

MOSAIC EXCERPTS-VOLUME 1

## NATURAL MEDICINE MOSAIC

### VOLUME 1

#### GENERAL TABLE OF CONTENTS

Preface	iii
General Table of Contents	iv
Table of Contents: Basis of Herbal Therapy <i>-PhytoMedicina: All about Herbs-</i>	1
Table of Contents: Holistic Allergology <i>-The Amazing World of Allergies and Sensitivities-</i>	73
Table of Contents: Pharmacology for the Holistic Practitioner <i>-Meds and more Meds-</i>	111
Glossary	203
Index	214

# *BASIS OF HERBAL THERAPY EXCERPTS*

## Table of Contents

Botanical Medicine: A Brief History	5
Introduction to principles of Herbalism	6
Definitions	6
Principles	6
Routes of administration	7
Storage	7
Over the counter advice	8
Active constituents	8
Terminology in Herbalism	9
Herbal remedies	12
Measurements	12
Infusions	12
Decoctions	12
Tinctures	13
Creams and ointments	13
Poultices	13
Compresses	13
Suppositories	13
Douches	13
Baths	13
Others	14
Steam inhalations	14
Gargles and mouthwashes	14
Essential oils	14
Cold macerations	14
Tonic wines	14
Syrups	14
Most popular herbs	14
Using herbal remedies safely	
Plant families	
Alfalfa	
Aloe Vera	16
Artichoke	17
Astragalus	17
Bearberry	18
Bilberry	18
Black cohosh	18
Burdock	19
Buchu	19

Cayenne	20
Chamomile	21
Chaste tree/ chaste berry	21
Cinnamon	22
Comfrey	22
Corn	23
Cranberry	23
Dandelion	24
Echinacea	24
Eucalyptus	25
Fennel	25
Garlic	26
Gentian	26
Ginger	27
Ginkgo	27
Ginseng	28
Siberian	28
Goldenseal	29
Hawthorne	30
Hops	30
Horse chestnut	31
Kava kava	31
Kelp	32
Lemon balm	32
Licorice	33
Marigold	34
Marshmallow	34
Milk thistle	35
Neem	35
Nettle	35
Oats	36
Onion	37
Parsley	37
Passion flower	38
Pepper	38
Peppermint	39
Psyllium	40
Red clover	40
Rosemary	40
Saw Palmetto	41
Senna	42
Slippery elm	42
St. John's wort	42
Tea tree	43
Thyme	44
Turmeric	44

Valerian	45
Wild yam	45
Witch hazel	46
Yarrow	46
Yellow dock	47
Herbal remedies for common conditions	48
Basis of safe home herbal therapy	48
Dosages	48
Safety precautions	48
Pregnancy	49
Self help herbal shelf	49
Acne and boils	49
Allergic rhinitis	50
Anemia	50
Anxiety, tension	50
Bronchitis	50
Bruising	50
Canker sores	50
Constipation	50
Mild	50
Persistent	50
Depression	50
Digestive system infections	50
Dry cough	50
Eczema	50
Fungal skin infections	50
Gas and bloating	51
Headache	51
Classic	51
Sinus and tension headache	51
Migraine	51
High blood pressure	51
Insomnia	51
Minor bites or stings	51
Muscle aches	51
Nausea and vomiting	51
Nausea	51
Due to emotional distress	51
With headaches	51
Nerve pain (neuralgia)	51
Palpitations	52
Poor circulation-extremities	52
Poor sleep and exhaustion	52
Pregnancy	52
Skin rashes	52

Sprains and strains	52
Stomach ache	52
Stomach acid, high	52
Toothache	52
Urinary infections	52
Wheezing and shortness of breath	53
Wounds	53
Herbs/Nutraceuticals interactions table	53
Effects/properties of nutraceuticals-table	59
Possible medicinal herbs-drug interactions table	60
Recipe booklet	63
Herbal album	64
Bibliography	72
Parts used	

Active constituents

What makes *Chamomile* act on the nervous and digestive systems? Or *Uva ursi* (bearberry) act on the urinary tract? Plants' actions are due to one or more active ingredients, the substance/substances responsible for the benefits (or in some cases, side effects) of a given botanical principle.

Sample fragment:

ACTIVE CONSTITUENTS	MAIN ACTIONS	EXAMPLES	
		ACTIVE INGREDIENT	PLANT
Tannins	Astringents	Witch hazel	
Proanthocyanins <i>Give flowers and fruits a blue, purple or red hue</i>	Antioxidants Free radical scavengers	Blackberries Red grapes Hawthorn	
Coumarins	Blood thinning	Horse chestnut	
Saponins ( <i>they produce lather when placed in water</i> )	Hormonal activity	Wild yam	
	Expectorant	Licorice	
Alkaloids ( mixed group)	Multiple actions	Atropine	Belladonna
Vitamins and minerals	Nutritive	Multiple examples	

\* Extracted from plants to produce essential oils;

\*\* Act as pigments, imparting colors to flowers and fruits;

\*\*\* Found in ALL plants; mucilages and gums soak up large quantities of water, producing a jelly-like mass that protects irritated tissue (skin and mucus membranes).

\*\*\*\*\*

**DECOCTIONS**

Decoctions: similar to infusions, but made from tougher materials: roots, bark, nuts and seeds; longer steeping time;

Place herb in saucepan, ( 20 g dried or 40g fresh) add cold water ( 3 cups/750ml); put on a tight lid; bring to a boil, then turn down and simmer for 10-15 minutes; strain; discard herb; keeps in the refrigerator for two-three days.

\*\*\*\*\*

\*\*

◆ CAYENNE (*Capsicum frutescens*)

*Habitat:* native to the tropical America; now cultivated throughout the tropics; fruit harvested when ripe in the summer and dried in the shade;

*Family:* Solanaceae

*Parts used:* fruit

*Constituents:* oleoresins (*capsaicin*), volatile oils, carotenoids, proteins, Vitamins A and C;

*Actions:*

- Stimulant, tonic;
- Carminative;
- Antispasmodic; rubefacient;
- Antiseptic;
- Diaphoretic;
- Analgesic.

*Uses:*

- Internally; indigestion, gas, colic; prevents infections in the GI tract; gargle for pharyngitis;
- Externally: treatment of diabetic neuropathy, osteoarthritis, neuralgia, post surgical pain, RA.

*Adverse reactions:*

- Lacrimation, burning, sneezing, conjunctival edema;
- GI: discomfort, when using high doses;
- GU: renal dysfunction, when used daily for a prolonged period of time;
- Hepatic: hepatic dysfunction, when used orally on a regular basis;
- Skin: transient erythema, irritation, itching, stinging.

*Contraindications:* pregnancy (possible uterine stimulant effects); hypersensitivity;

*Interactions:*

- Anticoagulant therapy: may increase bleeding, when used concomitant with warfarin or aspirin;
- Sedatives: may cause additive therapeutic effects.

*Notes:*

- Applied to skin, capsaicin desensitizes nerve endings;
- In Mayan culture, cayenne was used as an antimicrobial agent;
- For sore throats, add a pinch to 25ml lemon juice; dilute with hot water, add honey; use as a gargle;
- Add 25 g chopped cayenne to ½ cup oil and simmer; gently massage into rheumatic limbs.

## ◆ CHAMOMILE (*Matricaria recutita*)

*Habitat:* native to Europe; flowers harvested in full bloom, in the summer.

*Family:* Asteraceae

*Parts used:* flower heads;

*Constituents:* volatile oils, flavonoids, bitters, coumarins, tannins;

*Actions:*

- Antiallergic, anti-inflammatory;
- Sedative;
- Antispasmodic;
- Carminative; mild bitter.

*Uses:*

- GI: colic, IBS, hyperacidity, gas, pain, discomfort, digestive mucosa inflammation, hiatus hernia;
- Hayfever, asthma;
- Topically: minor inflammations and irritations; eczema, eye irritation, hemorrhoids ( in sitz bath);
- Great children's remedy!; soothing, calming;

*Adverse reactions:* allergic conjunctivitis, contact dermatitis;

*Contraindications:* may cause hypersensitivity; ragweed allergy; pregnancy and breast feeding;

*Interactions:*

- Anticoagulants; may enhance effects;
- Other drugs: may decrease absorption, due to chamomile's antispasmodic activity in GI tract.

\*\*\*\*\*

## Self help herbal shelf\*

\*For the following, every bullet should read "or"

❖ = OR

### *Acne and boils*

- ❖ Dab 1 drop of tea tree or clove essential oil on the pus-filled head of a boil twice a day;
- ❖ Rub on ½ garlic clove 1-2 times/day;
- ❖ Calendula ointment or tincture applied on the pus-filled area every day;
- ❖ Dab pure lemon juice on the affected area or dilute 1 tsp lemon juice in 1 tbs water and use as skin wash every day;
- ❖ Mix 1tsp slippery elm powder with calendula ointment/tincture, enough to make a smooth paste; place on and around the boil and bandage; remove after 1-2 hours;
- ❖ Internally, infusion of dandelion root and yellow dock root; take 2 cups/day.

### *Allergic rhinitis*

- ❖ Make an infusion with 1/2tsp each Echinacea, marshmallow and thyme, to 2-3 cups of water; drink up to 2 cups/day.

### *Anemia*

- ❖ Infusion of 25g of nettle to 2 cups water; sip it throughout the day;

### *Anxiety and tension*

- ❖ Lemon balm or skullcap infusion; drink up to 3 cups/day;

### *Bronchitis*

- ❖ Mix 5 drops each of eucalyptus and thyme oil with 2 tsp of olive oil; massage over the chest up to twice a day;

\*\*\*\*\*

\*


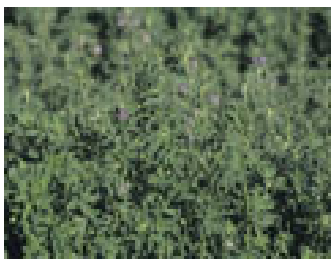

Sample fragment:

<i>Possible Medicinal Herb—Drug Interactions</i>		
HERB	DRUGS	INTERACTIONS
Cascara	Cardiac glycosides	Long-term use of this herb can increase loss of serum potassium;
	Anti-arrhythmic agents	Potentiates the toxicity of cardiac glycosides and anti-arrhythmic agents;
Chamomile	Anticoagulants	May increase the risk of bleeding ;
	Barbiturates and other sedatives	May increase the effects of sedatives ;
	Iron	Chamomile may reduce iron absorption;

\*\*\*\*\*

## HERBAL ALBUM

Sample fragment:

<i>Herbal album</i>		
		
<i>Alfalfa</i>	<i>Alfalfa field</i>	<i>Aloe vera</i>

<i>Herbal album</i>		
		
<i>Aloe vera field</i>	<i>Artichoke</i>	<i>Artichoke</i>

## *HOLISTIC ALLERGOLOGY EXCERPTS*

### *TABLE OF CONTENTS*

The beginning...History of Allergies	76
Classification of Allergists	76
Conventional medicine/Biomedicine presentation	77
Statistics	77
Introduction to elements of the Immune System	77
Lymphatic System	77
Roles of blood cells	79
Body Defense	79
First line of defense	79
Second line of defense	80
Phagocytes	80
Natural Killer cells	81
Complement and Interferon	81
Fever	81
Inflammation	81
The third line of defense	82
Antigens	82
Antibodies	82
Classes of antibodies	83
Cells of the Immune System	83
Macrophages	83
Lymphocytes	84
Summary of immune response	84

Pathology of the Immune System	84
Allergies	85
Introduction	85
Classification of allergens	85
Why me? Heredity and allergies	86
Types of allergic reactions	87
Type 1	87
Mechanism of IgE allergic reaction	87
Anaphylaxis	87
Gastro-intestinal allergy	88
Food allergens	88
Terminology	89
Cross-reactivity	89
Oral allergy syndrome	89
Exercise-induced food allergy	89
Skin allergies	89
Hives	89
Eczema/allergic dermatitis	89
Mucosal/respiratory allergy	90
Hayfever	90
Asthma	90
Type 2	92
Type 3	92
Type 4	93
Allergy testing in conventional medicine	94
Anti-allergic medication	94
Allergy shots	94
Autoimmune disorders	95
Definition	95
Classification	95
Examples-table	95
Immunodeficiencies	96
Definition	96
Classification	96
Allergies and intolerances: alternative medicine presentation	97
Definitions	97
Timing of food sensitivities	97
Causes of an impaired Immune System	98
Ingested allergens	98
Environmental allergens	98
Chemical allergens	99
Others	99
Mechanisms of impaired Immune function	99
Stress	99
Improper nutrition	100
Maldigestion/malabsorption	100

Improper liver function	100
Chronic diseases	100
Thyroid gland abnormalities	100
Psychoneuroimmunology	100
Brief introduction to principles of homeopathy	103
Brief introduction to principles of TCM	103
Brief introduction to principles of muscle testing	104
Holistic allergology testing	104
The cytotoxic test	104
The IgG Elisa test	104
Muscle testing	105
EDS-Electro-dermal screening	105
Auriculo-cardiac reflex	105
Pulse test	105
Food elimination	105
Provocation test	105
NAET	105
Immune system support	105
Lifestyle	105
Nutrition	106
CAM approaches for immune system conditions	106
Food therapy	106
Supplements and other measures	107
Allergic rhinitis/hayfever	107
Asthma	107
Eczema	107
ALLERGIES and SENSITIVITIES: SYNOPSIS OF APPLIED CAM MODALITIES AND APPROACHES	108
Bibliography	109

Sample fragment:

FIRST LINE OF DEFENSE	
INTACT SKIN EPIDERMIS	FORMS MECHANICAL BARRIER PREVENTING PATHOGENS' ENTRY
SKIN SECRETIONS	PERSPIRATION AND SEBUM RENDER SKIN'S SURFACE ACIDIC SEBUM CONTAINS BACTERICIDAL COMPONENTS
KERATIN	PROVIDES RESISTANCE AGAINST ACIDS AND BACTERIAL ENZYMES
INTACT MUCUS MEMBRANES	FORM MECHANICAL BARRIER PREVENTING PATHOGENS' ENTRY

\*\*\*\*\*  
\*\*\*\*

## *Why me? Allergies and Heredity*

You may ask yourself why a person may be very sensitive to a particular allergen, and others are not? What determines the increased production of IgE's in certain individuals? Actually, the determining aspect seems to be heredity. Children of parents with "*allergic terrain*" seem to inherit a predisposition to producing more IgE. If neither parent is allergic, the chance that you will have allergies is about 15%. If one parent is allergic, your risk increases to 30% and if both parents are allergic, your risk is greater than 60%. Having an "*allergic terrain*" does not necessarily mean that you will develop allergies or other immune system disorders; it just mean that, given circumstances and exposure, you may develop allergies. You also will not necessarily inherit the same allergies or the same diseases as your parents.

### *Allergy in a Nutshell*

Allergy involves an exaggerated response of the immune system.  
Allergens are substances that are foreign to the body and can cause an allergic reaction.  
IgE is the allergy antibody.  
Allergies can develop at any age.  
Your risk of developing allergies is related to your parents' allergy history.

\*\*\*\*\*  
*Terminology*

Cross-reactivity: occurrence of allergic reactions to foods that are chemically or otherwise related to foods known to cause allergy in an individual;

Oral allergy syndrome: develops as itching of mouth and throat in people who are highly allergic to environmental allergens upon them consuming, generally melons or apples during their high allergenic season; develops and goes into remission rapidly; unusual form of cross-sensitivity;

Exercise-induced food allergy: starts with an individual consuming a particular food, then soon exercising; body temperature increases, skin itching and lightheadedness develops, followed by characteristic allergic symptoms, such as hives, asthma, and, in rare cases, anaphylactic shock; these individuals should not exercise for two hours after eating;

\*\*\*\*\*  
\*\*\*

## Eczema/Atopic dermatitis

### *Etiology:*

- Subacute and chronic skin allergic reaction, caused by Type 1 hypersensitivity with Histamine release;
- Risk factors: increased family and personal medical history of allergies (may they be skin, asthma, hay fever; children of parents with an allergic terrain stand a high chance to develop allergies themselves, even so they may not develop the same allergy as the parents. For example, an asthmatic mother may have a baby with eczema. The tendency to allergy counts here, not the type or the location of the allergic reaction);
- Zinc deficiency status;
- Affected EFA and Prostaglandin metabolism (which will affect the strength of the cell membrane and also will affect the health of the immune system);
- Dysbiosis, Candidiasis: will create the conditions for Leaky gut and circulating allergens, which will overload the immune system, rendering it more reactive;
- Food sensitivities (by the mechanism described above under Dysbiosis, Candidiasis).

### *Clinical aspect:*

- Itching, vesicles, papules, excoriations, redness, lichenification, dryness (not all signs have to be present in order for eczema to be diagnosed), localized on face, scalp and extensor surfaces in infants and on the face, scalp, neck, flexural surfaces in childhood and adulthood);
- Secondary infection: because of scratching; also, the presence of local lesions decreases the skin resistance to infections (remember, the skin is part of our non specific defense system).

\*\*\*\*\*  
\*\*\*\*\*

▣ Type 3 reactions (Immune complex mediated hypersensitivity): caused by circulating immune complexes that can be deposited in vascular walls or extravascular tissues; they are not organ specific.

### *Mechanism:*

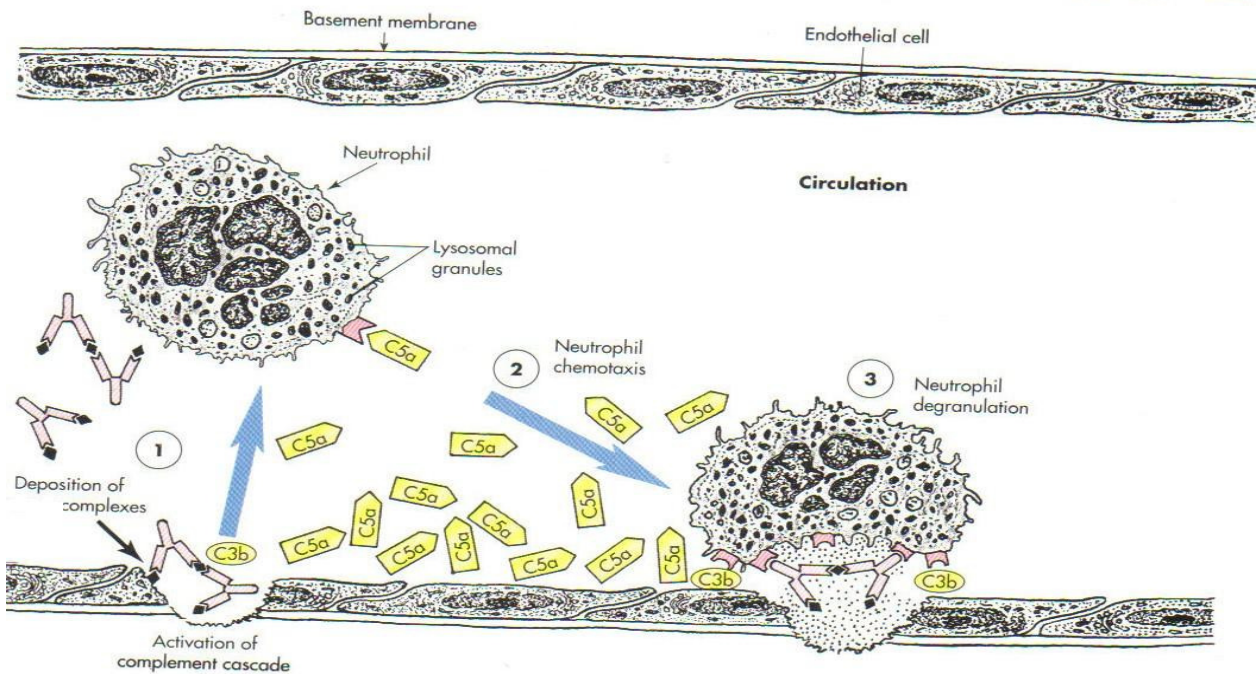


Fig.8.4-p.245- Pathophysiology, third edition; Kathryn L.McCance; Sue E.Huether

Sequence of events:

- Deposition of immune complexes;
- Complement activation with generation of complement fragments with attraction for neutrophils;
- Neutrophils unsuccessful attempt to ingest bound-to tissues immune complexes;
- Release of lysosomal enzymes of neutrophils into the tissue;
- Tissue damage.

**Clinical examples:** rheumatoid arthritis, SLE, glomerulonephritis, etc

\*\*\*\*\*  
\*\*\*

ALLERGY TESTING IN CONVENTIONAL MEDICINE

1. SKIN TESTS

- **Puncture, prick or scratch test (percutaneous).** In this test, which is the type of skin test most commonly performed, tiny drops of purified allergen extracts are pricked or scratched into skin's surface. This test is usually performed to identify allergies to pollen, mold, pet dander, dust mites, foods, insect venom and penicillin.
- **Intradermal test (intracutaneous).** Purified allergen extracts are injected into the skin of arm. This test is usually performed to identify allergies to insect venom or penicillin.
- **Patch test (epicutaneous).** An allergen is applied to a patch, which is then placed on skin. This test is usually performed to identify substances that cause contact

dermatitis. These include latex, medications, fragrances, preservatives, hair dyes, metals and resins.

Note: skin tests are usually performed on forearm for adults and on back for children;

2. BLOOD TESTS

- 2a. Total serum antibodies measurement
- 2b. RAST (Radioallergosorbent test)/ Allergen-specific IgE antibody test
- 3. Food elimination

*Common anti-allergic medications:*

- **Antihistamines** are used to relieve or prevent the symptoms of hay fever and other types of allergy. They work by preventing the effects of histamine;
- **Inhalation corticosteroids** are cortisone-like medicines. They are used to help prevent the symptoms of asthma. When used regularly every day, inhalation corticosteroids decrease the number and severity of asthma attacks. However, they will not relieve an asthma attack that has already started.
- **Adrenergic bronchodilators** are medicines that are breathed in through the mouth to open up the bronchial tubes of the lungs. Some of these medicines are used to treat the symptoms of asthma, chronic bronchitis, emphysema, and other lung diseases, while others are used to prevent the symptoms.

**Others:** Allergy Shots

Allergy shots, also called "*immunotherapy*," are given to increase tolerance to the substances (allergens) that provoke allergy symptoms. They usually are recommended for people who suffer from severe allergies or for those who have allergy symptoms more than 3 months each year. They do not cure allergies, but reduce your sensitivity to certain substances.

\*\*\*\*\*  
\*\*

*SOME AUTOIMMUNE DISORDERS*

Sample fragment:

<i>Autoimmune disorder</i>	<i>Organs/tissues/structures affected</i>
----------------------------	---

<i>Autoimmune disorder</i>	<i>Organs/tissues/structures affected</i>
Ankylosing Spondylitis	Spine; eyes, heart, lungs and kidneys;
Autoimmune hepatitis	Liver;
Autoimmune Hemolytic Anemia	Red blood cells;
Bullous Pemphigoid	Skin basement membrane;
Celiac disease, Crohn's disease, Ulcerative colitis	GI tract;

\*\*\*\*\*

\*

## Causes of an impaired Immune System:

### 1. Ingested allergens

1a. Foods; either the food itself may cause an allergic/intolerance reaction or the culprit may be undigested/improperly digested food particles;

1b. Food additives and /or preservatives and/or hormones; chemical additives may be perceived as “foreign” by your immune system, which will mount an attack against them;

1c. Genetically modified foods; see above, under 1b;

1d. Antinutrients: white flour, white sugar, coffee, alcohol; weaken the immune system by altering the immune system’s responses; for example, increased alcohol consumption decreases white blood cells mobilization to areas where they are needed and increased sugar consumption decreases the destroying power of phagocytes; these effects will modify the immune system’s responses to threats, rendering it less effective; in time, premises for abnormal reactivity are created.

### 2. Environmental exposure

2a. Airborne inhalants: molds, yeasts, grasses, pollens; they can elicit an allergic response, as the immune system considers them “foreign” and mounts an attack against them;

2b. Smoking; tobacco and other substances can be allergens on their own; another aspect is the potential weakening of the immune system with subsequent increased reactivity, due to exposure to smoke;

2c. Hair and/or dandruff- pets; see above, under 2a;

2d. Electro-magnetic fields: cell phones, TV’s, computers, satellite transmissions, working/living near high voltage power lines or electronic equipment etc; pose the risk of weakening of the immune system, thus creating premises for its increased reactivity status;

2e. Acid rain; and other “atmospheric chemicals”; see above, under 2b.

\*\*\*\*\*  
\*\*\*

## Holistic Allergology testing

Alternative medicine practitioners employ a vast array of testing methods for detecting body intolerances. Whereas much disputed by the conventional medicine model, it seems that some of these assessments gained increased popularity.

Most of these holistic assessments are based on principles of homeopathy, TCM and muscle testing. The following is a synopsis of the most common and well known tests:

### ***1. The Cytotoxic Test (Bryan's Test)***

Bryan's Leukocytotoxic test was originally developed in 1956. The basis of the test is that if the patient's white blood cells are mixed with the offending allergen, their size will increase.

### ***2. The IgG ELISA Allergy Test***

This test measures IgG antibodies to various foods which should not be confused with IgE antibody testing in conventional RAST.

### ***3. Muscle Testing***

In this test, the practitioner tests the patients muscle strength when the allergen is placed in a vial in contact with their skin.

### ***4. Electrodermal Screening***

This test was developed by German physician Dr.Reinhold Voll in 1958; it involves measuring electromagnetic conductivity in the body using a galvanometer.

The patient has one electrode placed over an acupuncture point and the other electrode is held while a battery of allergens and chemicals are placed in a metallic honeycomb. A fall in the electromagnetic conductivity or a "disordered reading" measure indicates an 'allergy' or intolerance to that allergen.

## ***PHARMACOLOGY FOR THE HOLISTIC PRACTITIONER EXCERPTS***

### **TABLE OF CONTENTS**

Introduction	117
Terminology	117
Drug administration	118
Drug products	118
Tablets	119
Capsules	119
Powder/liquid forms	119
Enteric coated	119
Modified-release	119
Drug absorption	119
Drug distribution	119
Drug elimination	120
Drug metabolism	120
Interactions	121
Drug-drug interactions	121
Drug-disease interactions	121
Drug-food interactions	121
Drug-supplement interactions	122
Possible medicinal herbs-drugs interactions	125
Adverse reactions	127
Pregnancy and drugs	128
Breast-feeding and drugs	129
Naming drugs	130
Main classes of drugs	130
Drugs and the nervous system	130
Stimulants	130
Opiates	131
Sedatives	131
Antipsychotic drugs	132
Tranquillizers	132
Anti-depressants	133
Anti-anxiety drugs	134
Anti-Parkinson drugs	134
Anti-convulsivants/antiepileptics	134
Drugs and the cardio-vascular system	135
Calcium channel blockers	135
Nitrodilators	135
Beta-blockers	136
Diuretics	136
ACE inhibitors	137
Cardiac glycosides	137
Anticoagulants	137
Statins	138
Drugs and the respiratory system	138
Antiasthmatic drugs	138
Bronchodilators	138

Corticosteroids	138
Antihistaminic drugs	139
Cough medication	139
Drugs and the digestive system	139
H2-antagonists	139
Antacids	140
Antiemetics	140
Anti-diarrhea drugs	140
Laxatives	141
Hormones	141
Growth hormone	141
Thyroid medication	142
Antidiabetic medication	142
Estrogens	143
Progestins	143
Testosterone	143
Antibiotics	144
Penicillins	144
Cephalosporines	144
Tetracyclins	144
Macrolides	145
Others	145
Antivirals	145
Chemotherapy	146
Immuno-supressive medication	147
Anti-inflammatory drugs	147
NSAIDs	147
Non-narcotic analgesics	148
Index of common drugs	148
Acebutolol Hydrochloride ( <i>Sectral</i> )	148
Acetaminophen ( <i>Tylenol</i> )	148
Acyclovir ( <i>Zovirax</i> )	149
Allopurinol	149
Alprazolam ( <i>Xanax</i> )	150
Albuterol ( <i>Ventolin</i> )	150
Alendronate Sodium ( <i>Fosamax</i> )	150
Aminophylline	150
Amitriptyline Hydrochloride	151
Amoxicillin	151
Atenolol	152
Aspirin	152
Azathioprine ( <i>Imuran</i> )	153
Atorvastatin ( <i>Lipitor</i> )	153
Bacitracin	154
Bisacodyl ( <i>Dulcolax</i> )	154

Bismuth Subsalicylate ( <i>Pepto-bismol</i> )	155
Bupropion Hydrochloride ( <i>Wellbutrin</i> )	155
Caffeine	155
Calcitriol	156
Captopril	156
Carbamazepine ( <i>Tegretol</i> )	157
Castor oil	157
Cefaclor	158
Cephalexin ( <i>Keflex</i> )	158
Celecoxib ( <i>Celebrex</i> )	158
Chlorothiazide ( <i>Diuril</i> )	159
Chlorpromazine ( <i>Thorazine</i> )	159
Chlorzoxazone ( <i>Paraflex</i> )	160
Cholestyramine ( <i>Questran</i> )	160
Cimetidine ( <i>Tagamet</i> )	161
Citalopram Hydrobromide ( <i>Celexa</i> )	161
Clarithromycin ( <i>Biaxin</i> )	161
Clemastine Fumarate ( <i>Contac allergy</i> )	162
Clomiphene Citrate ( <i>Clomid</i> )	162
Clotrimazole	162
Codeine	163
Contraceptives, Oral ( <i>Combination Products</i> )	163
Contraceptives, Oral and Injection ( <i>Progestin only</i> )	164
Cortisone	164
Cyclophosphamide	164
Cyclosporine	165
Diazepam ( <i>Valium</i> )	165
Diclofenac Systemic ( <i>Voltaren</i> )	166
Digoxin	167
Diltiazem Hydrochloride	167
Diphenhydramine Hydrochloride ( <i>Benadryl</i> )	168
Dipyridamole ( <i>Persantin</i> )	168
Doxycycline ( <i>Vibramycin</i> )	169
Enalapril Maleate ( <i>Vasotec</i> )	169
Erythromycin	170
Estrogens, Conjugated ( <i>premarin</i> )	170
Famotidine ( <i>Pepcid</i> )	171
Fexofenadine ( <i>Allegra</i> )	171
Fluoxetine Hydrochloride ( <i>Prozac</i> )	172
Furosemide ( <i>Lasix</i> )	172
Glyburide	173
Haloperidol ( <i>Haldol</i> )	173

Hydrochlorothiazide ( <i>HCTZ</i> )	174
Hydrocortisone Systemic ( <i>Cortef</i> )	174
Ibuprofen ( <i>Advil</i> )	175
Indomethacin ( <i>Indocid</i> )	175
Insulin	176
Ipratropium Bromide ( <i>Atrovent</i> )	177
Isoproterenol ( <i>Isuprel</i> )	177
Ketoconazole Oral ( <i>Nizoral</i> )	177
Isotretinoin ( <i>Accutane</i> )	178
Ketorolac ( <i>Toradol</i> )	178
Levodopa	179
Levothyroxine Sodium ( <i>Synthroid</i> )	179
Lithium	179
Loperamide Hydrochloride ( <i>Imodium</i> )	180
Loratadine ( <i>Claritin</i> )	180
Lorazepam ( <i>Ativan</i> )	181
Lovastatin ( <i>Mevacor</i> )	181
Magnesium Citrate	182
Mebendazole ( <i>Vermox</i> )	182
Medroxyprogesterone Acetate ( <i>Depo-provera</i> )	182
Metformin	183
Methotrexate	183
Metronidazole ( <i>Flagyl</i> )	183
Miconazole ( <i>Monistat</i> )	184
Naproxen ( <i>Aleve</i> )	184
Neomycin/Polymyxin B/Bacitracin Topical ( <i>Neosporin</i> )	185
Nifedipine ( <i>Adalat, Procardia</i> )	185
Nitroglycerin	185
Omeprazole ( <i>Prilosec</i> )	186
Oxycodone Hydrochloride ( <i>Roxicodone</i> )	186
Paroxetine Hydrochloride ( <i>Paxil</i> )	186
Phenelzine ( <i>Nardil</i> )	187
Phenobarbital ( <i>Luminal</i> )	188
Phenytoin ( <i>Dilantin</i> )	188
Propranolol Hydrochloride ( <i>Inderal</i> )	189
Pseudoephedrine ( <i>Sudafed</i> )	189
Quinapril ( <i>Accupril</i> )	190
Ranitidine ( <i>Zantac</i> )	190
Risedronate Sodium ( <i>Actonel</i> )	191
Rosiglitazone Maleate ( <i>Avandia</i> )	191
Senna ( <i>Senokot</i> )	191

Tamoxifen Citrate	192
Teophylline	192
Trimethoprim/Sulfamethoxazole ( <i>Bactrim</i> )	192
Venlafaxine ( <i>Effexor</i> )	193
Verapamil Hydrochloride ( <i>Isoptin</i> )	193
Warfarin ( <i>Coumadin</i> )	194
Zidovudine ( <i>AZT</i> )	195
Detoxification	195
Overview of detoxification systems	195
Phases of liver detoxification	196
Nutrients needed for the phases of liver detoxification	196
Maintaining good liver health	197
Liver detoxification: principles and protocols	198
Kidney detoxification herbs	199
Index of trade names	200
Bibliography	202

\*\*\*\*\*

\*\*\*

### *Drug products:*

A *drug product* is the actual dosage form of a drug—a tablet, capsule, suppository, transdermal patch, or solution. It consists of the drug (*active ingredient*) and additives (*inactive ingredients*).

The type and amount of additives and the degree of compression of ingredients affect how quickly the drug disintegrates and is absorbed.

*Tablets:* mixture of drug and diluents, stabilizers, and lubricants, which are granulated and compressed;

*Capsules* consist of drugs and additives within a gelatin shell. The shell swells and releases its contents when it becomes wet;

*Enteric coated:* drug forms designed to bypass the acidic environment of the stomach and open up in the intestines;

*Modified-release, controlled-release:* release their active ingredients slowly or in repeated small amounts over time—usually for a period of 12 hours or more.

NOTE: whereas the active ingredients may be the same in various products, if the inactive ingredients are different, then drugs may have different distribution or different metabolism... This is why is very important to read about the drug form we are using, and not assume that they all behave the same.

## DRUG ABSORPTION

*Definition: the movement of a drug into the bloodstream.*

Absorption affects bioavailability—how quickly and how much of a drug reaches its intended (target) site of action.

*Factors affecting absorption*

- The physiologic characteristics of the person taking the drug (how long the stomach takes to empty, what the acidity (pH) of the stomach is, and the speed of drug moving through the digestive tract);
- The way a drug product is designed and manufactured;
- Its physical and chemical properties;

\*\*\*\*\*

3. Drug-food interactions

*Drug-food interactions are changes in a drug's effects caused by food (including beverages) consumed during the same time period.*

NOTE: drugs/food interactions can be avoided by taking the drug 1 hour before or 2 hours after eating.

Sample fragment:

DRUG	FOOD	INTERACTION
Anticoagulants	Foods high in vitamin K	May reduce the effectiveness of anticoagulants (such as warfarin), increasing the risk of clotting;
Antihistamines Codeine	Alcohol	It increases the sedative effects of these medications;
Acetaminophen NSAIDs	Alcohol	Chronic alcohol use in association with acetaminophen may increase the risk of liver damage or stomach bleeding;
Aluminum-containing antacids	Orange juice	May increase absorption of aluminum;
Corticosteroids	Sodium-rich foods	May cause water retention;
MAO inhibitors	Foods rich in tyramine*	Severe headache and a potentially fatal increase in blood pressure (hypertensive crisis) may be caused by this association;

Sample fragment:

<i>Possible drug and supplements interactions</i>		
Supplement	Drugs	Interactions
Acidophilus	Antibiotics	Antibiotics destroy the “friendly” gut flora;
Activated charcoal	Medication, generally	Activated charcoal can interfere with the absorption or metabolism of various nutrients and medications; take them away from each other;
Alpha-lipoic acid	Antidiabetic medication	May increase potency of anti-diabetic medication;
Antioxidants complex	NSAIDS Anticoagulants	Antioxidant complexes, especially those containing more than 400 IU of vitamin E may increase risk of bleeding;

Sample fragment:

DRUGS/SUBSTANCES WITH POTENTIAL ILL-EFFECT DURING PREGNANCY	
DRUG	EFFECTS
Diazepam (taken late in pregnancy)	May cause newborn’s irritability;
Kanamycin, streptomycin (antibiotics)	Deafness in babies;
Tetracycline	Yellow staining of teeth in babies;

\*\*\*\*\*

## **Antidepressants**

Definition: agents/drug, used to prevent or treat depression.

Action: they increase the amount of serotonin at synapses level.

Categories:

### 1. Monoamine oxidase (MAO) inhibitors

These drugs act on an enzyme that breaks down monoamines such as **noradrenaline** and **serotonin**. By inhibiting the enzyme in presynaptic serotonin-releasing neurons, more serotonin is deposited in the synapse.

Examples: Phenelzine (Nardil);

Tranylcypromine (Parnate);

MAO inhibitors are not used that frequently anymore because association between them and foods rich in tyramine\* (see below) may cause a potentially dangerous hypertensive crisis;

\* *Many cheeses, yogurt, sour cream, cured meats, liver, dried fish, caviar, avocados, bananas, yeast extracts, raisins, sauerkraut, soy sauce, fava beans, red wine, beer, and products containing caffeine;*

## 2. Selective Serotonin Reuptake Inhibitors (SSRIs)

Action: Selective serotonin reuptake inhibitors act only on the neurotransmitter serotonin, facilitating increased serotonin levels at synapse level;

Examples: *escitalopram* (Lexapro) *citalopram* (Celexa), *fluoxetine* (Prozac), *paroxetine* (Paxil) and *sertraline* (Zoloft).

Side effects: dry mouth, nausea, nervousness, insomnia, headache and sexual problems.

Selective serotonin reuptake inhibitors have fewer side effects than tricyclic antidepressants or MAO inhibitors

## 3. Tricyclic Antidepressants

Definition: these drugs block the reuptake of both noradrenaline and serotonin causing an increase in the level of these neurotransmitters at the synapse.

Examples: *amitriptyline* (Elavil), *desipramine* (Norpramin), *imipramine* (Tofranil) and *nortriptyline* (Aventyl, Pamelor).

Although tricyclic antidepressants are still in use, they have been mostly replaced in the treatment of depression with SSRIs.

Side effects: dry mouth, blurred vision, constipation, difficulty urinating, worsening of glaucoma, impaired thinking and tiredness.

## Other Antidepressants

- ***Venlafaxine*** (Effexor); common side effects: nausea and loss of appetite, anxiety and nervousness, headache, insomnia and tiredness;
- ***Bupropion*** (Wellbutrin) can cause agitation, insomnia, headache and nausea;
- ***Lithium*** (used mainly to treat manic depression, but also sometimes prescribed for recurring bouts of depression).



Sample fragment:

<i>Name</i>	<i>Aminophylline</i>
-------------	----------------------

<i>Name</i>	<i>Aminophylline</i>
<i>Brand name</i>	Aminophyllin
<i>Class</i>	Bronchodilator
<i>Indications</i>	Asthma, chronic bronchitis, emphysema, and chronic obstructive pulmonary disease (COPD).
<i>Drug/drug interactions</i>	Avoid concomitant use of: allopurinol, cimetidine, ciprofloxacin, erythromycin, lithium, oral contraceptives, and propranolol; check with your doctor for drugs interactions.
<i>Drug/food interactions</i>	Avoid excessive use of <i>caffeine-containing</i> beverages.
<i>Considerations</i>	Caution for cases with active peptic ulcer disease or a seizure disorder; also for cases with some cardio-vascular disorders, hypothyroidism and /or liver disease.

<i>Name</i>	<i>Paroxetine</i>
<i>Brand name</i>	Paxil
<i>Class</i>	Selective serotonin reuptake inhibitor (SSRI) antidepressant
<i>Indications</i>	Management of depression, obsessive-compulsive disorder, panic disorder, social anxiety disorder, and post-traumatic stress disorder.
<i>Drug/drug interactions</i>	Avoid taking paroxetine within 14 days of taking MAO inhibitors; (risk of side effects, such as: myoclonus, hyperthermia, stiffness); Also, avoid concomitant use of: tryptophan, warfarin;
<i>Drug/supplements interactions</i>	<b>Melissa, valerian, kava, melatonin:</b> may increase the risk of drowsiness; <b>St. John's wort;</b> taken along with paroxetine may increase the risk of cumulative side effects; <b>DLPA;</b> may interfere with paroxetine, as it has effects at central nervous system level; <b>5-HTP;</b> may cause anxiety or/and confusion if taken along with paroxetine
<i>Considerations</i>	Use caution in cases with: history of alcohol or drug abuse; seizure disorder; liver or kidney disease.

\*\*\*\*\*

\*

## INDEX OF SOME TRADE NAMES

*Accupril*- Quinapril

*Accutane*- Isotretinoin

*Actonel*- Risedronate Sodium

*Adalat*- Nifedipine

*Advil*- Ibuprofen

*Aleve*- Naproxen

*Allegra*- Fexofenadine

*Aminophyllin*- Aminophylline

*Amitril*- Amitriptyline Hydrochloride

*Amoxil*- Amoxicillin

*Anaprox*- Naproxen

*Apo-Doxy*- Doxycycline

*Ativan*- Lorazepam

*Atrovent*- Ipratropium

*Avandia*- Rosiglitazone Maleate

*Bactine*- Neomycin/Polymyxin B/Bacitracin Topical

*Bactrim*- Trimethoprim/Sulfamethoxazole

*Bayer Children's*-Aspirin

*Benadryl*- Diphenhydramine Hydrochloride

## GLOSSARY EXCERPTS

**Antibody (immunoglobulin):** protein that is manufactured by lymphocytes to neutralize or destroy an antigen or foreign protein;

**Antiemetic:** substance that reduces the incidence and severity of nausea and vomiting;

**Antigen:** a substance that can trigger an immune response causing the production of antibodies;

**Anthelmintic/vermifuge:** a substance that destroys or expels intestinal worms;

**Anti-inflammatory:** counteracts or diminishes inflammation or its effects;

**Antihistamine drugs:** a group of drugs that block the effects of histamine;  
**Anti-inflammatory drugs:** drugs that reduce the symptoms and signs of inflammation;  
**Antioxidant:** a compound which prevents free radical or oxidative damage;  
**Antipyretic:** an agent that can reduce fevers;  
**Antisclerotic:** an agent that helps prevent the hardening of tissues;  
**Antiseptic:** an agent that destroys and prevents the development of microbes;  
**Antispasmodic:** an agent that relieves spasms or cramps;  
**Antitussive:** an agent that can diminish cough;  
**Anxiolytic:** an agent that can reduce anxiety;  
**Aperient:** a mild laxative;  
**Arrhythmia:** abnormal heart rhythm;  
**Arthritis:** inflammation of the articular structures;  
**Asparagine:** substance in asparagus, responsible for urinary strong odour;  
**Asthma, extrinsic:** asthma that is triggered by an allergic reaction, usually to something that is inhaled;  
**Astringent:** an agent which causes contraction of tissues;  
**Asymptomatic:** no symptoms;  
**Asystole:** no cardiac contraction;

## *B*

**Basophils:** white blood cells containing histamine;  
**BCP:** birth control pills;  
**Beeturia:** harmless reddish coloration of urine;  
**Betacyanin:** anticancer agent in beets;  
**Beta-glucans:** form of natural soluble dietary fiber found in foods, including grains (such as barley, oats, and corn bran) and mushrooms (such as maitake, reishi, and shiitake) and the cell walls of baker's yeast;  
**Beta-sitosterol:** phytosterol commonly found in foods such as wheat germ, soybeans, and corn oil;

## INDEX EXCERPTS

### *C*

Caffeine 155  
Calcium channel blockers 135  
Canker sores 50  
Capoten 156  
Capsules 119  
Cardiac glycosides 137

Cardizem 167  
Cayenne 20  
Ceclor 158  
Celebrex 158  
Celexa 161  
Cephalexin 158  
Cephalosporins 144  
Chamomile 21  
Chaste tree/ chaste berry 21  
Chemotherapy 146  
Ciclosporin 165  
Cinnamon 22  
Claritin 180  
Clomid 162  
Codeine 163  
Cold macerations 14  
Comfrey 22  
Complement 81  
Compresses 13  
Constipation 50  
Contac 162  
Contraceptives 163, 164  
Corn 23  
Cortef 174  
Corticosteroids 138  
Cough medication 139  
Coumadin 194  
Coumarins 8  
Cranberry 23  
Creams and ointments 13  
Cytosan 164

## *D*

Dandelion 24  
Depression 50  
Digestive system infections 50  
Dry cough 50  
Decoctions 12

Definitions in herbalism 6

Detoxification 195

Diazepam 165

Digoxin 167

Dilantin 188

Diuretics 136

Diuril 159

Drugs

Absorption 119

Administration 118

Adverse reactions 127

Distribution 119

Elimination 120

Interactions 121

Drug-drug 121

Drug-disease 121

Drug-food 121

Drug-supplements 122

Drugs-herbs 125

Metabolism 120

Naming drugs 130

Dulcolax 154

Douches 13

Doxycycline 169