

● THE SCIENCE OF ACTIVATION

The body already has the answer.

Protandim® Nrf2 Synergizer—activating the pharmacy within.

This isn't supplementation. It's activation—switching on the body's own genetic antioxidant defense system at the cellular level. Research from Harvard, Ohio State, Louisiana State, Colorado, Mayo Clinic, and Johns Hopkins points to one idea: Nrf2 is a master regulator of human health and longevity.

40%

**OXIDATIVE STRESS
REDUCTION IN 30 DAYS**

In every subject studied ·
p=0.0001 · Free Radical Biology &
Medicine, 2006

70%

**REDUCTION AFTER 120
DAYS**

Ages 20–78 · the age-dependent
increase eliminated

1M⁺

**FREE RADICALS
NEUTRALIZED PER SECOND**

SOD +30% · Catalase +54% ·
Glutathione +300%

30⁺

**PEER-REVIEWED
PUBLISHED STUDIES**

pubmed.ncbi.nlm.nih.gov

*"Nrf2 is the **master regulator** of the antioxidant response, modulating the expression of hundreds of genes—providing a logical explanation for connections between oxidative stress and perhaps **200 human diseases**."*

UNIVERSITY OF COLORADO · MOLECULAR ASPECTS OF MEDICINE, 2011

ENZYMATIC RESPONSE

+300%

Glutathione

The master antioxidant—crosses brain and gut barriers; supports the liver and kidneys.

+54%

Catalase

Neutralizes hydrogen peroxide—an essential cellular protection enzyme.

+30%

Superoxide Dismutase

MnSOD—the only antioxidant enzyme that suppresses tumor formation when overexpressed.

SELECTED RESEARCH

LOUISIANA STATE UNIVERSITY · 2006

Oxidative stress reduced 40% in 30 days

Healthy adults aged 20–78 took Protandim daily. TBARS declined **40% on average (p=0.0001)**—the age-dependent increase wasn't just reduced, it was **eliminated**, in every subject studied.

PMID 16563016 · [Free Radical Biology & Medicine](#)

NIA / NATIONAL INSTITUTES OF HEALTH · 2016

10-year federally funded lifespan study

The National Institute on Aging's Interventions Testing Program—the gold standard of longevity research—reported Protandim **extended lifespan in male mice by 7%**. The same program referenced Metformin. Protandim is the only natural product to reach this result there.

NIA · Interventions Testing Program · 2016

BIOGEN IDEC (MS DRUG MAKER) · PEER-REVIEWED

Protandim vs. Tecfidera—an MS drug comparison

Biogen Idec, maker of Tecfidera (an Nrf2 drug for multiple sclerosis), funded a study comparing their drug to Protandim. Protandim showed **the most potent Nrf2 induction** and was identified as a **"likely better therapy"** for protecting oligodendrocytes.

Biogen-funded comparative study · Published

HARVARD UNIVERSITY · 2010

Muscular dystrophy—oxidative stress markers

Six months of Protandim in a Duchenne MD mouse model showed a **48% decrease in plasma TBARS** and a **57% decrease in plasma osteopontin**, plus a 35% increase in protective PON1 enzyme activity.

Harvard · Duchenne Muscular Dystrophy Model · 2010

MAYO CLINIC + UNIVERSITY OF COLORADO

Cancer, Alzheimer's & cardiovascular pathways

Mayo Clinic studied Protandim as a nutraceutical approach to ovarian cancer. Colorado's pathway analysis showed Protandim modulates genes linked to **colon cancer, Alzheimer's, and cardiovascular disease**—and is **7× more potent an Nrf2 activator than sulforaphane** (broccoli sprouts) and **2× more potent than Nrf2 pharmaceutical drugs**.

Mayo Clinic · University of Colorado · Published

LSU skin cancer study—a controlled trial

100% of mice received a cancer-causing agent. Half received Protandim, half did not. The results were published.

- Group without Protandim: **100% developed cancer**
- Group with Protandim: **33% developed zero cancer**
- Remaining mice: **40% less aggressive cancer**, fewer and smaller tumors
- Conclusion: **"Protandim may be practical for cancer prevention"**—LSU

CREDENTIALS & RECOGNITION

QUALITY CERTIFICATION

**BSCG Approved
for Elite Athletes**

QUALITY CERTIFICATION

**NSF Certified
Quality Control**

BOARD OF DIRECTORS

**Erin Brockovich
Environmental
Advocate**

PATENT PROTECTION

**10 U.S. Patents
Nrf2 · NRF1 · NAD ·
Topical · Collagen**

SELECTED RESEARCH · CONTINUED

OHIO STATE UNIVERSITY · AHA + NIH FUNDED · 2010

Coronary bypass graft protection

Human saphenous veins treated with Protandim showed **blocked intimal hyperplasia**—the over-proliferation of cells that re-blocks vessels after bypass, stenting, and endarterectomy. Antioxidant enzyme activity rose while free radical levels fell.

[PMID 21056665 · Ohio State / AHA](#)

RESEARCH INSTITUTIONS

Harvard University

Ohio State University

Louisiana State University

University of Colorado

Colorado State University

Mayo Clinic

Johns Hopkins

Washington State University

Virginia Commonwealth University

National Institute on Aging (NIA)

American Heart Association

NIH Funded

Biogen Idec

*"This isn't about adding antioxidants from outside the body. It's about **activating the pharmacy inside the body**—to do what it was already designed to do."*

INDEPENDENT LIFEVANTAGE CONSULTANTS

Independent LifeVantage Consultants

Study summaries are paraphrased for clarity; always refer to the original publications. Search "Protandim" at pubmed.ncbi.nlm.nih.gov for the full research library.