# THE BENEFITS OF STEAM THERAPY: A BRIEF REVIEW



Feel Good Inc.

## **Steam Therapy: A Scientific Overview**

Below are the areas where steam therapy can affect the body's mental and physical health.

#### **Respiratory Health**

Steam acts as a natural expectorant, and a steam room, being an enclosed environment, enhances this benefit. Steam can open up restricted airways and dislodge mucus and phlegm that may be obstructing normal breathing patterns.

- A study from India found that inhaling steam can help reduce congestion, even in those with "severe acute lower respiratory tract infection."<sup>2</sup>
- Steam therapy can help relieve the chronic inflammatory response caused by asthma.<sup>3</sup>
- Steam therapy also helps relieve the symptoms of croup. <sup>4</sup>

#### Skin Care

Steam therapy helps enhance cosmetic skin appearance and skin health through removal of dangerous bacteria and toxins that lodge in the surface area of the skin and deeper levels of the epidermis.

- Heat from steam rooms actually helps maintain the water capacity of stratum corneum protective cells. <sup>5</sup>
- Steam therapy greatly increases cutaneous (skin) circulation, and sweating enhances the flushing process.<sup>6</sup>
- Even improvement in serious skin diseases such as psoriasis have been measured after steam therapy.<sup>7</sup>



<sup>&</sup>lt;sup>2</sup> https://www.ncbi.nlm.nih.gov/pubmed/2286438

<sup>&</sup>lt;sup>3</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4049052/

<sup>&</sup>lt;sup>4</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2094841/

<sup>&</sup>lt;sup>5</sup> <u>https://www.ncbi.nlm.nih.gov/pubmed/18525205</u>

<sup>&</sup>lt;sup>6</sup> https://www.ncbi.nlm.nih.gov/pubmed/321889

<sup>&</sup>lt;sup>7</sup> https://www.ncbi.nlm.nih.gov/pubmed/20034760

#### Removal of Heavy Metals and Toxins from the Blood Stream

Research discovered that steam therapy helped lower mercury levels in the bloodstream.<sup>8</sup>

#### **Blood Circulation**

- One study found that steam heat dilates small blood vessels, creating better blood flow, which also helps reduce hypertension.<sup>9</sup>
- Blood flow out of the heart "increases by two or more times after a 10-to-15-minute steam room exposure." <sup>10</sup>

#### **Stress Relief and Mood Enhancement**

While anecdotal support for steam therapy's effect on relaxation are widespread, researchers have uncovered other actions.

- Research shows that steam therapy can increase release of aldosterone, a hormone that can help lower blood pressure and enhance relaxation.<sup>11</sup>
- A study found that heat therapy can help increase levels of the neurochemical serotonin, the "feel good" hormone.<sup>12</sup>
- Heat therapy has shown the ability to protect against oxidative stress in muscular tissue. <sup>13</sup>



<sup>&</sup>lt;sup>8</sup> <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3312275/</u>

<sup>&</sup>lt;sup>9</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3560772/

<sup>&</sup>lt;sup>10</sup> <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2359619</u>

<sup>&</sup>lt;sup>11</sup> https://www.ncbi.nlm.nih.gov/pubmed/21542324

<sup>&</sup>lt;sup>12</sup> <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2077351/</u>

<sup>&</sup>lt;sup>13</sup> <u>https://www.ncbi.nlm.nih.gov/pubmed/15761186</u>

### Sleep Endurance and Quality

The stress relief and mood enhancement noted above help improve sleep quality. Heat can also help improve sleep in other areas.

 One study on elderly subjects suffering from insomnia discovered that increasing body temperature helped enhance quality of sleep and "quickness of falling asleep." <sup>14</sup>

#### **Pain Relief**

#### Steam therapy can help relieve pain in muscles and connective tissues.

- If a joint is painful and stiff, applying heat will help loosen the surrounding muscles and increase blood flow to the area. <sup>15</sup>
- Application of moist heat after physical activity helps reduce pain and preserve muscle strength by soothing nerve endings and relaxing the muscles. <sup>16</sup>

#### **Exercise Recovery and Muscular Health**

## Apart from the study listed above, research has discovered other effects of steam therapy on recovery from physical activity and overall muscular health.

- Intermittent hyperthermia can enhance muscle regrowth and limit muscle cell damage after physical activity. <sup>17</sup>
- Steam therapy helps to increase plasma volume and oxygenation in blood, aiding in exercise recovery.<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> https://www.tandfonline.com/doi/abs/10.1080/17461391.2012.660506



<sup>&</sup>lt;sup>14</sup> https://www.ncbi.nlm.nih.gov/pubmed/12379298

<sup>&</sup>lt;sup>15</sup> https://www.clinicaladvisor.com/cmece-features/a-new-understanding-of-osteoarthritis/article/234854/2/

<sup>&</sup>lt;sup>16</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3808259/

<sup>&</sup>lt;sup>17</sup> https://link.springer.com/article/10.1007/s00776-006-1083-0

#### Weight Loss

#### Steam therapy has been associated with weight loss.

- Subjects in a hot bath (104°F) burned 140 calories per hour and lowered blood sugar levels. <sup>19</sup>
- Fitness experts report that a steam room set at 114°F can burn 150 calories in a single 15minute session. <sup>20</sup>

#### **AUGMENTED THERAPIES**

Researchers are increasingly interested in how immersive environments can affect health outcomes. For instance, one recent field of study related to virtual reality (VR) devices have shown promise in areas of health improvement.

Combining steam therapy with other sensory stimuli can enhance the effects of the core therapeutic effects of thermoregulation. The controlled environment of steam rooms and steam baths offer numerous options in enhancing wellness lifestyles. The following highlights look at aromatherapy, chromatherapy, and music therapy.

#### Aromatherapy

The National Institutes of Health<sup>21</sup> and the National Center for Biotechnology Information (NCBI)<sup>22</sup> list hundreds of studies examining the positive effects of aromatherapy on everything from everyday stress to cancer treatment.

#### Chroma Therapy

The 921 studies included in the NCBI database have exhaustive data on chromatherapy's effects on pain relief, cancer treatment, and other wellness and health conditions.<sup>23</sup> Included is "A Critical Analysis of Chromatherapy and Its Scientific Evolution," which analyzes chromatherapy's centuries-



<sup>&</sup>lt;sup>19</sup>https://www.tandfonline.com/doi/full/10.1080/23328940.2017.1288688?scroll=top&needAccess=true

 <sup>&</sup>lt;sup>20</sup> https://www.modernmom.com/the-calories-burned-sitting-in-a-steam-sauna-for-15-minutes-120171.html
 <sup>21</sup> https://www.nih.gov/

<sup>&</sup>lt;sup>22</sup> https://www.ncbi.nlm.nih.gov/pmc

<sup>&</sup>lt;sup>23</sup> https://www.ncbi.nlm.nih.gov/pmc/?term=chromatherapy

old history as "a method of treatment that uses the visible spectrum (colors) of electromagnetic radiation to cure diseases." <sup>24</sup>

#### **Music Therapy**

Since antiquity, music has been utilized as a lifestyle enhancement and medical intervention for cultures all over the world. Research on music therapy is numerous and covers almost every imaginable health condition.<sup>25</sup> More recent research has looked at music's effect on helping patients with diseases of the brain, including Parkinson's, dementia, Alzheimer's, and rehabilitative therapy for stroke victims. <sup>26 27 28</sup>

<sup>27</sup> https://www.ncbi.nlm.nih.gov/pubmed/11495422
<sup>28</sup> https://www.ncbi.nlm.nih.gov/pmc/?term=steam+therapy



<sup>&</sup>lt;sup>24</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1297510/

<sup>&</sup>lt;sup>25</sup> https://www.ncbi.nlm.nih.gov/pmc/?term=music+therapy

<sup>&</sup>lt;sup>26</sup> https://www.alzfdn.org/EducationandCare/musictherapy.html