

# Topical Application of CBD and Anti-Aging

by Healthcare International Research Limited

*This paper is the third white paper to be published by Healthcare International Research and discusses how the topical application of Cannabidiol (CBD) can contribute to anti-aging.*

## ANTI-AGING PRODUCTS & FUTURE DEVELOPMENTS

The World Health Organisation estimates that the pace of population ageing is greater now than at any other time in history and between 2015 and 2050, the proportion of the world's population over 60 years of age will double from 12% to 22%<sup>1</sup>; making health and wellbeing and anti-aging an extant area of concern. In 2020, Statista Research estimated the global market for anti-aging products was worth \$58.5 billion USD. Consumer market experts anticipate this will increase to \$88.3 billion USD by 2026<sup>2</sup>. Anti-aging skincare products consistently rank as one of the top selling items within the skincare market<sup>3</sup> with fundamental aims being to keep the body in optimal condition, increase beauty and attractiveness, protect against adverse environmental effects and combat the aging process<sup>4</sup>. However, the phenomenon of anti-aging extends past skin care with other important elements contributing to health and well-being as people age. Most experts agree that, anxiety and stress reduction, hormonal balance, skin collagen, inflammation control, joint health, cognitive health and anti-oxidant support are all important components of anti-aging<sup>5</sup>. Cannabidiol (CBD) products in the anti-aging market are estimated to skyrocket from \$147 million USD in 2018 to \$1.7 billion USD by 2025<sup>6</sup>. Not only does the topical application of CBD infused products encompass the important elements of anti-aging listed previously, they also help people who suffer from acne, skin dryness, and contribute to safe and effective healing of eczema

flare-ups and breakouts<sup>7</sup>. Scientists and anti-aging industry experts agree that there is a growing body of evidence that CBD is beneficial for a wide range of medical conditions and should be considered as effective medical therapy<sup>8</sup>.

## TOPICAL APPLICATION OF CBD & ANTI-AGING

Ageing can be considered a universal but not uniform phenomenon. Functional deterioration increases as people age and preventing osteoarthritis, improving joint health, optimizing skin collagen, reducing inflammation and sharpening cognitive health are tantamount to maintaining a healthy body<sup>9</sup>. There has been much research completed within the last decade on how the topical application of CBD contributes to anti-aging that supports fully the healing properties CBD brings to a broad-spectrum of anti-aging concerns. For example, medical experts and dermatologists agree there is substantive evidence across multiple clinical trials that support the utility of topical CBD for the treatment of various inflammatory and autoimmune skin disorders<sup>10</sup> that can retard aging of the skin, elevate skin collagen and reverse damage caused by adverse environmental conditions. Another anti-ageing concern CBD can help treat is osteoporosis. Globally, osteoporosis affects 1 in 3 women and 1 in 5 men over 50 years of age and is often termed the 'silent disease' because people cannot feel their bones getting weaker<sup>11</sup>. Empirical research concludes that CBD has an ameliorative approach against osteoporosis that can aid pain management and improve bone density regulation by optimising the body's endocannabinoid system<sup>12</sup>. CBD has also been extensively researched as a potential treatment for anxiety and stress with evidence conclusively demonstrating CBD's efficacy in reducing anxiety behaviours relevant to multiple disorders<sup>13</sup>. Another important study completed in 2019 concluded that 79%

1 World Health Organisation (2021) Ageing and Health, available online at: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>

2 Statista Research Department (2021) Size of the Anti-Aging Market Worldwide from 2020 to 2026, available online at: <https://www.statista.com/statistics/509679/value-of-the-global-anti-aging-market/>

3 Sabharwal, V., Maan, S. & Kumar, S. (2014) 'Women Buying Behaviour and Consumption Pattern of Facial Skin Care Products', International Journal of Management and SocialSciencesresearch.

4 Yan, S., Sim, Y., Ling, C.N. & Hock, T. (2012) 'Cosmetic Product: A Study of Malaysian Women Shoppers in Cyberspace', World Applied Sciences Journal, 20 (11), 1529-1533.

5 Louis, B.W.S. (2018) 'Clinical rationale for CBD in cardiovascular, brain, and liver function and optimal aging', Cannabis: A Clinician's Guide: CRC Press, Taylor-Francis.

6 Manuel, R. (2021) 'CBD Skin Care Market Size To Be Valued At \$1.7 Billion By 2025 Owing To Increasing Awareness Related To Healing Properties Of CBD Infused Beauty Products', Million Insights, available online at: <https://www.prnewswire.com/news-releases/cbd-skin-care-market-size-to-be-valued-at-1-7-billion-by-2025-owing-to-increasing-awareness-related-to-healing-properties-of-cbd-infused-beauty-products--million-insights-301210617.html>

7 Sivesind, T.E., Maghfour, J., Rietcheck, H., Kamel, K., Malik, A.S. & Dellavalle, R.P. (2022) 'Cannabinoids for the Treatment of Dermatologic Conditions', JID Innovations, p.100095.

8 Stella, B., Baratta, F., Della Pepa, C. et al. (2021) 'Cannabinoid Formulations and Delivery Systems: Current and Future Options to Treat Pain.', Drugs 81, pp. 1513-1557.

9 Jaul, E. & Barron, J.S. (2017) 'Age-Related Diseases and Clinical and Public Health Implications for the 85 Years Old and Over Population, Frontiers in Public Health, 5, pp.1-7.

10 Sivesind, E.T., Maghfour, J., Rietcheck et al. (2022) 'Cannabinoids for the Treatment of Dermatologic Conditions', JID Innovations 2022, 2 available online at: [https://www.jidinnovations.org/article/S2667-0267\(22\)00001-7/fulltext](https://www.jidinnovations.org/article/S2667-0267(22)00001-7/fulltext)

11 Quinones, F.H. (2019) CBD Oil for Osteoporosis: All You Need to Know about Using CBD Oil for Treating Osteoporosis.

12 Corroon, J. & Felice, J.F. (2019) 'The Endocannabinoid System and its Modulation by Cannabidiol (CBD)', Alternative Therapies in Health & Medicine, 25.

13 Blessing, E.M., Steenkamp, M.M., Manzanares, J. & Marmar, C.R. (2015) 'Cannabidiol as a Potential Treatment for Anxiety Disorders', Neurotherapeutics 12(4) pp.825-836.

of research participants had reduced anxiety as a result of CBD treatment with 67% of research participants reporting improved sleep and greater cognitive function<sup>14</sup>. A significant study by Meletis & Lewis provides overwhelming evidence for the clinical rationale for CBD use on mood, depression, anxiety, brain function and optimal aging<sup>15</sup>. Studies have produced sufficient evidence that CBD can optimise the endo-cannabinoid system that regulates hormonal balance and creates homeostasis in the body. Topical application of CBD has also been researched extensively with positive findings to treat inflammation and chronic pain and these topics have been discussed in our earlier white papers.

### **CBD AND PRESCRIPTION MEDICATIONS FOR ANTI-AGING**

A study titled *Is CBD Better Than Big Pharma? Patients Seem to Think So* by Green Entrepreneur in 2019 concluded that 'CBD is far less expensive, has practically zero side effects and often has the same or better efficacy'<sup>16</sup>. A study involving 2400 research participants concluded that 60% of respondents believed CBD was more effective than prescription medications with 75% of respondents claiming that CBD treatment was more effective than over-the-counter remedies. As people age, it is commonplace for them to take individual medications for a range of ailments or health concerns; a cocktail of different pills and potions to treat individual problems. Taking Celebrex, for example, as a nonsteroidal anti-inflammatory, may increase the risk of heart attack or

stroke<sup>17</sup>. In contrast, the topical application of CBD may present a greater opportunity to deliver effective treatment of anti-inflammatory problems while substantially lowering the risk of serious side effects<sup>18</sup>. Another seminal study concludes that cannabinoid risks in the older person are modest<sup>19</sup>.

### **CONCLUSIONS**

Health experts forecast that people are living longer and between 2015 and 2050, the proportion of the world's population over 60 years of age will double from 12% to 22%. Consequently, anti-aging health concerns remain an extant problem. CBD has been demonstrated to help with a wide range of anti-aging elements such as anxiety and stress reduction, hormonal balance, skin collagen, inflammation control, joint health, osteoporosis, cognitive health and anti-oxidant support. Moreover, CBD may yield better efficacy than prescription drugs with lower health risks and should be considered as credible treatment for a broad-spectrum of anti-ageing health concerns.

*This white paper was completed for HIR by Harry Rule. Harry is a leading independent researcher specialising in qualitative research across a wide range of sectors. He holds a Masters of Research and has recently completed a Doctor of Business Administration and leads HIR's research team.*

14 Skelley, J.W., Deas, C.M., Curren, Z. & Ennis, J. (2020) 'Use of Cannabidiol in Anxiety and Anxiety Related Disorders', Journal of the American Pharmacists Association, Vol. 60, pp.253-261.

15 Meletis, C.D. & Louis, B.W.S. (2018) 'Clinical rationale for CBD use on mood, depression, anxiety, brain function, and optimal aging', Cannabis: A Clinician's Guide (pp. 139-145).

16 Green Entrepreneur (2019) *Is CBD Better Than Big Pharma? Patients Seem to Think So*, available online at: <https://www.greenentrepreneur.com/article/333112>

17 Webmd (2019) Celebrex - Uses, Side Effects, and more, available online at: <https://www.webmd.com/drugs/2/drug-16849/celebrex-oral/details>

18 Lykins, W. (2021) 'Efficacy of Cannabidiol in Treating Osteoarthritis', JBJS Journal of Orthopaedics for Physician Assistants.

19 Beedham, W.; Sbai, M.; Allison, I.; Coary, R. & Shipway, D. 'Cannabinoids in the Older Person: A Literature Review', Geriatrics 2020, 5, 2. Available online at: <https://doi.org/10.3390/geriatrics5010002>