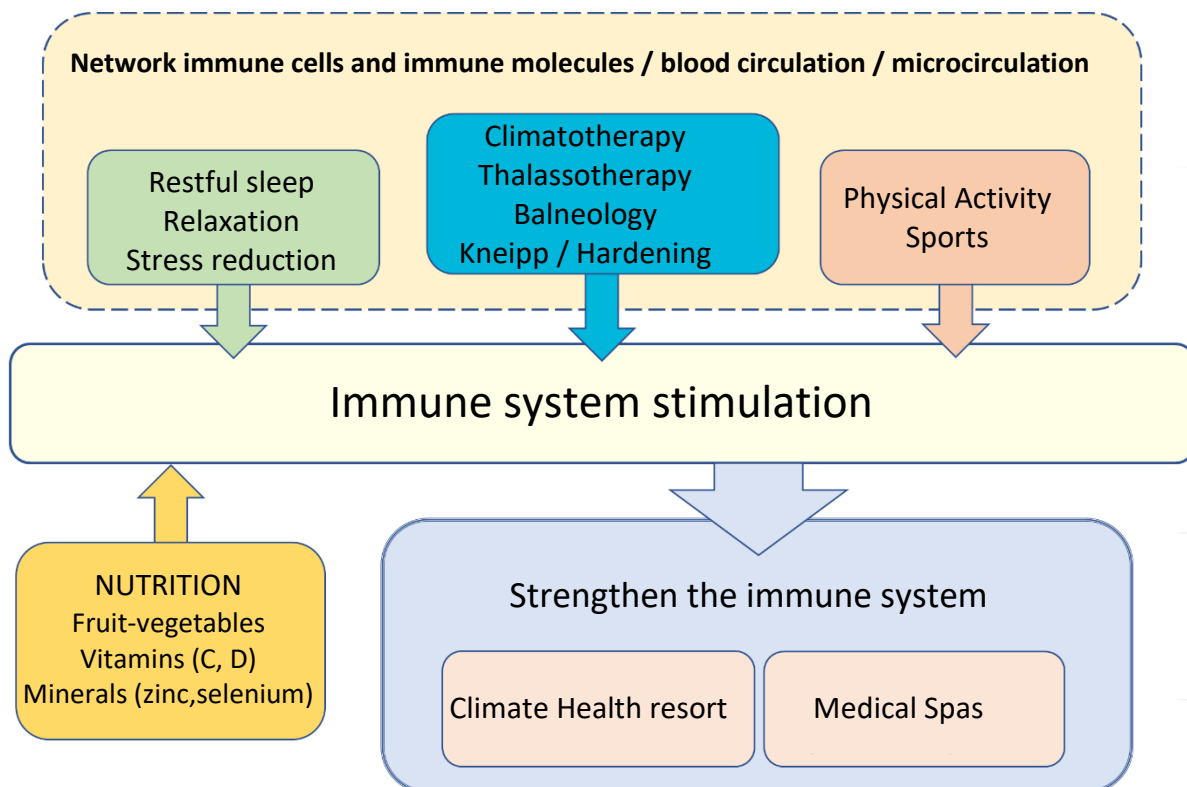


LIFESTYLE CHANGE using Balneo Medicine, Balneotherapy Stimulate the immune system effectively and increase its performance

Our immune system has an enormous capacity to deal with pathogens such as viruses and bacteria. It represents a complex network consisting of the circulation of arteries, veins and capillaries, the lymphatic system, blood-forming bones and various organs. The condition for effectiveness is that immune cells and messenger substances inside and outside the cells can easily and quickly reach anywhere. The greater the mobility between the different compartments for the immune cells and molecules, the higher the immune performance. A pronounced microcirculation with substance exchange between vessels, capillaries and cell tissue creates this requirement.

Therefore, all therapeutic measures that stimulate microcirculation also increase the immune system! These primarily include stimuli by thermal water, which lead to the stimulation of microcirculation via **Thalasso, Balneology, Kneipp therapy and healing climatic** conditions. **Sport and exercise, balneo therapy, restful sleep and all relaxation** procedures also promote microcirculation. In addition to the treatment of the underlying disease, all of the procedures that are carried out in medical spas and on seaside/mountain climatic health resorts in addition to the basal therapy procedures, effectively strengthening of the immune system and increase the immune system defense.

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One ancient but also forever valid principle of balneo medicine by treating patients with a variety of CDD is without any doubt the LIFESTYLE CHANGE using Balneo Medicine.

The corona pandemic has proven once and for all time that patients plagued by CDDs are the predisposed victims #1 during pandemics. Controlling, treating and even eliminating different forms of CDD will be the goal for preventive balneo medicine in the mitigation of future pandemics.

The modern lifestyle is therefore an addiction and clearing as many patients as possible of this addiction will only help mitigate the future economic meltdowns caused by pandemics. Balneo medicine has all what it takes to accomplish many aspects of a realistic modern **lifestyle change** but several objectives however must be followed if a successful and measurable improvement in CDD magnitude must be reached, with the understanding that the treating specialist and the patient are part of that unique team, working together diligently to accomplish their goal. This characteristics of a successful balneo lifestyle change must be the backbone of the entire therapy for the effectiveness of the process not to be compromised and the entire struggle to be rendered a total failure.

The lifestyle change must be sudden, drastic, replicable but tolerable to the patient.

Being sudden - the lifestyle change must start at a point when the patient willingly enters the program and never looks back to the past. Compromises of any kind devalue the program to a complete failure. This is the fundamental reason why ancient doctors would send fat, gout - plagued Romans to spas, as far away from home as possible.

Being drastic - the balneo lifestyle change must eliminate all detected components of the negative previous lifestyle which maintained and even caused different forms of present CDDs in the patient. The patient must be convinced of the action and accept a clear break of old habits. The lack of opportunity for relapse is here of paramount importance and therefore the balneotherapy and its remote location from the patient's home is ultimately a part of the answer for success.

In the matter of **REPLICABILITY** the requirement is essential since all patients must eventually return home. No matter how successful the balneo lifestyle change was, after two to four weeks the program must come to a happy end. The patient as well as his home doctor are expected to be trained and proficient with the program.

Acceptability of the balneo lifestyle change or **being tolerable** to the patient is the primary condition for success. Many changes such as exercise, dietary changes, relaxation breaks and many habits are very difficult to control and re-learn. The patient must be motivated to a degree where relapsing can be avoided through self-discipline and control mechanisms. The balneo lifestyle change would be best maintained if the patient continues to return to the medical spas for follow-up cures in a bi-annual or more often manner in the majority of cases.

The **lifestyle change** process is possible today thanks to the balneo medicine framework. CDD afflictions like vascular disease, diabetes, obesity, pulmonary and respiratory disease, lupus autoimmune disease, MS and many others can be controlled, diminished in severity and impairment degree to the patient. The treatment of such afflictions will considerably rejuvenate and rehabilitate the patient's immune system.

As the coronavirus pandemic undoubtedly shows, an overstressed immune system, overloaded by decades of attrition with CDD will overreact with a super inflammatory reaction when confronted with a Coronavirus. This over-reaction leads to death.

Patients with mental health problems are another essential risk group to pandemic related mortality. Here the dependency of drugs, malnutrition, social marginalization and others are accentuating the suppression of the immune system further and beyond the CDD incidence also found prevalently within this group. The role of balneology underlined millennia ago by the old Roman proverb “mens sana in corpore sano” - the pursuit of a sound mind is the major goal for the Balneo Medicine by utilization of multiple natural resources and special programs of medical spas and health resorts in Europe. Here the relaxation and active exercise combined with non-stressor nutrition can produce life changing turns within a few weeks generating permanent and desirable changes from the patient's perspective. (more details in our publication about Mental health)

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