysiology of the adrenal gland. Whereas the adrenal medulla and the adrenal cortex secrete different hormones, certain conditions will over stimulate the entire gland.



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APPENDIX C

VITAMINS DEFICIENCIES, CONTRAINDICATIONS, INTERACTIONS

NUTRIENT	DEFICIENCY	CONTRAINDICATIONS/ TOXICITY	MISCELLANEOUS/ INTERACTIONS
VITAMIN C	Scurvy, delayed wound healing, reduced resistance to infections	High doses can cause diarrhea and abdominal pain	Caution when administered along with blood thinners Alcohol and smoking may decrease levels
THIAMIN(B1)	Beriberi		
RIBOFLAVIN (B2)	Associated with red and burning eyes, glossitis and decreased neurotransmitters function		Alcohol intake decreases absorption; use of antidepressants may increase riboflavin requirements
NIACIN(B3)	Pellagra	Flushing, itching; not present with Niacinamide form; may increase liver enzymes	May increase vasodilation
VITAMIN B5		Possible diarrhea in large	

NUTRIENT	DEFICIENCY	CONTRAINDICATIONS/ TOXICITY	MISCELLANEOUS/ INTERACTIONS
		doses	
VITAMIN B6 (Pyridoxine)	Deficiency contributes to anemia	Doses over 500mg/day can cause peripheral neuropathy!	Large doses will decrease effectiveness of Levodopa; oral contraceptives may increase the need for B6
VITAMIN B12	Pernicious anemia		Colchicines, alcohol, aspirin, may decrease absorption
FOLIC ACID	Megaloblastic anemia	Large doses may promote seizures in epileptics	Large doses impair Phenobarbital absorption; oral contraceptive may affect metabolism
VITAMIN A	Immune impairment, dry skin and hair, eye disorders, impaired growth	Liver damage, bone pain, fissures at mouth corners	BCP may increase absorption
VITAMIN D	Rickets;osteomalacia	Very high doses: hypercalcemia, anorexia, nausea, H/A, depression, calcification of soft tissue, renal failure	BCP may increase absorption; barbiturates may decrease effectiveness
VITAMIN E	Muscle weakness	Nausea, diarrhea	Can potentiate action of blood thinners
VITAMIN K	Osteoporosis, coagulation problems	High doses may produce jaundice in infants	Antagonist of blood thinners

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