

# Botanical Ingredients for Managing Stress Naturally

By Elaine Yu at Layn

**Stress And Anxiety Now Top Health Concerns**  
For the first time in a decade, anxiety and stress prevention rose to the number 1 position as Americans' top health concern, according to research from The Hartman Group. Its Health + Wellness 2019 report indicates that mental and emotional health are gaining importance, and are key indicators of how consumers understand health and wellness<sup>1,2</sup>.



If a person is subjected to repeated stress over an extended period, the body gradually loses its natural ability to cope. Numerous studies have demonstrated that stress left unmanaged can contribute to many health problems, including high blood pressure, heart disease and obesity. Stress triggers the brain to release the hormone cortisol into the bloodstream. Many consumers are aware of this connection and are looking for natural solutions to help manage stress long-term, and without unwanted side effects. At Layn Natural Ingredients, we are seeing a general trend of products moving away from the rush of energy, in favor of products that have calming and de-stressing effects.

According to a recent Gallup Poll, there was an unprecedented increase in the percentage of people experiencing significant stress and worry in the first half of March. People with stress rose 14 points to 60% and worry rose 20 points to 58%. So, about 51 million more adults in the US were suffering significant worry this Spring than were experiencing worry last Fall.

America's State of Mind Report<sup>3</sup> high-

lighted that the number of antidepressant, anti-anxiety, and anti-insomnia medication prescriptions filled increased by 21% from February to March this year. The use of these medications was previously on a steady decline from 2015 to 2019, down 12% and 11.3%, respectively. The study revealed that new prescriptions for anti-anxiety medications showed nearly a 38% increase, emphasizing the need for other more natural approaches to stress management.

## Natural Approaches for Managing Stress

Disappointed with conventional therapies, and associated negative side effects, many consumers of all age groups and demographics are looking for natural solutions to help reduce stress, and support healthy mood and sleep.

Consumers today are taking a more proactive approach to wellness, rather than addressing health concerns only when they become a problem. Increasingly, people are seeking natural approaches and long-term self-care strategies to help manage stress including exercise, yoga, meditation, artistic endeavors and counseling. For many, proper nutri-

tion and supplementation are a critical part of this strategy. There is a growing awareness of the role of Adaptogens in managing stress, and many consumers are turning to time-proven botanicals to help keep moods in check.

Increasingly, consumers are seeking natural products with proven efficacy. More people are looking for natural, holistic alternatives to the chemical, artificial, and synthetic health therapies available. Additionally, many botanicals are rolling out in new and novel delivery formats. Adding botanical extracts to functional foods and beverages, or in gummies, chewable tablets or liquids can uncover new opportunities for manufacturers and formulators to deliver the benefits of these ingredients in formats consumers prefer.

## The Role of Adaptogens and How They Help

Adaptogens are gaining increasing attention as consumers seek natural alternatives for dealing with stress and anxiety. Adaptogens are herbs and botanicals that exert a normalizing effect upon bodily processes, and have restorative properties that help the body adapt to stress.

The term "adaptogen" was coined by Dr. Nikolai Lazarev in 1947. It is used to describe a variety of botanicals that are known to rejuvenate and balance the nervous system, increase stress resilience and support balance, or homeostasis, in the body. Adaptogens have long been used in Ayurvedic Medicine and Traditional Chinese Medicine.

Adaptogens play a role in reversing the adverse effects of physical and mental stressors and work to bring the body back into a more balanced state. The full method of action is not fully understood, but research has shown that adaptogenic herbs can have a normalizing effect on stress hormone levels.

- **Rhodiola**, also known as **Arctic Root**, grows in cold climates and high altitudes. It has been shown reduce general fatigue under certain stressful conditions.
- **Schisandra**, sometimes referred to as **Chinese Magnolia Vine** or **Five Flavored Fruit**, has a long history of use in helping to support healthy mood.
- **Holy Basil**, also known as **Tulsi**, is shown to help manage healthy stress response and improve symptoms of anxiety.

## Hemp Extracts and Cannabinoids

Studies<sup>4</sup> have shown that hemp extracts can greatly reduce the symptoms of anxiety. One recent study<sup>5</sup> demonstrated that CBD may reduce stress-related depression because of its anti-stress properties. Often, the calming effects of CBD can be felt almost immediately. In addition, its positive effects can be lasting and have fewer side effects than most prescription medications.

CBD was initially the most readily available Cannabinoid and now as more data unlocks the power of the Endocannabinoid system, research continues to uncover increased opportunities from minor cannabinoids such as CBG, CBC, CBN, CBGa, as well as a series of terpenes all of which are found in hemp extracts. As the industry conducts more clinical studies on the other cannabinoids and terpenes, more spe-

cialized ingredients and products will be available.

At Layn Natural Ingredients, and our subsidiary HempRise, we are seeing increased interest in unique combinations of various cannabinoids and terpenes. We are also innovating around synergistic formulations of CBD in combination with other key botanicals.

## Other Botanicals for Stress Support

Foods and botanicals with high antioxidant levels may also help keep stress in check by reducing oxidative damage and suppressing inflammatory molecules. It has been demonstrated that inflammation plays a role in stress and depression. Unchecked, inflammatory molecules can wreak havoc on certain neurotransmitters, which can affect mood and stress responses.

At Layn, we are innovating with a number of botanical extracts and synergies for their potential to help manage stress and fatigue, based on the concentration of active phytonutrients and high levels of antioxidant activity. These include:

- **Apple Phloretin** – Phloretin is one of the important phytochemicals present in apples, and demonstrates very high antioxidant activity.
- **Broccoli** – Sulforaphane (SFN), an isothiocyanate compound derived from broccoli has been shown to help reduce inflammation-related depressive symptoms. Animal studies show that by lowering the levels of inflammatory molecules that can pass through the blood-brain-barrier, broccoli extracts are showing great promise in managing stress and mood<sup>6</sup>.
- **Rice Bran Extract** – Studies have shown that stress-induced increases of brain serotonin metabolism were reduced by supplementing with rice bran. These beneficial effects may be due to the high levels of antioxidant compounds, which have been shown to provide neuroprotective support and reduce stress-induced behavioral and neurochemical deficits<sup>7</sup>.

- **Ziziphus (Also known as Jujube)** – This nutrient-dense fruit is a good source of vitamin A, C, B vitamins,

minerals including iron, phosphorus, and calcium, and healthful fatty acids. Ziziphus has been shown to reduce stress and anxiety, and support relaxation and sleep<sup>8</sup>.

## Keeping it Real

As consumers are demanding natural vs. synthetic health support, they also require more than just the knowledge that certain herbs and botanicals have been used effectively for thousands of years. They need hard-hitting scientific evidence to support specific health claims and modes of action.

Scientific research and studies reinforce the traditional knowledge of botanicals. Consumers today are demanding scientific validation of the safety and efficacy of botanical ingredients. They also want to know how the ingredients are sourced, and are looking for evidence of authenticity, and proof that the ingredients are pure and unadulterated. ●

Elaine Yu is president of Layn USA – a global leader in the production of premium-quality, plant-based functional ingredients, sweeteners, hemp extracts and natural flavors serving the needs of food, beverage, flavor, nutraceutical, animal nutrition and pet health markets ([www.layncorp.com](http://www.layncorp.com)).

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