

Thalassotherapy and SPA therapy in France

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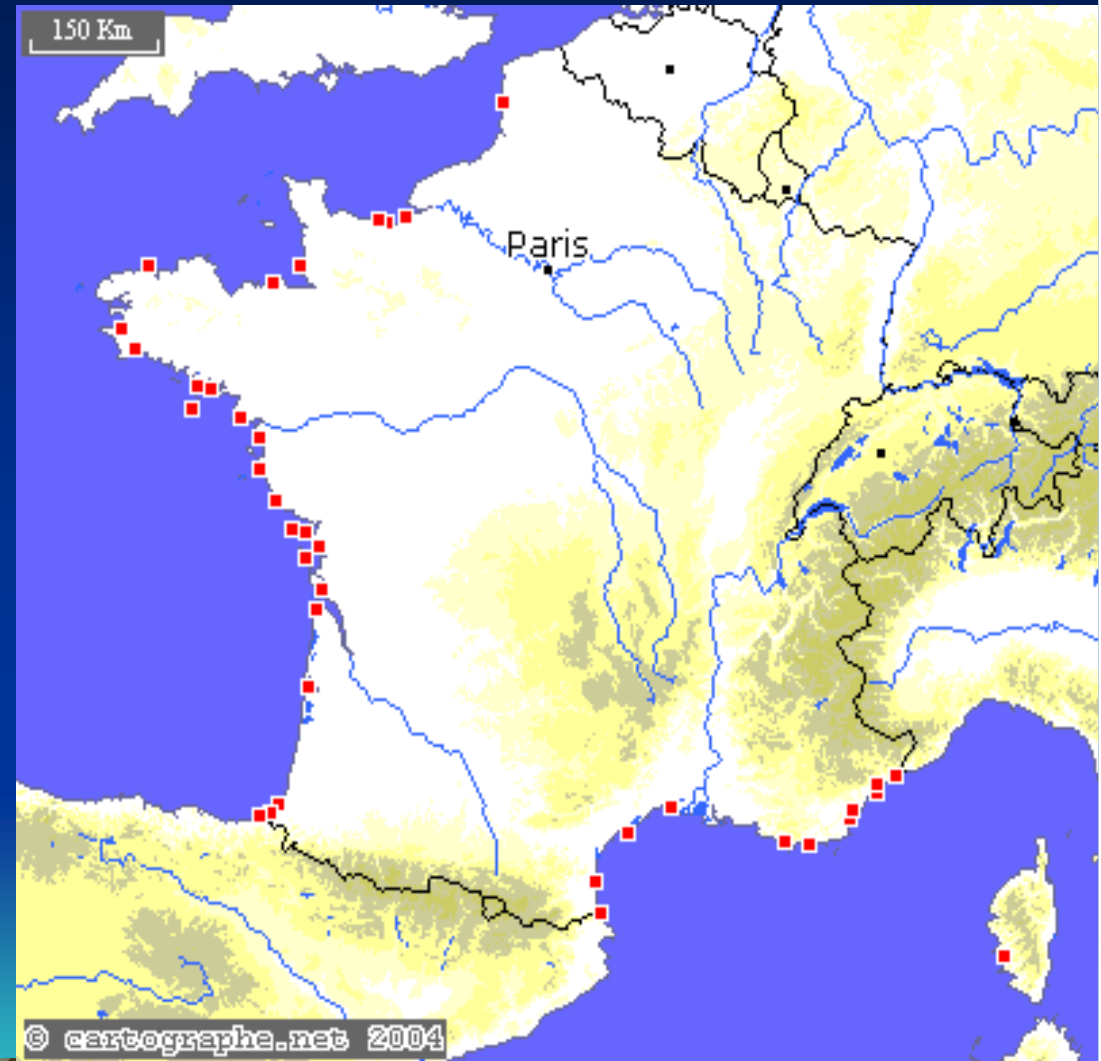
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France

A stylized, low-poly mountain range graphic in shades of brown and tan, positioned at the bottom of the slide. The background of the slide is a dark blue gradient that transitions to a lighter blue at the bottom, where the mountain range is located.

The seashore in France

- * France: 3120 Kms of sea shore
- * 3% of the total area of the country
- * 10 Millions of people
- * 23% of the seashore unoccupied
- * 50 thalassotherapy centers



History of thalassotherapy

- 1750 : Richard Russel MD (GB)
- 1778 : Dieppe (France)
- 1822 to 1835 in France : health resorts in Dieppe, La Rochelle, Cherbourg, Sète, Trouville, Biarritz, ...
- **1835 : French National Academy of Medicine: the sea water is a mineral water (=therapeutic)**
- 1867 : la Bonnardière MD : thalassotherapy (Arcachon)
- 1894 : Boulogne/Mer (F) : 1st int. Congress (150 doctors)
- **1899 : Roscoff : heated sea water + rehabilitation (Bagot)**
- 1961 : France first specific regulation

Basis of the thalassotherapy

- the sea water – (Denfant, 1961)

- **Sodium chloride** **27 g/l**
North sea: 20 g/l; Atlantic: 25 g/l; Mediterranean sea: 30 g/l
- **Magnesium chloride** **3,807 mg/l**
- **Magnesium sulfate** **1,658 mg/l**
- **Calcium sulfate** **1,260 mg/l**
- **Potassium sulfate** **0,863 mg/l**
- **Calcium carbonate** **0,123 mg/l**
- **Magnesium bromide** **0,076 mg/l**
- **Others elements and Oligoelements**
(mg/m³)
 - Fluor : 1400 Silicium: 1000 Nitrogen: 1000 Rubidium : 200
 - Aluminium: 120 Lithium: 70 Iodine: 61 Phosphorus: 60
 - Baryum: 54 Iron: 50 Arsenic: 15 Copper: 5
 - Mn: 5, Zn: 5, Se: 4, Ur: 2, Ce:2, Mo: .7, Cerium: .4, Th: .4, Va: .3
 - Y: .3, La:.3, Ag: .3, Ni: .1, Sc: .04, Mg: .03, Au: .004, Ra: .0000001




The dimensions of thalassotherapy

- **Medical dimension**
 - **Curation**
 - Musculoskeletal conditions
 - Neurological effects
 - Overweight
 - Chronic dermatitis, ...
 - **Prevention**
 - Growth
 - Ageing
 - Sports medicine
 - Circulatory disturbances
 - Post-childbirth, ...
- **Wellbeing dimension**
- **Beauty dimension**

Thalassotherapy resources

- **50 Thalassotherapy centers :**
 - ambulatory treatment
 - Accomodation facilities (hotel, motel, flats, ...)
 - Food :
 - Conventional restaurants
 - Dietary restaurants
 - Beauty centers
 - Sea beauty and dietary products, ...
- **Doctors involvement**
 - 120 doctors
 - Specialists PRM, rheumatology, sports medicine, cardiology
- **Care-givers**
 - Physiotherapists, ergotherapists, osteopaths, ...
 - Bath givers
 - Gymnastic teachers
 - Beauty specialists, dieteticians, nutritionnists, ...

Therapeutic products

- **Dry treatment**
 - Massage, ...
 - **Wet treatment**
 - Water baths, showers, ...
 - Aerosols
 - Seeds and sea muds baths, illutations, ...
 - Underwater Exercise, swimming, ...
 - **Complementary treatments**
 - Cardiotraining,
 - Musculation,
 - Sauna, hammam, ...
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Thalassotherapy – the cares

– **Conventional thalassotherapy :**

baths, swimming, aquagym, massages, mud baths, seeds, ...

– **Specific health programmes :**

post birth, urinary incontinence, tobacco stop, back pain, heavy legs, sport injuries, fitness, cardio-training, chronic fatigue, slimness, sleep disturbances, ageing prevention ...

– **Non medical programmes (wellbeing, beauty)**

*wellness techniques,
beauty,
dietary,
cooking, ...*



Thalassotherapy and Beauty

- **Sea Beauty products** Used in
 - Thalassotherapy centers
 - Beauty centers
 - Personal use
- **Several marine cosmetic companies**
 - Algotharm
 - Thalion,
 - Science et mer
 - Thalgo, ...



Thalassotherapy

- **Companies** : Accor, Thalazur, Thalacap, Monceau, ...
- Usual **duration of the treatment** : 3 days
- **517 000 persons treated**
(with accomodation : 300 000 ; french people: 90%)
- 1500000 days of treatment
- **Average cost** : 70 € by day of treatment
- Total product : 105 000 000 € (cares)
- No Social Security involvement (fitness, prevention) since 1995



SPA Therapy : the 3 pillars of the specialized therapeutic thermalism

- Therapeutic **thermal cares** delivered in french spa resorts
- **Research** : scientific investigations on
 - Actual Medical Benefit
 - Thermo-mineral products and resources
 - Security, ...
- Development in **new trends**

The 12 Medical Orientations


treated in the 104 french thermal resorts
(number of resorts for the orientation)

<i>Rheumatisms (63)</i>	<i>Respir. ENT (32)</i>
<i>Urinary diseases (8)</i>	<i>Phlebology (12)</i>
<i>Digestive tract (15)</i>	<i>Cardio-arterial dis.(4)</i>
<i>Metab. Diabetes (15)</i>	<i>Dermatology (8)</i>
<i>Stomatology (8)</i>	<i>Gynaecology (13)</i>
<i>Neurol, Psychosom (7)</i>	<i>Child.dvpt disorders (4)</i>

The Mineral Waters

Sulphur	Rheumatism, Ear Nose Throat, Respiratory
Sulphate	Neurology, Rheumatology, Dermatology, stomatology
Salt	Gynaecology, Children
Bi Carb	Digestive tract, Diabetes, phlebology
Bi Carb and Chlorine	Respiratory, dermato, stomato, children
Oligomineral	Urinary tract, phlebology

SPA Therapy

- **Doctor's prescription**
 - family doctor for the care at spa;
 - resort doctor for the spa treatment)
 - **Health practitioners** : SPA doctors (600)(2 years special training), nurses, physiotherapists, bath givers, ...
 - **Ambulatory treatment**
 - 3 weeks, 18 days of treatment (convention with Social Security – regulation of the health dpt)
 - 4 to 6 different treatments every day (baths, showers, muds, steam, gaz, massages, water exercise, ...)
 - **Cost average**
 - 500 € (treatment)
 - 70 € (SPA doctor)
- 

SPA Therapy

- **2007 : 508514 persons (75% with accomodation)**
 - 9 158091 days for medical treatment
 - 490 889 days for wellness
- **Female : 64 % ; male : 36 %**
- **Age : above 60 : 65 % - under 16 : 7 %**
- **Aetiology**
 - Rheumatic conditions **72 %**
 - Respiratory diseases, ENT **12 %**
 - Metabolic, Digestive and urinary problems **6 %**
 - Ciculatory disturbances **5 %**
 - Skin diseases **3 %**
 - Psycho-somatic, neurologic disturbances **2 %**
 - Others **1 %**

SPA therapy

- 104 resorts, 1200 mineral springs
- Gross product of spa resorts : 1 Billion €
(7 236 735 accomodations – day – night)
- Social security involvement (care) : 290 Millions € (= 0,28% budget Social Security)
 - Thermal cares paid to the SPA facilities
 - Medical fees paid to the doctors
- Employed persons : 110 000

The AFRETH – Dec 2004

- **The origin** : research an obligation in the convention SPA contractors – Social security
- **3 partners**
 - The CNETH (contractors)
 - The ANMCT (spa resorts municipalities)
 - The FTCF (french branch of the FEMTEC)
- **2 Committees**
 - Administration committee (strategy and financial decisions)
 - Scientific committee (scientific instruction and validation of the yearly call for projects)
- **A budget**
 - Functioning : 50000 € (CNETH, ANMCT, FTCF)
 - Investigation : 1,3 Million € (yearly)(CNETH 2/3, ANMCT 1/3)

AFRETH – 4 calls for projects (2005 + 2006 + 2007+2008)

	Abstracts	Eligible	Full Protocols	Scientific validity	Financial support
Medical service	57	43	38	21	17
Sécurité	4	3	3	3	2
Biology	7	3	3	3	1
Total	68	49	44	27	20

ACTUAL MEDICAL BENEFIT

2005-2006-2007-2008

- **Finished trials**
 - **Generalized anxiety disorder** (1 RCT) : significant for SPA therapy (237 patients)
 - **Knee Osteo-arthritis** (3 RCT=1 multicentric) significant for SPA therapy (462 patients)
- **In progress studies**
 - **Overweight** (RCT)(208/400 patients)
 - **Adults Sinusitis** (RCT)(52/440 patients)
 - **Children Otitis** (RC pilot trial)
 - **Osteoarthritis – medico-economic** approach (pilot study)(632/720 patients)

ACTUAL MEDICAL BENEFIT

2005-2006-2007-2008

- **In preparation studies**
 - **Venous** insufficiency (RCT)
 - **Shoulder** pain (RCT)
 - Treated **breast cancer** (pilot study)
 - **Metabolic** Syndrom (pilot study)
 - Therapeutic **education** of the patients with **venous insufficiency** (pilot study)
 - **Psychotrop Drugs** withdrawal (pilot study)
- **Withdrawed studies**
 - Atopic Dermatitis (RCT)
 - Post-thrombotic venous syndrom (RCT)

Methodological investigation

- Organisation of an expert consensus (October 2006- April 2007) on the methodology of thermal therapeutic trials
(1 vol, 57 pp PDF : www.afreth.org)

- Realisation of a meta-analysis of the existing randomised controlled trials on spa therapy

(cric@t, Pr Jean Pierre BOISSEL, INSERM Lyon)

Meta-analysis : Qualitative approach

Jadad score (randomisation, blindness, withdrawals)

Score	1	2	3	4	5
Low back pain	1	3	2		1
Osteoarthritis	1	3	4	2	1
Inflammatory arthritis	2	5	2		1
Fibromyalgia	4	3	2		
Chronic periph. arterial disease	1				1
Venous insufficiency	1	2			

Quantitative approach (effect size)

Effect size	0.4 to 1	1 to 2	> 2
Fibromyal.	Press. Pain (algometer)	Spont. Pain	FIQ
RA	Morning stiffness		N painful pts N painful joints
Pso arthritis		PASI	
Osteoarthritis			Womac
Low back pain	Drugs consumpt.	Pain duration	Muscles sensib.
Arterial disease			Walking perimeter
Venous insuff.		Pain, itching, Foot volume	

New trends in spa medicine

- **A spa treatment always more effective**
 - Development of new cares
 - Education, weight control, physical activity, ...
- **Education and prevention**
 - For spa customers population
 - For the general population
- **An increased participation in rehabilitation**
 - Othopaedics, burns, metabolism, heart problems, ...
- **An increased involvement in the geriatric care**
 - Geriatric patients
 - Family care-givers
- **A participation in public health research**
 - Cohorts for the investigation on spa therapy
 - Cohorts for the knowledge of health

CONCLUSION

- **SPA resorts = health (complementary medicine)**
 - Traditional thermal care
 - Prevention
 - Rehabilitation
 - Ageing
- **SPA resorts, thalassotherapy centers = wellbeing**
 - wellness techniques
- **Scientific investigation**
 - A crucial problem
 - Multicenter international trials needed