Nrf2

Study results from Western Sydney University, Australia & the University of Bath in the UK.

What is Nrf2, how it affects our bodies, and why Redox Signaling Molecules matter

- Oxidative stress leads to various negative effects like fatigue, brain fog, wrinkles, gray hair, and headaches.
- Activation of the Nrf2 pathway helps reduce oxidative stress by improving antioxidant defenses and removing free radicals.
- The Nrf2 pathway is also responsible for detoxification, cell protection, immune system support, gut health, cardiovascular protection, healthy stress response, and improved inflammatory response due to overexertion.
- Nrf2 is activated by redox signaling molecules that are produced inside your body's cells.
- Redox-based products stimulate Nrf2 activity with the same redox molecules your body naturally produces on its own.
- In vitro research indicates that redox-based products support a significant increase of Nrf2 activity by up to 60%. This increase in Nrf2 boosts glutathione production by 40-55%.*

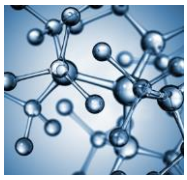
What is oxidative stress?

Oxidative stress occurs when your body's cells are under attack from free radicals. These *free radicals* can damage your cells, almost like rust on metal. Oxidative stress happens when there are too many of these free radicals, and not enough antioxidants to stop them. It can lead to fatigue, brain fog, temporary muscle and/or joint pain, wrinkles, gray hair, decreased eyesight, headache, and other serious conditions.

What is Nrf2?

Nrf2, short for nuclear factor erythroid 2-related factor 2, is the *master redox switch* that plays a crucial role in regulating the body's antioxidant response. It helps protect cells from oxidative stress and inflammation due to overactivity by activating various genes involved in detoxification and cellular defense.

Nrf2 is essential for maintaining cellular health and combating oxidative stress, making it a key player in overall well-being and relevant in various medical contexts, such as cardiovascular protection, gut health, and healthy stress response.

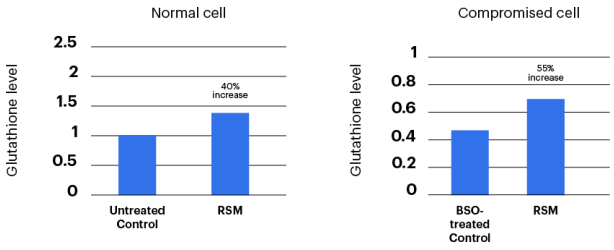


Glutathione and its role in helping your body to recover

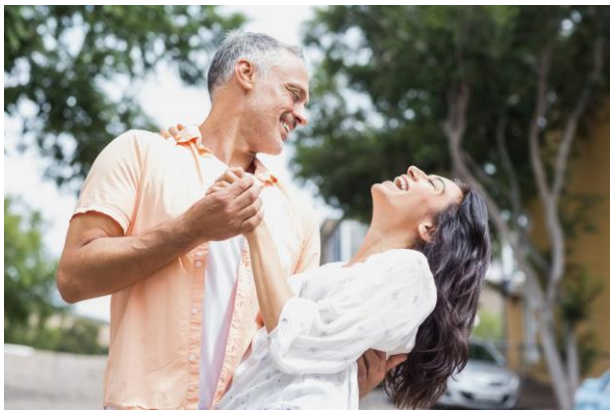
Our product is not a glutathione (GSH) supplement; rather, it helps stimulate the creation of endogenous glutathione, through activation of the Nrf2 pathway. This is only one of many pathways signaled through redox signaling molecules (RSM).

Glutathione is a powerful bodyguard for your cells. It's a natural antioxidant that your body makes, and its job is to protect your cells from harm. Just like a shield, it blocks bad free radicals that can damage your cells.

Glutathione protects your cells and plays a major role in important cellular functions such as maintaining your immune system.



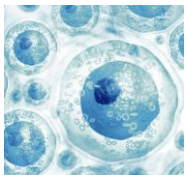
Normal cells treated with RSM showed a 40% increase in GSH levels. In another test, RSM treatment resulted in a 55% increase in GSH levels, even in cells compromised by exposure to the GSH blocker, BSO. Thus, RSM improved GSH production in both normal *and* compromised cells.



Activating Nrf2 is linked to major benefits

- Antioxidant defense
- Anti-inflammatory response due to overactivity
- Detoxification
- Cellular protection
- Tissue regeneration
- Neuroprotection
- Cardiovascular protection
- Age-defying effect

This material is intended for a US audience only.



Redox signaling molecules, cell signaling, and Nrf2

Redox signaling molecules are tiny, high-energy molecules produced within every cell in your body. Because they are high-energy, they signal your cells, carrying messages in support of many important functions, including the production of antioxidants in the body through the Nrf2 pathway.

Redox-based products contain the same redox signaling molecules your body naturally produces. These products increase the amount of redox signaling molecules in the cell, which enhance communication at the cellular level, leading to increased activity of important pathways, like Nrf2.

Conclusion

In vitro research indicates that Redox- based products support a significant increase of Nrf2 activity by up to 60%. This increase in Nrf2 boosts glutathione production by 40-55%, improving antioxidant protection.

Nrf2 is an important pathway, but it is only one of many pathways boosted by redox signaling molecules. Redox-based products directly activate cell signaling to ignite the communication between cells, helping them to perform the various cellular activities each cell is already programmed to do, facilitating the cell's innate regenerative processes.*

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