

## Immune Boosting Wellness Programs at Hot Springs Destinations –

By Amanda Wilson



1. Cold Water Immersion Therapy:
  - Exposing the body to a cold shower or cold plunge pool for a short period of time constricts the blood vessels that helps reduce swelling and inflammation within the body and boosts the activity of the lymphatic system which promotes detoxification.
2. Hot and Cold Contrast Therapy:
  - Cooling down after exposure to hot bathing, steam rooms and sauna by alternating hot and cold actions is beneficial to stimulate blood circulation and strengthen the cardiovascular system and increasing the metabolic rate. Cold plunge pools, cold showers, ice caves and waterfalls.
3. Specialised Bathing in Hot Spring Pools or Private Mineral Baths:
  - Fresh Herbs or Aromatherapy Oils infused into water helps to promote detoxification, decrease stress, anxiety and promote peaceful sleep.
  - Salt Floatation Therapy is a zero-gravity environment that allows the mind and body to completely let go, relax, and reset.
  - Colour Therapy is used in ambient cave pools which aim to bring balance to the energy of the body.
4. Stay Hydrated
  - Water helps to flush toxins waste and bacteria from the body to fight disease and infection as well as strengthens the immune system. This is one of the easiest and most effective things to ward off viral illnesses. Try to drink at least half your body weight in ounces of water each day to ensure proper hydration. Have generous and accessible water stations located throughout the facilities.
5. Teas Houses and Tea Rituals:
  - Tea has been used for health purposes for centuries in China. The main health-promoting substances in tea are polyphenols, catechins and epicatechins. Studies say these molecules have anti-inflammatory and antioxidant properties. Examples include white tea, green tea, matcha tea, nettle, ginseng, holy basil, echinacea or ginger blends. Provide tea stations throughout the facilities.
6. Healthy Eating:
  - Nutritional deficiencies can impair immune function, increasing both the risk and severity of illness and infection. By eating the rainbow of local, seasonal fresh fruits and vegetables and incorporating antioxidant rich foods into menus; examples include citrus, elderberry, ginger, garlic, turmeric, papaya, mushrooms, berries, matcha are high in essential vitamins and minerals and more will help strengthen the immune system. A kitchen garden can provide fresh farm-to-table produce in restaurants and cafes.
7. Vitamin C
  - Physicians at the International Society for Orthomolecular Medicine suggest high dose vitamin therapy may prevent the transmission of COVID-19 and that preventing and treating respiratory infections with large amounts of vitamin C is well established. Serve freshly pressed citrus, pineapple, cranberry and elderberry juices and examples of foods high in Vitamin C that could be included in restaurant or café dishes are chillies, rosehips, Kakadu plum, guava, cherries, spinach, broccoli and peppers.
8. Sunshine:
  - Vitamin D deficiency can suppress immune function. By expanding sundecks with lounges, chairs and pools with direct sunlight exposure for safe sunbathing. Studies indicate that vitamin D may also help immune cells identify and destroy bacteria and viruses.
9. Tai Chi and Qi Gong Classes:
  - This daily practice is designed to rejuvenate the immune system. Barefoot on the earth or in bathing pools. These age-old teachings offer a gentle practice of movement, visualization, sound, and meditation to help awaken joy and healing from within.
10. Fitness Retreats:
  - Regular exercise in fresh air is one of the pillars of healthy living, it improves cardiovascular health, lowers blood pressure, helps control body weight and protects against a variety of diseases. Hiking, walking, bike riding, golf, yoga, Pilates and dancing activities combined with bathing all contribute to a healthy immune system.

11. Breathwork Practice:
  - If hot spring destinations are located in nature with clean fresh air then the way we breathe strongly affects the chemical and physiological activities in the body and by practicing breathing exercises, waste materials are more easily released. The simple act of correct breathing techniques and deep diaphragmatic breathing can strengthen immune defences.
12. Pranayama:
  - Is the practice of breath control in yoga. In modern yoga as exercise it consists of synchronising the breath with movements between asanas but is also a distinct breathing exercise on its own. Daily pranayama trains the lungs by improving the capacity of respiratory system and directly works to positively affect the autonomic nervous system which controls and governs essential functions of the body.
13. Yoga Classes:
  - Lowers stress hormone levels and calms the nervous system to reduce inflammation. Deep breathing helps to boost resistance to infection, inverted yoga poses help circulate fluid through the lymphatic system, filtering out toxins.
14. Meditation:
  - Group or individual meditation improves immune and cognitive function, helps cultivate healthy sleep patterns and reduces blood pressure. Guided meditations, group sound bath meditations with Tibetan or quartz singing bowls and gong baths are all methods designed to reduce stress, tension and cortisol levels in the body.
15. Earthing:
  - Earthing (or grounding) is a therapeutic technique that focuses on realigning the body's electrical energy by reconnecting to the earth such as walking barefoot outside or lying, sitting in hot springs pools. The earth has an infinite supply of free electrons, so when a person is grounded, those electrons naturally flow between the earth and the body, reducing free radicals and eliminating any static electrical charge. Studies indicate that the reason grounding is so powerful is it reduces and prevents inflammation from occurring in the body, which in turn prevents inflammation-related health disorders.
16. Forest Bathing (Shinrin Yoku):
  - The intentional practice of connecting with nature and to the energy of the natural world. Mindful walking is calming and soothing to the nervous system and can help boost immune function. Benefits include improved sleep, sunlight exposure, physical activity, reduced stress hormone production, improve feelings of happiness, lower heart rate and blood pressure. It was discovered that phytoncides, a chemical released by plants, could also boost the immune system. Encourage walking paths throughout the hot springs is areas of nature.
17. Mind Body Education:
  - Workshops, communications and collaterals for staff and customers.
  - (Hygiene) The practice of good hygiene and educate on how to combat the spread of infection.
  - (Sleep) The most critical immune building processes happen in our sleep, it is proven that short sleepers are more likely to catch a cold.
  - (Chronic Stress) Impacts immunity and will suppress the effectiveness of the immune system by causing the body to produce greater levels of the hormone cortisol, which over time produces inflammation and leaves the body more susceptible to infections.
  - (Smoking) The effects of tobacco smoke on the immune system include a greater susceptibility to infections such as pneumonia and influenza, more severe and longer-lasting illnesses and lower levels of protective antioxidants (such as vitamin C) in the blood.
  - (Nutrition) The foods we eat modulate our immune system in many ways and can efficiently reduce the risk of infection.
  - (Wellbeing Programs for Employees) To support and educate the staff working in the facilities.

18. Aromatherapy:
  - One way to kill airborne viruses and bacteria is to diffuse pure essential oils in enclosed areas such as treatment rooms or tea lounges. Blends for boosting the immune system can include lemon, eucalyptus, clove, peppermint, cinnamon, rosemary, oregano, lime, cypress. Aromatherapy diffusion can also include bathing pools and showers.
19. Salt Therapy (Halotherapy):
  - Salt rooms can help cleanse the lungs and respiratory system and have been used in Europe for more than 150 years to improve sleep, skin, sports performance and recovery and relieve stress. Himalayan salt emits negative ions that are absorbed directly into the bloodstream and may help to combat free radicals within the body. They have a relaxing effect and have been reported to normalize breathing rates, decrease blood pressure and relieve tension. Salt also has antibacterial, anti-inflammatory and antifungal properties.
20. Infrared Saunas:
  - Infrared saunas are designed to raise body core temperature, stimulate the circulatory system, causing the heart to beat more vigorously and blood vessels to dilate, which help cleanse the circulatory system and more fully oxygenate the body's cells. Better blood circulation means more toxins flow from the cellular level to the skin's surface to improve cell health, aid in muscle recovery and strengthen the immune system.
21. Massage and Detoxifying Body Treatments:
  - The lymphatic system plays an integral role in the immune functions of the body; it is the first line of defence against infection and disease. Circulation is also improved by body brushing, thermal body muds, salt body scrubs, body wraps, hammam rituals and body massage which all produce measurable biological effects to positively influence the immune system.
22. Reflexology Lounges:
  - Reflexology with therapists to provide acupressure massage and reflexology for reducing stress and tension throughout the body's systems that will improve blood and lymph circulation and release toxins from the bodies tissues.
23. Natural and Traditional Chinese Medicines:
  - Resident or visiting expert practitioners offering Acupuncture, Oriental Medicines, Cupping therapy, Herbal Remedies, Ayurveda, Homeopathy, Naturopathy. TCM Treatment focuses on restoring your protective qi's equilibrium to optimise your body's natural resistance and healing ability. Homeopathy emphasises treating the underlying imbalance in the immune system rather than fighting the infection. Herbal remedies can be an effective way of treating and relieving some of the major symptoms of viruses and can also reduce the duration.
24. Extreme Bathing/Extreme Wellness:
  - Pushing the body to extremes may help stimulate the immune system and the body's self-healing mechanisms. Natural hot springs are playing host to extreme wellness retreats and adventures: The extreme comfort of natural hot pools provides a stark contrast to bathing in snow-covered mountain streams, or try a walking tour in the forest punctuated by the discovery of portable heated hydro hammocks or makeshift steam room tents.
25. Singing, Sound Healing, Ambient Music and Mantra:
  - Singing activates the spleen, helping to increase the blood concentrations of antibodies and boost the immune system. Musical events and instruments, concerts, sound bath healing and group singing mantra can help to balance out the frequencies of the body and reduce the stress hormones that can suppress the many functions of the immune system. Ambient music, sound bowls or guided meditations can be played throughout the facilities.

## Resources:

- \*The Science Behind the Wim Hof Method <https://www.wimhofmethod.com/science>
- \*Yoga and Immune System Function <https://www.ncbi.nlm.nih.gov/pubmed/29429046>
- \*The Science of Breathing and Immune Function <https://www.thebreatheffect.com/immune-system-breathing-techniques/>
- \* Study proves exercise boosts immune system <https://www.abc.net.au/science/articles/2010/11/02/30.htm>
- \*Vitamin C Protects Against Coronavirus <http://orthomolecular.org/resources/omns/v16n04.shtml>
- \*20 Foods That Are High in Vitamin C <https://www.healthline.com/nutrition/vitamin-c-foods>
- \*The compelling link between physical activity and the body's defence system <https://www.sciencedirect.com/science/article/5>
- \* Singing modulates mood, stress, cortisol, cytokine and neuropeptide activity <https://ecancer.org/en/journal/article/631-singing/t>
- \*The Neurochemistry of Music <http://www.downloads.imune.net/medicalbooks/Neurochemistry%music.pdf>
- \* Effects of Singing Bowl Sound Meditation on Mood, Tension, and Well-being <https://www.ncbi.nlm.nih.gov/>
- \*12 Science Based Benefits of Meditation <https://www.healthline.com/nutrition/12-benefits-of-meditation>
- \*Earthing: Health Implications of Reconnecting the Human Body to the Earth's Surface Electrons <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3265077/>
- \*Short Sleepers Are Four Times More Likely to Catch a Cold <https://www.ucsf.edu/news/2015/08/131411/short-sleepers-are-four-times-more-likely-catch-cold>
- \*Shinrin-Yoku (Forest Bathing) and Nature Therapy <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5580555/>
- \*Health benefits linked to drinking tea [https://www.health.harvard.edu/press\\_releases/health-benefits-linked-to-drinking-tea](https://www.health.harvard.edu/press_releases/health-benefits-linked-to-drinking-tea)
- \*Impacts of cigarette smoking on immune responsiveness <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5352117/>
- \*Effects of Swedish Massage Therapy on Hormones, Immune Function <https://nccih.nih.gov/research/results/spotlight/090110.htm>
- \*Near Infrared for Immunity & Cell Health <https://www.sunlighten.com/infrared-sauna-health-benefits/cell-health/>
- \*Healing Effects Of Colour Therapy Treatment <https://www.healthdigests.com/color-therapy-treatment/>
- \*Traditional Chinese medicine and immune regulation <https://www.ncbi.nlm.nih.gov/pubmed/22826112>
- \*The Art and Science of Traditional Medicine [https://www.sciencemag.org/sites/default/files/custom-publishing/documents/TCM\\_Dec\\_19\\_issue\\_high\\_resolution.pdf](https://www.sciencemag.org/sites/default/files/custom-publishing/documents/TCM_Dec_19_issue_high_resolution.pdf)
- \*Health Benefits of Negative Ionization <https://www.vtsaltcaves.com/negative-ionization>
- \*Top 7 Acupressure Points for Strengthening Immune System <https://www.modernreflexology.com/acupressure-points-for-immune-system/>
- \*7 Essential oils that boost your immune system <https://www.essentialoilhaven.com/essential-oils-immune-system/>
- \*5 Ways to boost immunity against cold and flu <https://www.atms.com.au/5-ways-to-boost-your-immunity-against-cold-and-flu/>
- \*Global Wellness Institute <https://www.ausleisure.com.au/news/global-wellness-institute-names-top-five-international-hot-springs-trends/>