# Health Tourism and Medical Treatment two parts in Health Resorts

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### Health Resorts? Which kind of principles are included?

Centres using methods to re-activate self-healing power by

- Salur Ealth Resonants?
- Use of endogenous power stimulation and stabilizing forms of treatment
- Activation of the patient's own responsibility for his health
- Use of a pleasant and culturally encouraging environment close to nature to stimulate the therapeutic acceptance.

#### Therapeutic Principles

#### stimulatio

Naturopathic, reactivate of self healing power

#### 2 substitutio

Substitution for metabolic malfunctions

#### 3 directio

Pharmacotherapy

#### 4 excludio

Surgery

hygiogenetic oriented "self healing"

pathogenetic oriented "artificial healing"

#### Types of Health Resorts

- Spas using natural spring water or natural peloids
- Wellness centres using equipments for pleasure and fun
- Climatic centres using healthy climate in the mountains
- Thalasso centres using the natural remedies of the sea
- Kneipp centres using the 5 columns of "Sebastian Kneipp"

#### Water as an elixir of life

Dietetic baths

Medical baths

- cleanse
- refresh
- give pleasure
- enjoy
- take healthy
- compose
- palliative effect
- healing effect

### Water is good for treatment and for health

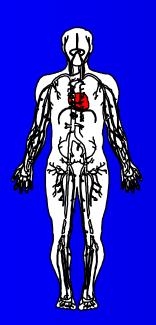
- It can be used in prevention (Dietetic)
  - By drinking as food
  - By bathing as cosmetic
- It can be used in medical treatment
  - By bathing about its physical and pharmacological effects mediated by the skin
  - By drinking about its stimulating effect to the inner organs
  - By inhaling about its effect on the respiratory systems

### Water is the most used medicament

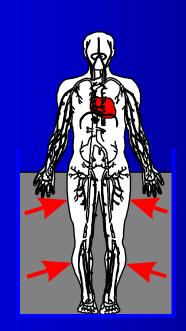
- Everybody is using it.
- Everybody believes its effectiveness.
- The medical experience is bigger than in any other drug.
- The private share in costs is higher than in any other medicament.
- It is the cheapest medicament.
- No other medicament was described so many times by artists than water.

#### Effect by immersion

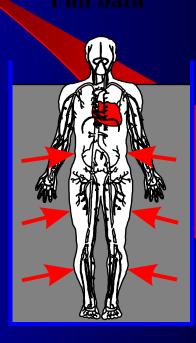
Air bath



Half bath



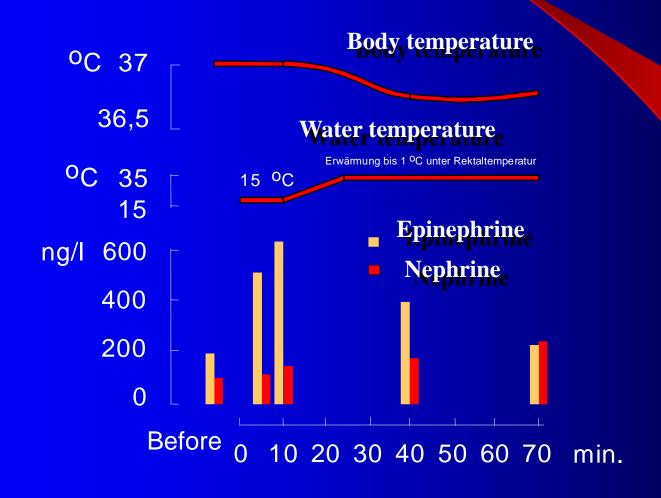
Full bath



About 1000 ml of blood flows into the thorax

#### Effect of cold bath on Epinephrine

nach Bühring



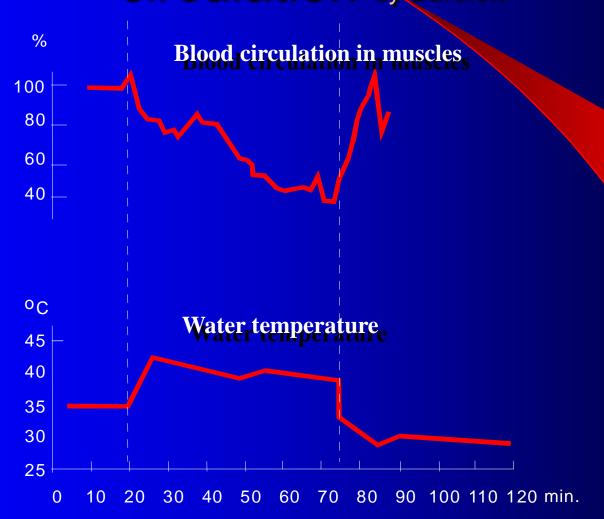
#### Effect of cold bathing

- Thermic Stimuli for Training of regulation of blood flow
  - Functional disturbance of blood flow
  - Phlebopathy
  - Cardio vascular diseases
- Thermic Stimuli for Training of inurity
  - Infect prophylaxis

## Effect of changing cold-hot bathing

- Thermic Stimuli for Training of vegetativehormonal Functions
  - Convalescence
  - Psycho-vegetative Syndrome
  - Cardio vascular regulation disturbance
  - Metabolic disturbance

### Effect of hot bath on blood circulation by Barcroft



#### Effect of hot bathing

- Muscle relaxation
- Increase of extensibility the structures of connective tissue
- Analgesic
- Anti Inflammatory by Overheating
  - Rheumatic diseases
  - chronic-inflammatory diseases of the urogenital system
  - Post acute after trauma conditions and operations on locomotor system

#### Chemical bath effects

- Activation of endogenous inflammatory resistance
- Decrease of increased pain sensitivity
- Normalisation of blood pressure

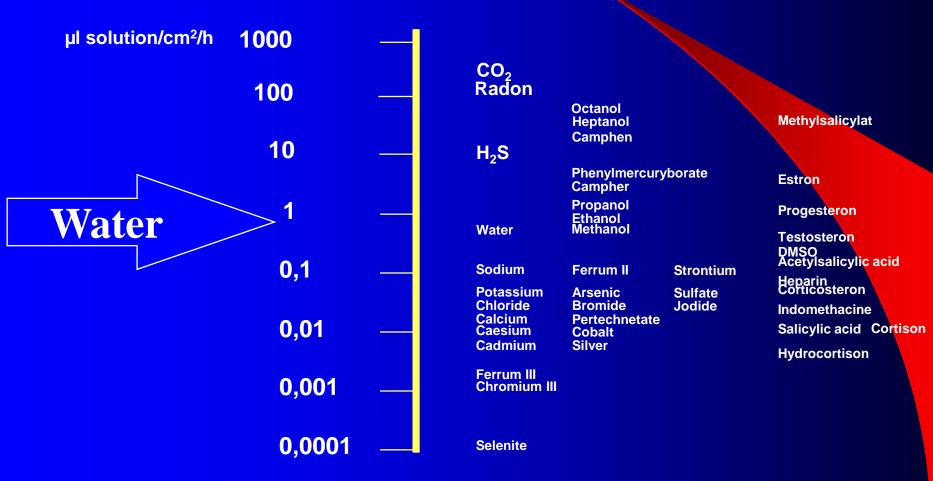
#### Rheuma baths

- Sulphur
- Radon
- Brine
- Peloids

#### Skin baths

- Oak bark
- Camomile, yarrow
- Shave grass
- Plant oils
- Sulphur

### Permeability of skin for solutions in water



# Diseases of the locomotoric system

The following treatments are effective:

- Sulphur baths (only in bath tubs or showers)
- Radon baths (only in bath tubs or in gas containers)
- Brine baths
- Carbon dioxide baths (only bath tubs or in gas containers)
- Hot water baths

### Therapeutic use of Sulphur Baths in rheumatology

- Degenerative diseases of joints
- Extra articular rheumatism
- Rheumatoid arthritis
- Post traumatic lesions
- Postoperative therapies

### Therapeutic use of Radon baths

- Rheumatoid Arthritis (not acute stadium)
- Ankylosing spondylitis
- Treatment of pain by Radiculitis, Neuritis, Neuralgia
- Hypertension Stadium I und II WHO
- Sklerodermie
- Osteoporosis

### Therapeutic use of Carbon Dioxide baths

- Disturbance of micro circulation in the skin
- Trophic Ulcera of the skin, venues Ulcera
- Decubitus
- Peripheral arterial occlusive disease in any stadium
- Functional arterial disturbance of vascularity

## General rules for effective bathing

- Chemical effects of water can be used only in bath tubs
  - No disinfection
  - Concentration in bath tub
    - $H_2S > 10 \text{ mg/l}$
    - Radon > 1 kBq/l
    - $CO_2 > 1 g/1$
    - Brine 10-150 g/l (in case of indication)
- Physical effects of water can be uses in pools
  - With disinfections (chemical substances are destroyed)
  - Temperature >30 °C (in case of application)

### Basic Infrastructures of Health Resorts (I)

- Natural resources and remedies certificated for treatment
- High quality standard of air and healthy climate
- Resort with special equipment depending on indications for bathing, drinking, inhaling, gymnastics and physical therapy
- Favourable therapeutic environment with parks and walking areas
- Areas for fitness, sports, and relaxing
- Specialized physicians and medical teams

### Basic Infrastructures of Health Resorts (II)

- Special hotels or pensions with dietetic measures and maintenance for patients
- Cultural events
- Health education centre
- Health promoting urbanisation
- Equipment of medical care and first aid
- High quality standard of hygienic equipment

# "Kur" and Rehabilitation (Definitions)

- \*\*Wur" (cure of treatment, course) is a special type of medical treatment in Health Resorts with natural remedies during a period of 3-6 weeks. It mainly use the reactivation of self-healing powers by stimulation and training by minimize the use of drugs.
- Prevention or Rehabilitation are the goal of treatment.

## Two Functions of Health Resorts and Spas

- Health Resorts are centres in treatment of chronicle diseases and to realize preventive and rehabilitative goals.
- Health Resorts are centres to get health in healthful vacations.

### Importance of Health Resorts and Spas

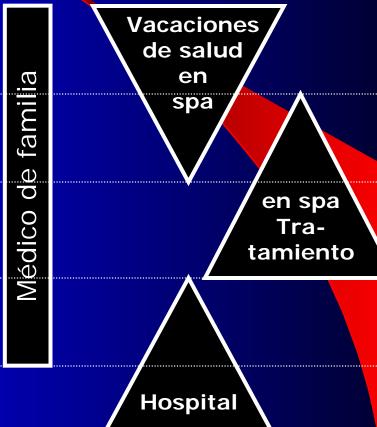
- Therapeutic use of classical forms of prevention and rehabilitation.
- They provide economic incentives for regional health care industries and tourist markets.
- They serve as healthy ecological location for environmental protection and appreciation.

# Integration of Spas and Health Resorts in the Health Care System

- Out-patient treatment by the Family Physicians
- In-patient treatment of special acute diseases in Hospitals
- In-patient or out-patient rehabilitation mainly in Spas and Health Resorts
  - of chronic diseases
  - of acute diseases, stroke, street accidents a. o. after treatment in special hospitals
- In-patient or out-patient prevention in Spas and Health Resorts

#### Situación y competencia térapéutica

- Sano
- Agotado
- Enfermedades crónicas
- Enfermedades agudas
- Caso de emergencia



#### Course of Treatment

depending on impairment, malfunctions, disability or handicap

- Out-patient treatment course
   (Patients stay in Pensions or "Kur"-Hotels)
- In-patient treatment course
   (Patients stay in Sanatoriums or Rehabilitation Clinics)

### European Spas and Health Resorts

Austria	98	Luxembourg	2
Belgium	3	Poland	79
Bulgaria	43	Portugal	41
Croatia	13	Romania	89
Czech Republic	31	Russia	20
Estonia	5	Slovakia	23
France	100	Slovenia	15
Germany	329	Spain	63
Netherlands	3	Switzerland	56
Hungary	28	Turkey	338
Italy	300	United Kingdom	20

### German Spa and Health Resort Industry

- 329 Health Resorts and Spas
- annual increment value 13.300 million \$
- Work force 310.000 persons (=\$42.903 per person)
- 118 million overnights 1993 in 726.000 beds (=44,5%)
- 9.8 million visitors 1993 (=12 days per visitor)
- **8.2** million patients privately financed (=83,6%)
- 1.6 million patients social financed (=16,4%)

#### German Spa Statistics 1993

1993	<b>East-Germany</b>	<b>West-Germany</b>
<b>Health Resorts and Spas</b>	60	269
Visitors	477.977	9.364.301
Private Visitors	390.647	7.842.000
Social Visitors	87.330	1.522.000
Overnights	4.400.000	113.606.988

### Costs of Treatment in Spas and Health Resorts

- Out-patient treatment \$2000 during 3 weeks
  - insurance pays \$10 per night and 90% of treatment costs
- In-patient treatment \$2500 during 3 weeks
  - patients pay about \$10 per day

#### Public Health the goal of presentday Health Resort Medicine

- Prevention is better than Therapy
- Learning to Live Healthfully

#### Social Taxable Rate in Germany

19,2 % of income for the Retirement Insurance (income more than \$350 per month)

13.2 % of income for the State Health Insurance (income \$350-3600 per month)

#### Health Costs in Germany

**•** 1969

1992 286.000 million\$

payment of the State Health Insurance

138.400 million\$

46.000 million\$

in-patient treatment in hospitals37,1 %

out-patient treatments29,0 %

administration6,0 %

health resort and spa treatment2,3 %

payment of the Retirement Insurance

19.300 million\$

## Costs of Chronic Back Pain in Germany 1994

- 19892,3 million cases of back pain resulted43 million non-working days
- 1994
  30.000 million\$ treatment costs
  for disorders of spine and back pain and
  18.000 million\$ non-working salary
  total 48.000 million\$

## Statistics of Health Resort and Spa Treatment 1992

- 53 % Diseases of the locomotoric system
- 14 % Diseases of the circulatory system
- 13 % Psycho-social diseases
  - 5 % Metabolic diseases
  - 5 % Tumours
  - 5 % Respiratory tract diseases
  - 5 % others

#### Education

Learning to treat chronic illness needs

- the patients with these disorders,
- efficient therapy centres,
- teachers with enough practise.

### The fight against the chronic illnesses

- cannot be won only by control of the free market
- can only be won by political decisions

#### Research

Three levels of research goals are important:

- medical treatment effect during the course of treatment
- long-term medical and social-medical effectiveness
- difference between expense and success: the efficacy.

The following methods are suitable:

- clinical comparison
- comparison of costs before and after treatment
- comparison of non-working time

#### Conclusion

Chronically ill patients are dependent on the possibilities offered at the Health Resorts and Spas.

But healthy tourists learn in Health Resorts too.

The goal of both groups in treatment and prevention is the same:

"To die young, but as late as possible".

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