ONE8T Experience Literature Review

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Hydr8: Electrolyte/Caffeine Infused Hydration

Hydration Overview

Hydration plays a critical role in recovery, performance, and overall health. Within high-performance and wellness settings—including sauna therapy, strength training, conditioning, and recovery modalities—understanding the physiological mechanisms of hydration and electrolyte balance is essential. Hydration is not simply a matter of water intake; it is a dynamic physiological process influenced by fluid distribution, electrolytes, hormonal regulation, and environmental stressors such as exercise and heat exposure (Perrier, 2017). Effective hydration strategies must support both health and performance outcomes.

Hydration and General Health

Water is the body's most essential nutrient and is required for cellular function, cardiovascular regulation, temperature control, metabolic processes, and kidney health (Perrier, 2017). Research demonstrates that even mild dehydration affects plasma osmolality, vasopressin regulation, and urine concentration—factors linked to kidney strain and cardiometabolic dysfunction if chronically elevated. Adequate daily water intake lowers vasopressin levels and reduces metabolic strain; higher water intake is associated with reduced risk of chronic kidney disease and kidney stone formation (Perrier, 2017). Thus, supporting clients in maintaining adequate hydration is foundational to long-term health and recovery.

Hydration for Recovery After Exercise

Exercise induces significant fluid loss through sweat, and these losses include both water and electrolytes, particularly sodium and chloride (Maughan & Shirreffs, 1997). Adequate rehydration is a core component of the recovery process, as insufficient intake can impair performance, thermoregulation, and physiological restoration. Sweat sodium concentration

typically ranges from 20–80 mmol/L, and these losses must be replenished for effective recovery (Maughan & Shirreffs, 1997). Sweat rate varies by individual, environment, exercise intensity, and acclimatization status. Drinking plain water post-exercise leads to dilution of plasma sodium and increased urine output, slowing the recovery process (Maughan & Shirreffs, 1997), while rehydration beverages with ≥50 mmol/L sodium significantly improve fluid retention and restore plasma volume, and electrolyte-containing beverages outperform water alone in maintaining positive fluid balance (Maughan & Shirreffs, 1997). Electrolyte-supported hydration is therefore superior for clients using ONE8T's recovery services, particularly those engaging in conditioning sessions, sauna therapy, or high-intensity training.

Hydration and Sauna Use

Sauna exposure creates rapid increases in core temperature and induces significant sweating—upwards of 400–600 g of water evaporation per session (Pilch et al., 2003). Without proper hydration before entering a sauna, users experience elevated heart rate, increased thermal strain, greater plasma volume losses, and faster rises in core temperature (Pilch et al., 2003). Pilch et al. (2003) compared sauna exposure under three conditions: no hydration, hydration with water, and hydration with glycerol solution. The findings demonstrated that the no-hydration condition resulted in the greatest thermal and cardiovascular stress, including a 0.78 kg body mass loss and significant heart rate increases, while hydrated conditions resulted in noticeably lower thermal strain and more stable physiological responses. Adequate hydration before sauna exposure significantly increases heat tolerance and reduces cardiovascular load.

Electrolytes: Mechanisms and Importance

Electrolytes—especially sodium, potassium, and magnesium—play essential roles in fluid balance, neuromuscular function, and cardiovascular stability. Benefits of

electrolyte-enhanced hydration include improved water retention and plasma volume restoration (Maughan & Shirreffs, 1997), more stable thermoregulation during heat exposure (Pilch et al., 2003), reduced risk of cramping, dizziness, and heat-related symptoms, and enhanced overall hydration efficiency. Without electrolytes, water alone may be insufficient for individuals experiencing high sweat losses or sauna-induced dehydration.

Recommendations

Before sauna use, clients should hydrate with at least 300–500 ml of water, and electrolyte-enhanced TWIST options should be recommended for clients with a history of heavy sweating, dizziness, or cardiovascular strain. After exercise, clients should be encouraged to consume electrolyte-enhanced water immediately post-training, with guidance that water alone may delay complete rehydration for heavy sweaters.

Activ8: Massage Chair

Physiological Benefits

Massage therapy meaningfully contributes to physical recovery by improving circulation, reducing muscle tension, and enhancing autonomic nervous system function. Fu et al. (2022) found that massage chair intervention significantly reduced physical fatigue scores and improved recovery markers in adults experiencing fatigue. The same randomized controlled trial reported increased high-frequency heart rate variability (HRV)—a marker of parasympathetic activity—and reduced sympathetic activation, demonstrating physiological relaxation (Fu et al., 2022). A rapid scoping review by Youn et al. (2024) summarized evidence showing that massage chairs decrease muscle stiffness, increase mobility, and promote physiological recovery by enhancing circulation. Collectively, these physiological changes support faster recovery, reduced soreness, and improved physical well-being.

Psychological Benefits

Massage therapy also provides substantial mental and emotional benefits, including stress reduction, improved cognitive function, and reduced anxiety. Youn et al. (2024) reported consistent evidence that massage chair use decreases psychological stress, reduces mental fatigue, and enhances cognitive function across multiple studies. Baek et al. (2022) demonstrated that regular massage chair use decreased serum cortisol and DHEA-S levels, indicating reduced physiological stress and improved mood states. Massage chair sessions led to reduced stress, better perceived well-being, and decreased muscle tension among healthcare professionals—groups known for high psychological strain (Youn et al., 2024).

Vibr8: Hyperice Precussion Therapy

Overview of Percussive Therapy

Percussive therapy uses handheld massage devices like the Hyperice Hypervolt to deliver rapid, targeted pulses of vibration to muscles and soft tissues. This mechanical percussion mimics traditional tapotement massage, helping increase blood flow and muscle mobility (Cheatham et al., 2021; Sams et al., 2023). The Hypervolt, for example, offers adjustable speed and multiple head attachments to target different muscle groups effectively (Cheatham et al., 2021). These tools have become popular with athletes and therapists: one survey found 92% of sports medicine professionals use Hyperice or similar percussion devices (Cheatham et al., 2021).

Physiological Benefits of Precussive Therapy

Hyperice percussion produces vibrations that increase local blood flow and muscle temperature, which can reduce tension and enhance flexibility (Cheatham et al., 2021; Sams et al., 2023). This physiological response supports greater joint range of motion and improved muscle pliability (Cheatham et al., 2021). Regular percussion sessions can help alleviate muscle pain and soreness. In a systematic review, multiple percussive therapy treatments significantly reduced musculoskeletal pain (Sams et al., 2023), and clinicians report these devices help modulate discomfort (Cheatham et al., 2021). These findings support the use of percussion tools for managing acute and chronic muscle tension. A single Hyperice massage session has been shown to acutely boost muscle strength and explosive power. Research indicates that one session of percussion therapy can increase strength and flexibility immediately afterward (Sams et al., 2023). One controlled study found that a 5-minute post-exercise massage-gun session had an effect on recovery and slightly increased short-term soreness (Leabeater et al., 2024), indicating

that proper timing is important. When used correctly, percussion can still support muscle recovery and speed (Sams et al., 2023). This suggests that individualized guidance enhances its recovery benefits.

Psychological Benefits of Precussive Therapy

Beyond physical effects, rhythmic percussion engages the nervous system. Studies of body percussion training report improvements in coordination, concentration, and reduced anxiety (Romero-Naranjo et al., 2014), suggesting percussion therapy can also boost mental focus and well-being. These cognitive and emotional benefits complement its physical advantages.

Radi8 & Rejuven8: Infrared Sauna & Red Light Therapy

Infrared Sauna Introduction

Infrared saunas deliver deep, gentle heat that raises core temperature and induces sweating at lower air temperatures. This thermoregulatory stress increases heart rate, vasodilation and cardiac output to levels comparable to moderate exercise (Ahokas et al., 2023). For example, one review notes that far-infrared heat triggers sweating, reduced vascular resistance and higher heart rate similar to brisk walking (Beever, 2010). These effects support cardiovascular health: studies report that regular infrared sauna use can lower blood pressure and improve endothelial (vessel) function in people with various conditions (Beever, 2010). In addition, infrared sessions promote muscle recovery after workouts. A controlled trial found that basketball players who used a 20-minute infrared sauna after resistance training had less loss of jump power and significantly less muscle soreness than those who recovered passively (Ahokas et al., 2023). The sauna group also reported higher perceived recovery with no impairment of autonomic balance (heart rate variability)(Ahokas et al., 2023). In practical terms, infrared heat after exercise dilates blood vessels and may accelerate clearance of metabolic waste, reducing inflammation and pain. (For example, vivid sweating can aid detoxification by excreting toxins and metabolites, though quantitative evidence is limited.)

Key Infrared Sauna Benefits

Increases heart rate and cardiac output to moderate-exercise levels, helping to lower blood pressure and improve vascular function (Beever, 2010). Post-exercise sauna use preserves strength and speeds recovery. Athletes using an infrared sauna after training showed smaller declines in performance and reduced soreness compared to passive rest. Sauna heat briefly raises sympathetic (stress) activity, but studies show no negative effect on overall autonomic recovery

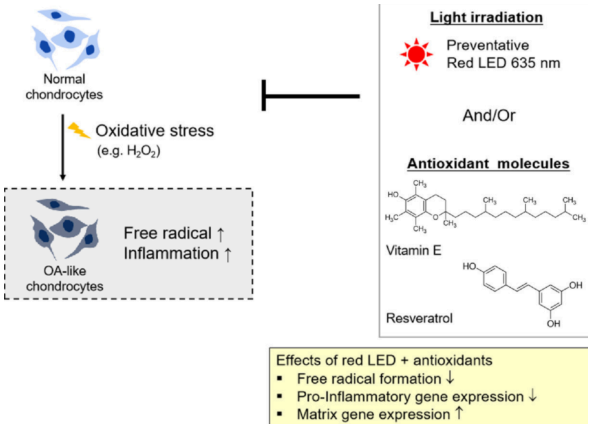
or sleep. In fact, users often report feeling more recovered the next day (Laukkanen & Kunutsor, 2023). Deep sweating in the sauna may help eliminate metabolic byproducts through the skin, supporting the body's cleansing processes (Hussain, 2022). Together, these systemic effects make infrared saunas a valuable tool for high-performance recovery and wellness. Heat therapy's broad benefits – improved circulation, reduced inflammation and stress – have been linked with longer healthspan and lower disease risk.

Red Light Therapy (Photobiomodulation) Benefits:

Red and near-infrared light therapy (600–1100 nm) delivers photons that penetrate skin and are absorbed by cellular chromophores, notably in mitochondria (Couturaud et al., 2023). This photobiomodulation boosts cellular energy and repair (Couturaud et al., 2023). For example, red light activates cytochrome c oxidase in mitochondria, greatly increasing ATP production and enhancing cell metabolism (Couturaud et al., 2023). In practical terms, red light "recharges" cells: tissue under LED irradiation shows higher energy output, upregulated protein synthesis and activation of growth factors. In cultured skin and clinical studies, these effects translate into collagen and elastin production, angiogenesis (new capillary growth), and tissue repair (Ngoc et al., 2023). For example, a systematic review found that LEDs significantly stimulate fibroblasts and increase skin collagen, accelerating wound healing and reducing wrinkles (Ngoc et al., 2023). Critically, red light therapy also calms inflammation. The same LED photons that energize cells can lower pro-inflammatory cytokines and oxidative stress. In practice, this means less pain and swelling in treated tissues (Ngoc et al., 2023). Clinically, red light has proven safe and effective for skin rejuvenation: one trial reported progressive reversal of aging signs on the face after regular red-LED mask treatments, with all subjects noting improved skin quality (Ngoc et al., 2023). Other studies link photobiomodulation to faster

muscle repair and reduced chronic pain, through its antioxidant and healing-promoting pathways (Couturaud et al., 2023; Ngoc et al., 2023). Red/NIR light jump-starts cellular respiration. LEDs boost mitochondrial ATP output and metabolic activity, fueling faster repair and energy regeneration (Ngoc et al., 2023). Cellular regeneration: Light energy triggers gene pathways for tissue renewal. Red light stimulates fibroblasts, collagen and elastin synthesis (reducing wrinkles and improving skin texture) and enhances angiogenesis for nutrient delivery. Anti-inflammatory: Photobiomodulation lowers inflammatory signalling. Studies show red light can reduce pro-inflammatory cytokines and oxidative stress in cells, which eases pain and accelerates the healing of injuries (Chen et al., 2021). Regular red-light sessions visibly improve skin density and tone. Clinical trials document wrinkle reduction and firmer, more youthful skin after sustained red light use (Ngoc et al., 2023). By revitalizing cells from within, red light therapy complements other recovery methods. It is well-suited to enhance workout recovery, reduce inflammation, and support cellular health.

Figure 1. Preventative treatment of red LED alone or combined with anti-oxidants reduced free radical formation, inflammatory gene expression and induced matrix gene expression (Chen et al., 2021).



(Chen et al., 2021)

Combined Benefits: Synergy of Heat and Light Therapy

Using infrared sauna and red light therapy in tandem can deliver more comprehensive rejuvenation than either alone. Infrared heat broadly activates the cardiovascular and immune systems, while photobiomodulation directly targets cells at the tissue level. For example, one sauna study notes that passive heat's anti-inflammatory and antioxidant effects act in synergy across circulatory and immune function (Laukkanen & Kunutsor, 2023). Adding red light's targeted mitochondrial boost could amplify these effects. Together, the therapies address recovery at multiple scales: the sauna enhances circulation and autonomic relaxation, and the LEDs accelerate cellular repair and collagen remodelling. This synergistic approach aligns with emerging evidence: regular sauna bathing lowers cardiovascular risk and extends longevity (Laukkanen & Kunutsor, 2023), while red light has proven benefits for cellular regeneration (Ngoc et al., 2023). When used sequentially, clients may experience accelerated relief from soreness, reduced systemic inflammation, and enhanced overall well-being.

Reson8: Vibrational Renaissance Therapy

Introduction

Vibrational resonance therapy (VRT) transforms an infrared sauna bench into a full-body sound and vibration platform using embedded magnetic transducers (Clearlight Saunas UK Ltd., 2025). These transducers convert music or therapeutic audio into gentle, rhythmic pulses that travel through the bench and into the body, creating a light massage sensation and a fusion of vibration and sound (Clearlight Saunas UK Ltd., 2025). In this way, VRT integrates elements of whole-body vibration, sound therapy, and music therapy to induce deep relaxation and autonomic balance (Clearlight Saunas UK Ltd., 2025). Users simply pair their smartphone or audio device via Bluetooth, allowing the sauna to deliver synchronized vibration and sound throughout the session.

Physiological Benefits

VRT's rhythmic vibration helps muscles release tension while enhancing circulation (Clearlight Saunas UK Ltd., 2025). Research on whole-body vibration shows that it stimulates endorphin release, reduces muscle tightness, and improves blood flow (Moggio et al., 2022). Experimental studies report significantly less post-exercise muscle soreness at 24, 48, and 72 hours when vibration is used after training (Moggio et al., 2022). Systematic reviews further show that whole-body and focal vibration can reduce spasticity and improve neuromuscular control (Moggio et al., 2022). These mechanisms help relieve aches and stiffness, making VRT a valuable recovery tool when paired with infrared heat. Many individuals experience an analgesic effect during vibration-based therapies, aligning with evidence that vibration reduces abnormal muscle tone and modulates sensory pathways involved in pain (Moggio et al., 2022). Combined

with the calming warmth of an infrared sauna, VRT can provide meaningful relief from everyday discomfort.

Psychological Benefits

Research on sound and vibration modalities shows that rhythmic vibration can activate the parasympathetic "Relaxation Response," lowering stress hormones and supporting nervous-system equilibrium (Fooks & Niebuhr, 2024). Reports from VRT users describe mental clarity, reduced stress, and a meditative state (Clearlight Saunas UK Ltd., 2025). The gentle vibrations naturally slow breathing and enhance vagal activation, promoting calmness and improved mood (Clearlight Infrared Saunas, 2022). With repeated use, VRT may help improve sleep quality and resilience to stress.

Synergy with Infrared Heat

When combined with infrared sauna therapy, VRT delivers a multisensory recovery experience. Infrared heat increases circulation, elevates tissue temperature, and relaxes muscles, while the vibrations add a rhythmic, massage-like stimulus that deepens the therapeutic effect. According to manufacturer data, ergonomic bench design enhances how vibrations travel through the body, leaving users feeling restored and focused (Clearlight Saunas UK Ltd., 2025). Together, these modalities enhance muscle recovery, accelerate perceived detoxification, and dissolve mental fatigue more effectively than either therapy alone.

High Performance Benefits

For athletes, VRT supports faster recovery, reduced soreness, and maintenance of neuromuscular performance after training (Moggio et al., 2022). For executives and high-stress professionals, the parasympathetic activation and mood-lifting effects offer cognitive clarity and

stress relief—often within a single session (Clearlight Infrared Saunas, 2022). Ultimately, VRT paired with infrared heat creates a powerful recovery and relaxation tool that meets the demands of physically active individuals, peak performers, and wellness-focused clients alike (Clearlight Saunas UK Ltd., 2025; Moggio et al., 2022).

Invigor8: Salt Water Cold Plunge

Cold Water Therapy Introduction

Cold water therapy—including cold plunges, cold-water immersion (CWI), and cold showers—is an evidence-supported hydrotherapy practice known for its powerful effects on physical recovery, metabolic function, psychological resilience, and long-term healthspan. Cold exposure influences multiple physiological systems at once, including inflammation, circulation, thermogenesis, and neuroendocrine signalling (Kunutsor et al., 2025). For these reasons, cold therapy plays an essential role within ONE8T's ecosystem, complementing hydration, heat, breathwork, and contrast modalities to create a complete recovery experience.

Physiological Benefits of Cold Water Therapy

Cold water immersion is one of the most widely validated modalities for reducing post-exercise soreness and speeding recovery in both athletes and clinical populations. Extensive evidence shows that CWI can significantly reduce delayed-onset muscle soreness (DOMS) by lowering tissue temperature, limiting swelling, and slowing metabolic activity in stressed muscle fibres (Machado et al., 2015). A systematic review and meta-analysis found that CWI was more effective than passive recovery for minimizing both immediate and delayed soreness, with the greatest benefits observed when protocols were performed at 11–15°C for 11–15 minutes (Machado et al., 2015). Cold exposure produces rapid vasoconstriction, which limits inflammatory processes and temporarily decreases fluid accumulation in tissues recovering from exercise or injury (Kunutsor et al., 2025). Beyond these acute effects, regular cold-water practitioners—including winter swimmers—show improved antioxidant capacity and reduced oxidative stress markers, suggesting that consistent exposure may build systemic resilience against inflammation (Kunutsor et al., 2025). This improved oxidative balance is beneficial not

only for athletic recovery but also for long-term cellular health (Kunutsor et al., 2025). By reducing reactive oxygen species and downregulating inflammatory pathways, cold therapy supports tissue repair, joint comfort, and the body's natural healing processes, especially when combined with other modalities such as infrared heat or targeted mobility work (Kunutsor et al., 2025). Cold immersion sharply increases metabolic rate as the body works to maintain thermal balance. This thermogenic response activates brown adipose tissue (BAT) and significantly increases caloric expenditure—mechanisms associated with improved metabolic flexibility and cardiovascular health (Hachemi & U-Din, 2023). Research indicates that cold exposure can raise basal metabolic rate by up to 350% while reducing resting heart rate and blood pressure in controlled environments (Kunutsor et al., 2025). These physiological shifts improve circulation, enhance nutrient delivery, and support post-exercise recovery. For clients seeking metabolic benefits, cold therapy provides a natural and measurable way to boost thermogenesis and support weight management goals (Hachemi & U-Din, 2023).

Psychological Benefits

Cold-water exposure creates an immediate activation of the sympathetic nervous system, triggering a surge in catecholamines such as norepinephrine along with an increase in endorphins (Schepanski et al., 2025). These neurochemical shifts promote heightened alertness, improved mood, and reduced perception of stress (Schepanski et al., 2025). Over repeated sessions, individuals adapt to this acute stressor—a process known as hormetic conditioning—which improves their ability to regulate physiological arousal in everyday life (Kunutsor et al., 2025). As a result, cold therapy becomes a training tool for emotional resilience, helping clients handle psychological stress with more stability and calm. A growing body of research suggests that cold-water exposure may contribute to reduced symptoms of anxiety and depression through

several pathways, including neurotransmitter modulation, anti-inflammatory effects, and improved autonomic balance (Schepanski et al., 2025). Pilot studies involving cold-water swimming demonstrate meaningful improvements in mood, sleep quality, and general well-being (Schepanski et al., 2025).

Immune Function and Cardiometabolic Health

Regular cold-water therapy has been linked to improved cardiometabolic profiles (Hachemi & U-Din, 2023). Studies show favourable effects on blood pressure, lipid profiles, triglycerides, and homocysteine levels—key factors related to long-term cardiovascular risk (Kunutsor et al., 2025). Winter swimmers, for example, consistently demonstrate lower ApoB/ApoA-I ratios and improved vascular health markers, suggesting that repeated short-term cold stimulus conditions the cardiovascular system toward greater efficiency and resilience (Kunutsor et al., 2025). These adaptations may support longevity and reduce the burden on the cardiovascular system during periods of physical or psychological stress. Cold exposure influences immune function by modulating cytokine activity and activating adaptive immune responses. Frequent cold-water swimmers show measurable shifts in inflammatory markers such as IL-6 and IL-1β, indicating that regular cold exposure may improve the body's resilience to infection and stress (Schepanski et al., 2025). While cold therapy is not a direct immune "booster," it appears to train the immune system similarly to how exercise trains the musculoskeletal system—making it more adaptable and responsive over time.

Healthy Aging and Healthspan Extension

Cold water therapy supports several biological processes associated with healthier aging and longer healthspan. By improving cardiovascular function, enhancing metabolic regulation, strengthening immune resilience, and promoting stable mood and sleep patterns, cold exposure

contributes to long-term vitality (Kunutsor et al., 2025). These benefits accumulate gradually with consistent use, making cold therapy a proactive strategy for clients seeking longevity, improved daily functioning, and long-term wellness.

Elimin8: Vitamin-C + Activated Carbon Filtered Shower

Contrast Shower System

Post-exercise contrast showers—alternating periods of hot and cold water—are widely used to improve circulation, reduce soreness, and promote overall recovery (Shadgan et al., 2018). Heat encourages vasodilation while cold produces vasoconstriction, creating a pumping effect that enhances blood flow and nutrient delivery to tissues. The ONE8T Elimin8 system elevates this already effective modality by integrating two additional wellness technologies: activated carbon filtration and vitamin C infusion. Together, these components purify the water while providing antioxidant support directly to the skin. Evidence indicates that this dual-action approach offers synergistic benefits, as carbon filtration removes waterborne contaminants that may irritate the skin, while vitamin C infusion counteracts oxidative stress and supports dermal healing processes.

Vitamin C Infusion for Skin Health

Vitamin C (ascorbic acid) is one of the most essential antioxidants involved in maintaining healthy skin structure and function (Wang et al., 2018). It plays a critical role in collagen synthesis, keratinocyte differentiation, and skin barrier integrity—processes that are especially important for individuals who regularly engage in exercise, heat therapy, or outdoor activity (Wang et al., 2018). According to Wang et al. (2018), vitamin C drives dermal collagen formation and protects skin from oxidative damage produced during both environmental exposure and physiological stress. This antioxidant activity is especially beneficial after exercise, when oxidative byproducts may be elevated. More recent findings from De Simoni et al. (2024) further highlight vitamin C as a “potent antioxidant” that promotes healthy epidermal turnover while strengthening the protective skin barrier. Since humans cannot synthesize vitamin C

naturally, external application through topical or shower-based delivery may help replenish cutaneous stores, offering a gentle way to nourish skin following sweat-heavy sessions such as sauna, conditioning, or contrast therapy (Wang et al., 2018).

Activated Carbon Filtration of Shower Water

Activated carbon is one of the most effective materials for removing chemical contaminants from water, and its use in showers can significantly enhance both water quality and skin comfort (Dvorak & Skipton, 2013). Carbon filtration relies on adsorption, binding unwanted compounds to its porous surface structure. Research by Dvorak and Skipton (2013) confirms that activated carbon can efficiently reduce chlorine, chloramine, and a wide range of organic compounds commonly present in municipal water. These chemicals, though safe for general use, may contribute to skin dryness, irritation, and barrier disruption—effects that can be amplified when the skin is warm, freshly exfoliated from sweat, or recovering after intense exercise. Gaurab (2017) further demonstrated that multiple types of activated carbon filters removed substantial amounts of minerals and contaminants—including chloride, potassium, and sulphate—from shower runoff. By capturing these impurities before they reach the skin, activated carbon can help protect the skin barrier, reduce itchiness and irritation, and improve the overall sensory experience of post-exercise showering. In summary, carbon filtration strengthens the recovery process by ensuring the shower environment itself does not introduce additional stressors to the skin.

Synergistic Effects in Post-Contrast Showers

When vitamin C infusion and activated carbon filtration are combined, they create a two-tiered purification and nourishment system that is particularly beneficial after contrast

therapy or intense exercise. Carbon filtration performs the initial cleanup by removing chlorine, organic compounds, and trace contaminants that would otherwise contact the skin's surface (Dvorak & Skipton, 2013). Any residual chlorine or chloramine that escapes filtration is then neutralized by the infused vitamin C. As Tikkanen et al. (2001) explain, ascorbic acid has long been used as an effective dechlorinating agent, quickly converting chlorine into harmless chloride ions with minimal byproducts. This ensures that shower water becomes almost entirely free of oxidants, which is ideal for skin that may already be flushed or sensitized from heat, sweat, and rapid temperature shifts. Beyond purification, the vitamin C infusion adds a direct skin-health benefit by delivering an antioxidant that helps reduce oxidative stress and supports collagen production (Wang et al., 2018; De Simoni et al., 2024). This is particularly meaningful for active individuals, as contrast therapy, sauna sessions, and high-intensity exercise can temporarily increase oxidative load on the skin (Wang et al., 2018). With both purification and nourishment working together, this transforms the end of a recovery session into a restorative skin-conditioning treatment. Clients report that skin feels smoother, less dry, and more balanced—an effect supported by the literature on chlorine removal and vitamin C's dermal benefits (Wang et al., 2018).

References

Ahokas, E. K., Ihalainen, J. K., Hanstock, H. G., Savolainen, E., & Kyröläinen, H. (2023). *A post-exercise infrared sauna session improves recovery of neuromuscular performance and muscle soreness after resistance exercise training*. Biology of Sport, 40(3), 681–689.

Allison, S. (2004). *Fluid, electrolytes and nutrition*. Clinical Medicine, 4(6), 573–578.

Baek, Y., Kim, Y., Kim, M., Lee, S., & Lee, D. (2022). *Massage chair on stress: A pilot randomized controlled trial*. Journal of Korean Medicine.

Beever, R. (2010). *Far-infrared saunas for treatment of cardiovascular risk factors: Summary of published evidence*. Canadian Family Physician, 55(7), 691–696.

Cheatham, S. W., Baker, R. T., Behm, D. G., Stull, K., & Kolber, M. J. (2021). *Mechanical percussion devices: A survey of practice patterns among healthcare professionals.* International Journal of Sports Physical Therapy, 16(3), 766–777.

Chen, I.-C., Chen-Ying, S., Chi-Hau, F., & Hsu-Wei, F. (2021). *Preventative treatment of red light-emitting diode protected osteoarthritis-like chondrocytes from oxidative stress-induced inflammation and promoted matrix gene expression.* Journal of the Taiwan Institute of Chemical Engineers, 127, 23–31.

Clearlight Infrared Saunas. (2022). *Vibration resonance therapy (VRT) infographic [*Brochure]. Clearlight.

Clearlight Saunas UK Ltd. (2025, January 11). *The many benefits of vibrational resonance therapy* [Blog post].

Couturaud, V., Le Fur, M., Pelletier, M., & Granotier, F. (2023). *Reverse skin aging signs by red light photobiomodulation.* Skin Research and Technology, 29, e13391.

De Simoni, E., Candelora, M., Belleggia, S., Rizzetto, G., Molinelli, E., Capodaglio, I., Ferretti, G., Bacchetti, T., Offidani, A., & Simonetti, O. (2024). *Role of antioxidants supplementation in the treatment of atopic dermatitis: A critical narrative review.* Frontiers in Nutrition, 11, Article 1393673.

Dvorak, B. I., & Skipton, S. O. (2013). *Drinking water treatment: Activated carbon filtration* (NebGuide G1489). University of Nebraska–Lincoln Extension.

Fooks, C., & Niebuhr, O. (2024). *Effects of vibroacoustic stimulation on psychological, physiological and cognitive stress.*

Fu, X., Yoon, S., & Kim, K. (2022). *Effect of massotherapy on fatigue recovery using a smart massage chair: A randomized controlled trial.* Healthcare Engineering, 2022.

Gaurab, K. C. (2017). *Testing different combinations of personal cleaning products against activated carbon for Showerloop shower water purification system (*Bachelor's thesis, Metropolia University of Applied Sciences, Helsinki, Finland).

Hachemi, I., & U-Din, M. (2023). *Brown adipose tissue: Activation and metabolism in humans. Endocrinology and Metabolism* (Seoul), 38(2), 214–222

Hussain, Juhaina (2022). *Study of whole-body thermotherapy (sauna) in human health and wellness.* RMIT University. Thesis.

Kunutsor, S. K., Lehoczki, A., & Laukkanen, J. A. (2025). *The untapped potential of cold water therapy as part of a lifestyle intervention for promoting healthy aging.* GeroScience, 47, 387–407.

Laukkanen, J. A., & Kunutsor, S. K. (2023). *The multifaceted benefits of passive heat therapies for extending the healthspan: A comprehensive review with a focus on Finnish sauna.* Temperature, 11(1), 27–51.

Leabeater, A. J., Clarke, A. C., James, L., Huynh, M., & Driller, M. W. (2024). *Under the gun: Percussive massage therapy and physical and perceptual recovery in active adults.* Journal of Athletic Training, 59(3), 310–316.

Machado, A. F., Ferreira, P. H., Micheletti, J. K., Almeida, A. C., Lemes, Í. R., Vanderlei, F. M., Netto Junior, J., & Pastre, C. M. (2015). *Can water temperature and immersion time influence the effect of cold water immersion on muscle soreness? A systematic review and meta-analysis.* Sports Medicine, 46, 503–514.

Maughan, R. J., & Shirreffs, S. M. (1997). *Recovery from prolonged exercise: Restoration of water and electrolyte balance*. Journal of Sports Sciences, 15(3), 297–303.

Moggio, L., de Sire, A., Marotta, N., Demeco, A., & Ammendolia, A. (2022). *Vibration therapy role in neurological diseases rehabilitation: An umbrella review of systematic reviews.* Disability and Rehabilitation, 44(20), 5741–5749.

Ngoc, L. T. N., Moon, J.-Y., & Lee, Y.-C. (2023). *Utilization of light-emitting diodes for skin therapy: Systematic review and meta-analysis.* Photodermatology, Photoimmunology & Photomedicine, 39(3), 303–317.

Perrier, E. (2017). *Shifting focus: From hydration for performance to hydration for health.* Annals of Nutrition and Metabolism, 70(Suppl. 1), 4–12.

Pilch, W., et al. (2003). *The influence of body hydration on chosen physiological reactions to sauna training.* Journal of Human Kinetics, 9, 31–40.

Romero-Naranjo, A. A., Jauset-Berrocal, J. A., Romero-Naranjo, F. J., & Liendo-Cárdenas, A. (2014). *Therapeutic benefits of body percussion using the BAPNE method.* Procedia – Social and Behavioral Sciences, 152, 1171–1177.

Sams, L., Langdown, B. L., Simons, J., & Vseteckova, J. (2023). *The effect of percussive therapy on musculoskeletal performance and experiences of pain: A systematic literature review.* International Journal of Sports Physical Therapy, 18(2), 309–327.

Schepanski, S., Batta, F., Schröter, M., Seifert, G., & Koch, A. K. (2025). *Protocol for a systematic review and meta-analysis on the effects of cold-water exposure on mental health.* Frontiers in Psychiatry, 16, Article 1603700.

Twist by Quench. (2025). *Twist Nutritional Flyer: Enhancement Update.*

Wang, K., Jiang, H., Li, W., Qiang, M., Dong, T., & Li, H. (2018). *Role of vitamin C in skin diseases.* Frontiers in Physiology, 9, 819.