

Laboratorio Fitomykoterapéutico Lavra Mambré (Monasterio Ortodoxo Lavra Mambré)

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MEDICINAL MUSHROOMS IN BIOLOGICAL MEDICINE

Since the year 1992, one of the activities of the Orthodox Monastery Lavra Mambré, situated on top of a mountain overlooking Amatitlán Lake, is the research and use of medicinal mushrooms.

The use of mushrooms in medicine is based on the traditional knowledge in the different cultures scattered around the world. In places like China and Japan, mushrooms have been used for millennia, since these organisms promote general health, vitality, longevity and increase resistance to infectious agents which cause illness. Their magnificent preventive and curative value have been demonstrated in a practical form.

A great amount of scientific articles and books have been published which demonstrate and validate the multiple medicinal properties of the mushrooms after many years of studies in important research institutions in Asia, Europe and North America. Through these studies, different active principles have been characterized and identified responsible for such properties. The main information medium of all these investigations is the "International Journal of Medicinal Mushrooms" published by Begell Publicaitons in New York.

The medicinal properties of mushrooms can be summarized according to their use as: antibacterial, anticlotting, antitumor, hemostatic, hypoglicemic, hypolipidemic, immunomodulating and psychotropic.

It is important to take into account that not all wild mushrooms are used to produce medicines. The different forms in which medicinal compounds from mushrooms are produced: capsules, tablets, teas, liquid extracts and syrups, are prepared with carefully cultivated mushrooms. Wild mushrooms are adapted to special laboratory phases and cultivated afterwards in "plantations" where temperature, humidity, light, etc. are controlled in order to avoid environmental contaminations to which mushrooms are highly susceptible. This guarantees a high quality natural product.

Three compounds in the form of capsules are prepared at present at the Lavra Mambré Phytomylotherapeutic Laboratory with the required regency of Pharmaceutical Chemists. The compounds are described as follows.

IATRO-PK (shiitake)



The name is derived from the Greek *iatros*, meaning medicine or physician; and "**p**o-**k**u" from the Chinese name of the mushrooms. This compound is prepared with macromycetes of the genus *Lentinula*. Due to the preparation and processing of the compound, the benefits obtained are multiple and are experimented by those who regularly consume it. The medicinal properties of this product are the following:

- It contains a variety of essential aminoacids, vitamin B complex (niacin, thiamine and riboflavin),
 vitamin C and some mineral salts
- It decreases seric colesterol because of its eritadenine content
- It contains abundant provitamin (ergosterol), not found in vegetables and which can be converted into vitamin D (calciferol) upon exposure to sunlight
- It acts as a regulator of the immunological system (immunomodulator) by means of its polysaccharides lentinan and KS-2, in multiple ailments such as asthmas, allergies, etc.
- It diminishes inflammation and pain in ailments such as arthritis and rheumatism
- It prevents autoimmune illnesses, as well as some of the degenerative type such as diabetes and cancer

AUGE-R (reishi)



The name is derived from the Greek Word *auge*, meaning brilliant, shiny; and from the Japanese name "Reishi", or Spiritual Mushroom. This compound is prepared with macromycetes of the genus *Ganoderma*. As the former one, the benefits obtained by those who regularly consume it are multiple and quickly observed. It presents the following medicinal properties:

- It contains a variety of essential aminoacids, vitamin B complex (riboflavin), vitamin C and some mineral salts
- It inhibits platelet aggregation with marked anticlotting effects on the blood due to its many ganoderic acids
- Its triterpenes decrease high levels of cholesterol and lipids besides regulating blood pressure
- Its tonic activity helps to improve the excretion of toxic wastes through urine and feces, besides intensifying heart and liver activity
- It presents a significant anti-inflammatory activity, comparable to hydrocortisone
- A complex group of polysaccharides is responsible for its potent immunomodulator action in autoaggression illnesses and in degenerative ones like diabetes and cancer

NEFOS-G (maitake)



The name is derived from the Greek word *nefos*, meaning cloud; and the genus which comprises it. This compound is prepared with macromycetes of the genus *Grifola*. Its medicinal properties are the following:

- It contains a variety of essential aminoacids, vitamin B complex (niacin), vitamin C, vitamin D and some mineral salts
- Its antitumoral activity is very specific due to the diverse polysaccharide fractions it contains, the main one of which is grifolan and is used in the treatment of diverse types of neoplasias
- It presents a significant in vitro activity against the HIV virus through its sulfated fraction
- It reduces blood pressure, controls diabetes and diminishes seric colesterol

MECHANISM OF ACTION

These compounds act at the level of Pischinger's Basic System and immunologically stimulate the production of T cells. Dr. Pschinger from the University of Vienna concluded that mesenchyma was not only a filling tissue but defined a "cell-media" system in which the extracellular fluid is the common resonance substrate for all stimuli, which reach the periphery through the neuro-hemo-humoral way. It is in this Basic System that the exchange of oxygen, water and electrolytes; the acid-base regulation and the processes of inespecific defense occur, representing an anatomic-functional unit which reacts in a global form. These investigations were confirmed through an integral concept of medicine or Homotoxicology.

The German physician Hans-Heinrich Reckeweg, developed the scientific features of Homotoxicology. Accordingly, illnesses are biological processes of high value, whose objective consists in eliminating endogen and exogen toxins (homotoxins), and avoid, minimize or limit the injuries provoked by these toxins. The type and degree of injury capacity of a homotoxin in the organims depends on:

- The state of defenses of the organism (of its regulation capacity)
- The type of homotoxins, the duration of their effect and the intensity of the stimulus

 The reactions of the organism facing the action of homotoxins can be
 divided in two large phases (humoral and cellular), and these into six other different phases. See Table.

Humoral phases

In these three phases the organism faces the homotoxins eliminating, neutralizing or depositing them with no injury in organs or cells.

- Excretion phase: the organism expells homotoxins through physiological elimination (sweat, urine, feces, menstruation, etc.)
- Reaction phase: the physiological elimination of homotoxins is no longer possible, and there is activation of the great defense system (pathological excretions, fever, inflammation, pain)
- Deposition phase: the homotoxins are united to normal functioning cell-tissues (benign deposits such as lipomas, renal and biliary calculi, etc.)

Cellular phases

In these three phases the organism slowly yields to the presence of the noxious effect of the homotoxins, and yet tries to preserve life.

- Impregnation phase: the homotoxins are pahtologically deposited and there is immediate injury in cellular function and structure (viral illnesses)
- Degeneration phase: there is an alteration of intracellular structures and accumulation of degeneration products with the consequence of organic injuries (cronic-degenerative illnesses such as hepatic cirrhosis, arthrosis, renal atrophy)
- Neoplasia phase: structural alterations of genetic material at the cellular nucleus level, uncontrollable growth of tissue affected are present (malignant neoformations).

Between the humoral and cellular phases the denominated biological cut exists, which represents a significant dividing line. To the left of this cut (humoral phases) the system of flowing equilibrium is altered, the organism is able to have a compensation by its capacity of self-healing and through the application of determined stimuli where these alterations disappear, reestablishing an optimum equilibrium. To the right of the cut (cellular phases) the alteration has progressed so much, that a compensation is more difficult, and in some cases is completely impossible.

With the adequate stimuli, changes from one phase to the other can be produced, manifesting variations in the existing symptomatology. This change was denominated by Dr. Reckeweg as vicariation. According to the direction and point of departure on the displacemente of pathological symptoms, the vicariation can be evaluated as a progressive one towards cellular phases (aggravation) or a regressive one towards humoral phases (improvement). (See Table).

CONCLUSION

With the use of medicinal mushrooms, regressive vicariations are produced, mainly curative or of improvement in cellular phases. These vicariations could be manifested in some sporadic cases as "allergies" which simply shows that the organism is undergoing a curative crisis, indicating that chronic illnesses formerly suffered could reappear since the cellular memory of the organism has been stimulated. It is important to offer the organism all the possible supportive means in order to eliminate and sweat all toxins: natural enemas, an adequate and healthy diet (vegetables, fruits, fiber, etc.), abundant consumption of pure water, fresh herb teas, natural juices, and therapies such as sauna, aerobic excercises, etc. The main objective in the use of any medicinal substance is its curative power.

Along these years, tight work has been carried out with various Physicians and Surgeons in the country. Multiple medicinal properties of these compounds have been proven and it is our desire that the largest number of persons benefit with their results.

The main objetive in the use of any medicinal substance is its curative power. The objective of the Orthodox Monastery Lavra Mambré through this activity, is that of leading the human person towards alternative medicines, and therefore towards natural foods, towards plants and mushrooms. As we explain to those concerned persons, leading them again towards "GOD's natural pharmacy".

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TABLES

| | Humoral Phases | | | | Cellular Phases | | | |
|------------------------|--------------------|-------------------|---------------------|-------------|-----------------------|-----------------------|--------------------|--|
| | Excretion Phase | Reaction Phase | Deposition Phase | Bio | Impregnation Phase | Degeneration Phase | Neoplasia Phase | |
| Ectodermal Tissues | | | | - o m - | | | | |
| Endodermal Tissues | Sec. | | rogre | SSI | ve Vice | Ari- | | |
| Mesenchymal Tissues | | | egress. | ive | Vicari | atio | 7 | |
| Mesodermal Tissues | | | | C u t | | non | | |

| | HUMORAL PHASES | | | CELULAR PHASES | | | |
|-----------------------------------|---|---|--|---|--|--|--|
| TISSUES ECTODERMAL 1 Epidermic | sweating, earwax, serous | carbuncles, pyoderma, eczemas, | warts, keratosis, nails | tattoos, pigmentations | dermatosis, lupus | Ulcus rodens, basalioma, epithelioma, | |
| 2 Orodermic | saliva, coryza | dermatitis rhinitis, gingivitis | nasal polyps | leukoplakias | ocena, atrophic rhinitis | melanoma carcinoma of nasal and oral mucuoses | |
| 3 Neurodermic | Herpes zoster vesicles | Herpes | benign neuromas | migranes, tics | pads, multiple sclerosis, syringomyelia | neuromas, gliosarcomas | |
| 4 Sympathicodermic | neurohormonal celular secresion | neuralgias, Herpes zoster | benign neuromas | gastroduodenal ulcers, asthma | neurofibroma- tosis | gliosarcomas | |
| ENDODERMIC 1 Mucodermic | gastrointestinal secretions estercobilin | faringitis, laringitis, enteritis, colitis | laringeal polips, nodules, colon polips | asthma, gastroduodenal ulcer | pulmonar and intestinal tuberculosis | larinx cancer, stomach, rectum | |
| 2 Organodermic | pancreatic juice, thyroid hormones | parotitis, cholangitis, hepatitis | goiter, cholelithiasis | liver lesions, pulmonary infiltrates | hepatic cirrhosis, hipertiroidismo mixedema | hepatic cancer, gall bladder, pancreas, thyroid | |
| MESENCHYMAL 1 Dermal interstices | hyaluronic acids, interstice | phlegmons, abscesses | obesity, gout, sebaceous | elephantiasis, flu viruses | scleroderma | sarcomas | |
| 2 Osteodermal | hematopoiesis | osteomyeliti | cysts osteophytes | osteomalacia | spondylitis | osteosarcomas | |
| 3 Hemodermal | production of blood and antibodies | endocarditis, phlebitis | varicose veins, thrombosis, vasosclerosis | cardiac sclerosis | myocardial infarction, pernicious, anemia | myeloid leukemias, angiosarcomas | |
| 4 Lymphodermal | lymph, antibodies | tonsillitis, appendicitis | lymphatism | lymphatism | lymphogranulo matosis, | lymphoid leukemias, lymphosarcomas | |
| 5. Dermalcav | fluid cerebrospinal, synovial | arthritis, synovitis | deforming arthritis | first cellular articular alterations | arthrosis | chondrosarcomas | |
| MESODERMAL 1- Nephrodermal | catabolites urinary excretion | pyelonefritis cystitis | prostatic hypertrophy, kidney stones | hydronephrosis | nephrosis, kidney cirrhosis | kidney cancer, hypernephroma | |
| 2 Serodermal | secretion of serous membranes | pleurisy, peritonitis, pericarditis | ascites, pleural effusions | pretumoral phases | tuberculosis of serous membranes | cancer of serous membranes | |
| 3 Germodermal | menorrhagias, seminal or prostatic liquid | prostatitis, salpingitis, ovaritis | myomas, hydrocele, ovarian cysts | pretumoral phases | sterility, impotence | cancer of uterus, ovary, testicles, prostate | |
| 4. Musculodermal | mlactate | myositis | Myogelosis | miositis osificante | progressive muscular distrophy | myosarcomas | |