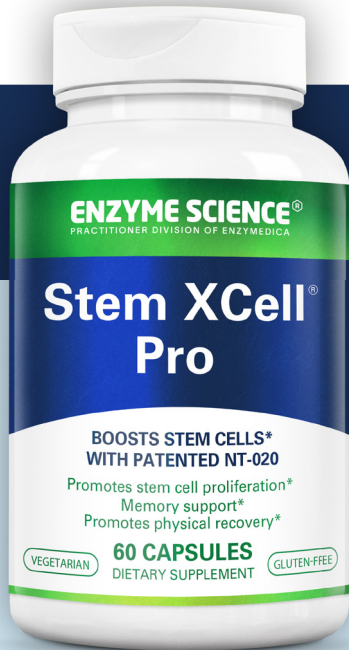


ENZYME SCIENCE®

PRACTITIONER DIVISION OF ENZYMEDICA



Stem XCell™ Pro

Boosts Stem Cells* With Patented NT-020

- Cellular regeneration*
- Cognitive function*
- Promotes physical recovery*

With enzymes, patented and university-developed NT-020 and Defenze™ Antioxidant Blend.

Stem XCell™ Pro promotes the health, proliferation and maintenance of stem cells, the body's "master" cells.* With enzymes to enhance potency and NT-020, which includes vitamin D3, green tea, blueberry and red grape extracts.* Polyphenol-rich formula promotes healthy aging, cognitive function and the body's natural repair processes.*

SUPPLEMENT FACTS

Supplement Facts

Serving Size: 2 Capsules
Servings Per Container: 30

Amount Per Serving	%DV
Vitamin D3 (as cholecalciferol)	50 mcg (2,000 IU) 250%
Proprietary Blend NT-020	800 mg **
Green Tea Extract (Leaf)	**
Blueberry Powder (fruit) (Vaccinium corymbosum)	**
Camarsine	**
BioVin® Advanced Red Grape Extract (Vitis vinifera) (fruit) (5% resveratrol)	**
VitaBlue® Blueberry Extract (fruit)	**
Botanical Optimizing Enzymes 25 mg	
Hemicellulase	3,000 HCU **
Cellulase	200 CU **
Xylanase	250 XU **
Pectinase (w/ Phytase)	5 Endo-PGU **
Defenze® Antioxidant Blend 25 mg	
Catalase	12.5 Baker **
Superoxide Dismutase (SOD)	4 mg **
Alpha Liponic Acid	4 mg **
Protease Thera-blend®	2,500 HUT **
Glutathione (reduced)	3 mg **

** Daily Value (DV) not established

OTHER INGREDIENTS:

100% vegetarian capsule (HPMC, water)

CONTAINS: Sulfites
CONTAINS NO: Casein, crustaceans, eggs, fish, gluten, milk, nuts, sesame, shellfish, soy, wheat; Artificial colors, fillers or flavors

RECOMMENDED DOSE:

2 capsules daily. More may be taken as recommended by a healthcare practitioner. Consult a physician before use if you are pregnant or nursing, taking medications or have a medical condition.

There are over 200 different types of cells in the human body! Stem cells are the foundation for every organ and tissue in the body. The human body consists of more than 200 different types of cells; however, stem cells are particularly fascinating given their unique characteristics. They are able to self-renew through cell division, and they can develop into more specialized cells such as muscle cells, red blood cells, or brain cells. Due to the uniqueness of stem cell properties, scientists have long studied the correlation between stem cell health and aging. The combination of natural compounds supporting proliferation and the health of existing adult stem cells offers therapeutic potential for health and wellness.* 2,3,4,5

Stem Cells and Aging

Stem cells form during different stages of life. Whereas embryonic stem cells form at the earliest stages of development, adult stem cells appear early on and remain with us throughout our lifetime. When a stem cell divides, each new cell has the potential either to remain a stem cell or to become another type of cell with a specialized function. As a result, adult stem cells are also referred to as tissue-specific and concentrate on repair and maintenance within the tissue or organ in which they live.¹ This process enables damaged cells to be replaced with healthy ones as a result of normal everyday life. As we age, the ability of our stem cells to self-renew, regenerate and differentiate to specific cell types declines.⁶ Understanding the diversity of stem cell responses to oxidative stress and the process of aging has therefore been a focus in research.

Phytochemicals and Oxidative Stress in Cellular Regeneration and Cognitive Function

Aging is a normal physiological process that occurs in cells and is a common stressor due to the repeated demands on stem cell function. Stress can arise from extrinsic factors, such as environmental, or intrinsic factors involving metabolic challenges such as generation of reactive metabolites that accumulate damage from repeated cell division.⁷ Oxidative stress results from an imbalance between reactive oxygen species production and antioxidant defense mechanism.⁸ ROS, or free radicals, are produced by living organisms as a result of normal cellular metabolism. Recent studies have suggested that reactive oxygen species can regulate physiological and biological functions in cellular processes.^{9,10} Oxidative stress resulting from excessive reactive oxygen species production and impaired antioxidant systems can affect stem cell proliferation, differentiation, genomic mutations, aging and stem cell health.⁸

Age-related increases in oxidative stress are thought to be linked to cognitive decline. Research has long described the positive impact of dietary phytochemicals such as polyphenols and flavonoids, on overall health and longevity.*^{11,12} These valuable compounds include anthocyanins found in berries, catechins in green tea, and resveratrol found in wine extracts.¹²



There is substantial evidence supporting the notion that dietary phytochemicals contribute to maintaining cognitive function.*^{12,13,14,15,16} Reactive species-quenching compounds, including the antioxidant enzymes catalase and superoxide dismutase, alpha-lipoic acid, and glutathione have also demonstrated protective properties for the brain and tissues under oxidative stress.*

With Patented NT-020

The patented NT-020 blend was developed by leading University scientists who analyzed over 100 natural compounds and discovered that blueberry and green tea extracts, L-carnosine, and Vitamin D³, in combination, demonstrated a synergy in increasing the number of adult stem cells.*^{5,16,17}

Enzymes Support Healthy Cells and Aging

Enzymes are essential for many vital processes in the body, such as food digestion and other metabolic functions. Besides playing an important role in digestion and metabolism, enzymes have also been used to protect cells from free radicals.*¹ Beyond antioxidant enzymes, studies have shown the therapeutic effect of proteolytic enzymes and its potential to mediate damaged proteins that are a result of oxidation and are accumulated as cellular debris.*¹⁸ In general these enzymes, which include hemicellulases, cellulase, xylanase and pectinase, assist in the breakdown of complex carbohydrates in the body.*

Stem XCell™ Pro for Optimal Health

In optimal health, the body has a strong and healthy population of adult stem cells to promote healthy tissue, immune, and cognitive function, by replacing cells lost to normal daily activities, stress, or injury. Stem XCell™ Pro is a powerful, one-of-a-kind formula delivering an array of phytochemicals, such as the patented blend of NT-020, botanical enhancing enzymes, and antioxidants to support the proliferation and health of the existing body's stem cell population, which is a contributing factor to healthy aging.*

References

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Additional information was made available by the ingredient manufacturers.



As the practitioner division of Enzymedica, America's #1 digestive enzyme company, we know you trust us to help your clients – our integrity and quality reflect the values of your practice. This is our promise.

ENZYMES SCIENCE®

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