

# Advanced Hydrotherapy Using Hungarian Wellness Mud™

## Chapter 1

### **Introduction to Hungarian Wellness Mud™ Therapy**

In this booklet you will find brief descriptions of the disorders that a professional may choose to utilize Hungarian Wellness Mud™ Therapy. We will discuss the definition of, known causes and symptomatology of disorders, and their therapy using both conventional methods and the advanced hydrotherapy program called HWM™ Therapy. Disorders include: Rheumatoid Arthritis, Osteoarthritis, Fibromyalgia, Systemic Lupus Erythmatosus, Gout, and Bursitis Tendonitis, Sports Injury & Rehabilitation and Cervical Spine Injury.

The body consists of 206 bones that give it strength and shape. The place where two bones meet together is referred to as the joint. The bones are covered at the site of each joint by tissue called cartilage. Joints have a sac, which produce fluid between each joint and is called the synovial sac. The clear fluid produced by this sac is called synovial fluid. This fluid is secreted into the joint and lubricates the bones during movement. This lubrication keeps friction from hampering the bones. When tissues become injured or affected by a foreign substance or disease, the joint area swells, becomes red, hot and causes pain to the body. This type of joint inflammation is called Arthritis. There are over 100 different types of Arthritis known to date. We will cover the most common types of this disease in the following chapters and pages.

You will learn the advanced hydrotherapy methodology that is utilized by Hungarian therapists in Spa Hotels and Hospitals throughout Hungary, as well as the HWM™ Therapy Packs that have been certified as “curative” by the Hungarian Ministry of Health since 1938. Each year 1000’s of people receive treatments for rheumatic disorders in Hungary’s world-renowned spa hospitals located in Budapest. The spa culture in Central Eastern Europe is recognized as being the oldest known bathing culture dated back to 1148 in the times of the Roman and Turkish Baths. It has been fully documented with proven, medical research that the waters, and subsequently the thermal, medicinal mud (Kolop Mud used in HWM™ Therapy) can and does improve inflammation and help to relieve pain while encouraging muscles, cartilage and bones to heal from injury.

Many of the terms you will read in the following chapters of this instructional booklet have been formatted in general terms so as to keep in accordance with all State Bi-laws that govern therapists throughout North America. HWM™ Therapy is used in Hungary as a prescribed method of medical treatment but it has not been recognized through the F.D.A. here in North America to date. The following recommended HWM™ Therapy plans are intended as an alternative method of hydrotherapy, and to assist clients with the symptoms of inflammation and associated pain. They are not meant to replace other therapies or medications. Only licensed medical professionals are authorized to prescribe medications or to advise change in medications to their clients/patients.

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## History of Hungarian Wellness Mud™

- In **1898** Dr. Hánko Vilmos, a member of the Academy of Sciences of Budapest, conducted a series of biological tests of the mud and found that the mud contained therapeutic quantities of iron and sulphate. For wide spread future healing purposes the mud was carefully and selectively excavated.
- By **1930**, Budapest's world famous Gellért Thermal Hotel & Spa had been using the Hungarian Wellness Mud™ for 10-years and the then Hungarian Balneology Society president Dr. Vámosy Zoltán proved that through all the documented treatments during this period the Hungarian Wellness Mud had significant healing properties.
- In **1938**, the Ministry of Health qualified Hungarian Wellness Mud™ as 'curative' and authorized it's trading as a medicinal mud.
- Hungarian Wellness Mud™ is widely used by the Hungarian National Health Service.
- There are over 100-years of documented clinical indications for Hungarian Wellness Mud™.



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## Excavation Site of Hungarian Wellness Mud™ & Spa Remains



- The population of Kolopfürdő local area is only estimated at 2800 people.
- Location of a large medicinal spa before World War II. However, heavy bombing to the area during the war destroyed the spa.
- Only 1-stone bath remains as evidence that a spa once existed.
- Hungarian Wellness Mud™ occupies 21.3 Hectares.
- Surrounding area declared a natural reserve in 1960.
- Mining techniques as used 100-years ago still employed today.
- Hungarian Wellness Mud™ is excavated from a depth of 8-14 metres.



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### **Reference from the Hungarian Ministry of Health**

Its organic ingredients determine the chemical properties of the Kolop mud. Its iron and sulfur content for example, induces hyperemia in both the deep and the superficial tissue layers.

At lower temperatures, the mud has anti-inflammatory, analgesic, and (fluid) reabsorbing effects. In particular, topical application of cold mud reduces the activation of pain-sensitive nerve endings and lowers nerve conduction velocity within nociceptive fibers.

### **Therapeutic indications for using HWM™ Therapy in Hungary**

- Chronic degenerative diseases of the joints and the spine
- Sports-related injuries, follow-up treatment of fractures and dislocated joints
- Chronic phase of Sudeck's atrophy
- Fibrositis syndrome
- Chronic stage of gout
- Dormant phase of ankylosing spondylitis
- Follow-up treatment of neuralgic disorders
- Chronic tendonitis
- Fibrosis of peri-articular soft-tissues (contractures)
- Chronic, non-specific inflammatory disorders as well as hypoplasia of female reproductive organs

**Contra-indications** to the application of HWM™ Therapy are the same as those pertinent to the use of other balneotherapy treatments

### **Further experience obtained during the clinical applications in Hungary of HWM™ Therapy:**

- Treatment of fibromyalgia with alternating applications of cold and warm mud achieves a significant improvement as evidenced by changes in symptom scores measured with a visual analog scale (VAS);
- In ankylosing spondylitis, finger-to-ground distance, morning joint-stiffness, and the dose-requirements of non-steroidal anti-inflammatory drugs (NSAIDs) are reduced by HWM™;
- The topical application of HWM™ achieves symptomatic improvement in calcaneal spur syndrome;
- Treatment with HWM™ is an important component in the rehabilitation of osteoporotic patients;
- In rheumatoid arthritis, applications of HWM™ of 23-35 °C temperature achieved anti-inflammatory and analgesic effects, improved the range of motion of involved joints.

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### **Composition of Hungarian Wellness Mud™**

To understand how and why the Hungarian Wellness Mud™ therapies work so well in relieving symptoms related to rheumatoid disorders and other associated inflammatory type diseases, you must first look at the chemical (mineral) composition of the mud itself. You must also be aware of how mineral absorption and/or loss can affect the body's well being in certain circumstances. Minerals are an essential need for maintenance and function of a healthy individual. Most people do not recognize that mineral content in your body is just as important as vitamin content. We often hear about supplementing vitamins but the minerals, even though they are all part of multi-vitamin therapy, are usually not considered in great detail outside of the mineral calcium-magnesium, which tends to be one of the most commonly recognized members of the mineral family. Minerals are inorganic elements or salts found naturally in the earth. Some of these minerals are needed on a daily basis to help sustain life in animals and people. These minerals have positive and negative ions that give each mineral a different 'heat' and charge towards other molecules, like with the enzymes in our bodies that they attach themselves to help our bodies work. Minerals provide vital chemical reactions in the body such as the sodium-calcium reaction that is necessary for nerve conduction & and contraction of muscle fibers.

Some of the positively charged minerals (electrolytes) include:

- Sodium
- Potassium
- Calcium
- Magnesium

Negatively charged minerals consist of the following:

- Chloride
- Phosphate
- Bicarbonate

Cells inside of our bodies are most plentiful in potassium, magnesium, phosphate and proteinate. The extra-cellular fluid that surround our cells is most plenty in sodium, chloride, calcium and bicarbonate. This extra-cellular fluid shifts from veins to muscles and these shifts are what cause inflammatory responses to infections, injuries and autoimmune disorders.

When tissues are injured the body releases histamines & a substance called bradykinin, which increases capillary permeability (thins the membranes so osmosis can occur) and allows proteins and other solutes to shift into the interstitial spaces between the muscles and the veins. This is called edema or water retention in the area affected. All of these electrolytes (minerals) have a major influence on:

- Body water retention/regulation
- Acid-base balance
- Enzyme reactions
- Neuro-muscular activity

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### Chemical Composition of Hungarian Wellness Mud™

The quantitative (and qualitative) composition

SiO <sub>2</sub> (silicon dioxide)	60.05 %
TiO <sub>2</sub> (titanium dioxide)	0.54 %
Al <sub>2</sub> O <sub>3</sub> (aluminium oxide)	17.91 %
Fe <sub>2</sub> O <sub>3</sub> (ferric oxide)	4.34 %
FeO (ferrous oxide)	2.38 %
MnO (manganese oxide)	0.05 %
P <sub>2</sub> O <sub>5</sub> (diphosphorus pentaoxide)	0.14 %
CaO (calcium oxide)	1.54 %
MgO (magnesium oxide)	2.10 %
Na <sub>2</sub> O (sodium oxide)	0.89 %
K <sub>2</sub> O (potassium oxide)	2.39 %
+H <sub>2</sub> O (water)	5.61 %
CO <sub>2</sub> (carbonic acid gas)	0.29 %
Cl <sup>-</sup> (chloride ion)	0.05 %
	<b>98.28 %</b>
O + LOI (loss of ignition)	1.72 %
	<b>100 %</b>

HUNGARIAN WELLNESS MUD™ IS **CERTIFIED CURATIVE**  
BY THE HUNGARIAN MINISTRY OF HEALTH



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### **Mineral; Function; Symptom of Deficiency**

The list below explains some functions of various minerals and what their deficiency may cause the patient.

#### **Calcium (Ca)**

- Aids in bone formation, blood clotting, nerve and muscle contraction
- Bone degeneration, nerve and muscle malfunctions (contracture)

#### **Chloride (Cl)**

- Aids in stomach acid production, acid-base balance in body
- Acid-Base Imbalance

#### **Iron (Fe)**

- Aids in production of red blood cells
- Fatigue and Anemia

#### **Magnesium (Mg)**

- Assists enzymes in body
- Nerve disorders, blood vessel dilation, heart rhythm problems
- Protects arterial lining
- Helps bone formation, carbohydrate and Mineral metabolism

#### **Manganese (Mn)**

- Assists enzymes
- Muscle and nerve disorders
- Necessary for bone growth and for reproduction
- Used in formation of cartilage and synovial fluid of joints
- Necessary for the synthesis of bone tissue

#### **Phosphorous (P)**

- Aids in bone formation, used to make ATP(Energy), DNA, RNA, and phospholipids in body
- Bone degeneration and metabolic problems

#### **Potassium (K)**

- Aids muscle and nerve function
- Muscle weakness, heart problems, nerve problems
- Necessary for a healthy nervous system
- Maintains stable blood pressure and transmission of electro-chemical

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### **Sodium (Na)**

- Aids in fluid balance and muscle/nerve function
- Weakness and digestion problems

### **Silicon Dioxide (SiO<sub>2</sub>)**

- Assists with assimilation of nutrients, provides strength to bones, skin, nails, holds temperatures and good electrical conductivity.
- Fatigue, pale skin color, thin, brittle nails and hair, extremities feel cold & clammy, chills

### **Aluminium Oxide**

- Production of haemoglobin and myoglobin
- Oxygenation of red blood cells

