

Core Product Introduction — D-Chiro-Inositol

Myo-inositol and D-chiro-inositol maintain a physiological ratio of 40:1 in human plasma. They synergistically participate in key pathways including insulin signaling, reproductive hormone balance and mood regulation.



Female Reproductive & Endocrine Health



Blood Glucose & Metabolic Management



Skin Health Applications



Oral Supplements & Functional Foods



Pet Health

Popular Formulation Reference

Myo-Inositol + D-Chiro-Inositol (40:1) + Active Folate + Vitamin D3

Benefits

Regulates endocrine function, supports pre-conception wellness, improves metabolic profile and provides nutritional supplementation.



Core Benefits

- Enhances insulin sensitivity
- Supports healthy blood-glucose balance
- Maintains reproductive-endocrine homeostasis
- Assists weight management
- Improves lipid-metabolism profile
- Supports nervous system function

Technical Advantages

The mainstream production method for D-chiro-inositol is plant extraction, mainly derived from plants such as bitter buckwheat. Using Corynebacterium glutamicum as chassis cells, our one-pot whole-cell catalysis efficiently converts substrates into D-chiro-inositol under ambient temperature and pressure. This world-first process has achieved industrial-scale production.

Recommended Daily Dosage: 200-400 mg / day

Recommended Dosage Forms



Instant-drink granules



capsules



tablets



gummies



oral liquids



solid beverages

Core Product Introduction——PQQ



PQQ is a redox-active quinone-type molecule naturally occurring in fermented foods, vegetables and human breast milk. It delivers potent antioxidant effects, supports energy metabolism, and exerts neuro- and cardio-protective properties. It is a safe nutritional supplement with broad health benefits.



Using Gluconobacter oxydans as the chassis strain, after multiple rounds of adaptive evolution, the strain tolerates high-concentration methanol and bioconverts this feedstock into PQQ.



Oral Beauty & Skin Anti-Aging



Brain Wellness & Cognitive Enhancement



Sports Nutrition & Physical Performance Recovery



Mitochondrial Repair & Anti-Aging

Popular Formulation Reference

Nicotinamide + NR + Resveratrol + PQQ

Benefits

Elevates NAD+ levels and optimizes cellular utilization; supports mitochondrial function to boost energy, sharpen mental clarity and support healthy aging.

Recommended Daily Dosage: 10-20 mg / day



- Alleviates oxidative stress
- Supports weight management
- Promotes reproductive health
- Helps reduce metabolic-syndrome risk
- Supports mitochondrial protection
- Delivers heart-protective effects
- Improves cognitive function
- Helps maintain muscle mass



- High Purity: ≥99.5% (HPLC)
- Stability:
2-year shelf-life at room temperature
- Safety:
Validated via in-house lab testing plus authoritative SGS verification
- Proprietary Technology:
Fermentation-based production, favorable cold-water solubility

Recommended Dosage Forms



Instant-drink granules



capsules



tablets



gummies



oral liquids



solid beverages

Core Product Introduction—Ergothioneine



Ergothioneine is a rare, potent natural antioxidant found in mushrooms and other foods. It effectively scavenges free radicals, relieves oxidative stress and shields cells from oxidative damage. Widely recognized for antioxidant, anti-inflammatory and skin-protective benefits, it is known as the "Longevity Vitamin".



Skincare & Cosmetics



Oral Health & Dietary Supplements



Functional Foods & Nutraceuticals



Pet Health Products

Core Benefits

- Scavenges free radicals for long-lasting antioxidant activity
- Specialized skin anti-aging & repair support
- Anti-inflammatory soothing, helps relieve chronic inflammation
- Cellular protection & photo-aging defense
- Liver support & detoxification, eases metabolic burden
- Neuroprotection, relieves mental fatigue
- Anti-glycation, supports healthy aging

Recommended Daily Dosage: 5-10 mg / day

Recommended Dosage Forms



Instant-drink granules



capsules



tablets



gummies



oral liquids



solid beverages



skincare formulations

Popular Formulation Reference: Ergothioneine + PQQ + Vitamin B

Benefits:

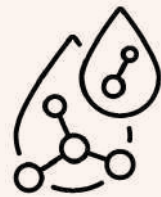
Activates mitochondrial biogenesis, alleviates fatigue caused by late-night lifestyle, delivers fundamental anti-aging effects and boosts energy levels.

Hygieia-Innovator in Anti-Aging Solution Portfolio



Brain Health & Cognitive Enhancement

Citicoline Brain-Support Formula



Anti-Aging

Ca-AKG Anti-Aging Formula
NMN Longevity-Wellness Formula
NAD+ Anti-Aging Nutrient Formula
Spermidine Cellular Anti-Aging Formula



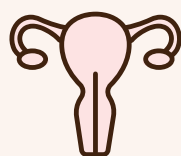
Sleep & Mood Regulation

Active Calcium Folate
Mood-Soothing Formula



Bone & Joint Health

Ca-AKG Bone-Joint Nourishing Formula



Ovarian Protection

inositol & D-Chiro-Inositol Hormone-Balance Formula
Active Calcium Folate Reproductive-Wellness Formula

Beauty & Skincare

Ergothioneine Anti-Aging Beauty Formula
Ca-AKG Skin-Hair-Nail Beauty Formula



Cardio-Cerebral Vascular Health

PQQ Cardioprotective Formula



Sports Nutrition

Ca-AKG Sports-Nutrition Formula
Ectoine Muscle-Performance Boost Formula



Weight Management

PQQ Weight-Management Formula
D-Chiro-Inositol Glycemic-Regulation Formula



Energy & Vitality Boost

NADH Anti-Fatigue Formula
Ca-AKG Energy-Replenishment Formula



Scientific Validation Empowers Product Performance

Only Verified Efficacy Counts

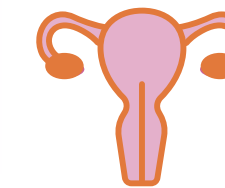


Hygieia conducts efficacy-validation studies in collaboration with third-party laboratories

Hygieia Exclusive Patented Formulations



Longevity & Anti-Aging Formulas



Women's Health Formulas



Sports Nutrition Formulas



Women's Health Formulas

What We Offer:

Rigorous Efficacy

Science-backed experimental data for authentic & reliable performance

Lower R&D Costs & Shorter Cycles
Mature ready-to-deploy formula
solutions for fast-track product launch

Proprietary Patent Moat
Intellectual-property protection to avoid homogenized price-wars

Cell-Level Anti-Aging Intervention System



Hygieia Anti-Aging Formula:

Ca-AKG (Energy Metabolism & Anti-Aging)
Pterostilbene (Potent Antioxidant)
Fisetin (Promotes Cellular Repair)

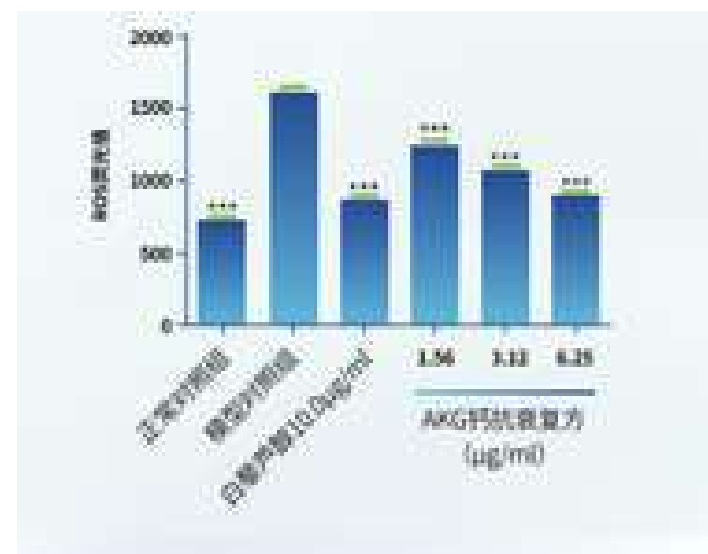


Experimental Model: Zebrafish Aging Model



Intervention:

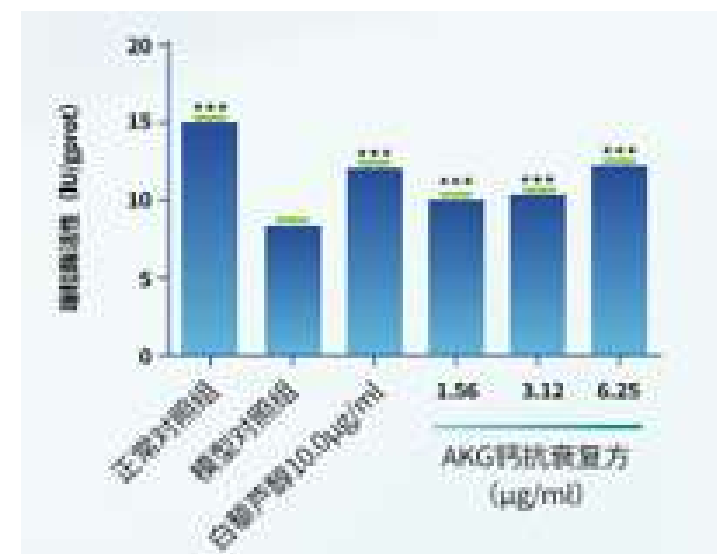
Low / Medium / High-dose Ca-AKG Anti-Aging Formula



Antioxidation

45%

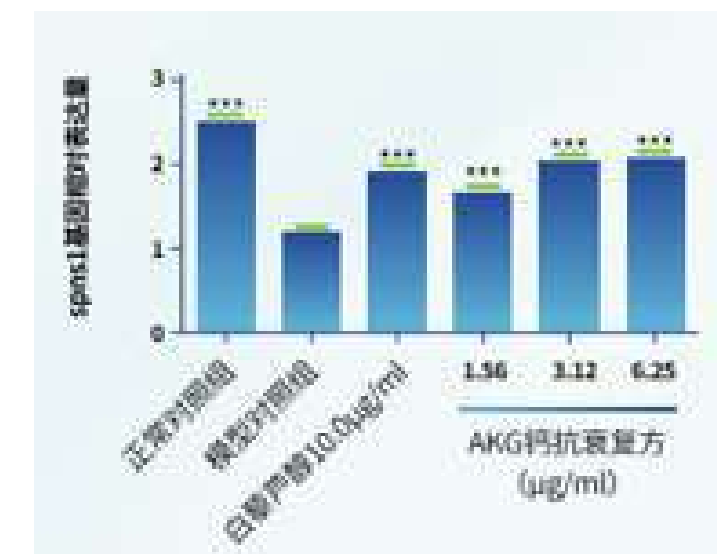
Ca-AKG formula reduces cellular ROS levels by 44.8%



Anti-Aging

53%

Ca-AKG formula elevates telomerase activity by 53.2%



Autophagy Enhancement

77%

Ca-AKG formula up-regulates autophagy-related gene Spns1 expression by 77%

Science Speaks
Through Data

Rigorous experimental studies by Hygieia Bio demonstrate the potent multi-target anti-aging properties of the Ca-AKG formula.

Women's Health Management Solution

Hygieia Women's Hormone-Balancing Supplement:

Inositol & D-Chiro-Inositol (Promote Hormonal and Metabolic Balance),
L-5-Methyltetrahydrofolate Calcium (Supports Mood Health & Cardiovascular Wellness)



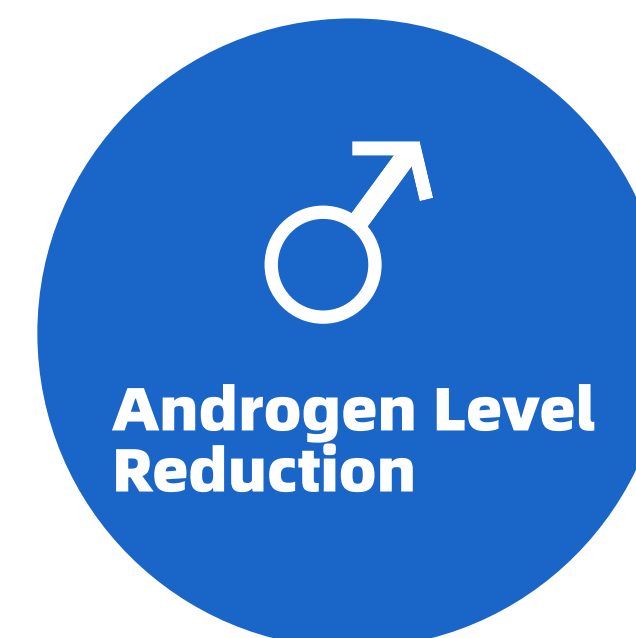
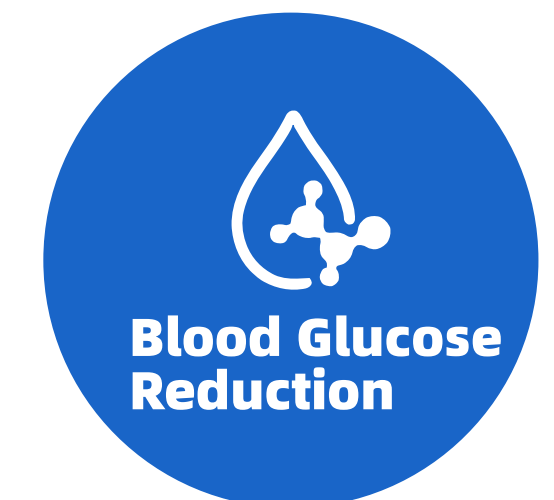
Experimental Model

Rat Model of
Hormone-Metabolic Disorder



Intervention:

Low-dose / High-dose
D-Chiro-Inositol Complex



Sports Nutrition Strategy

Hygieia Sports Health Formula:

Ca-AKG (Promotes Bone Formation, Enhances Muscle Strength),
Chondroitin Sulfate (Cartilage Repair)

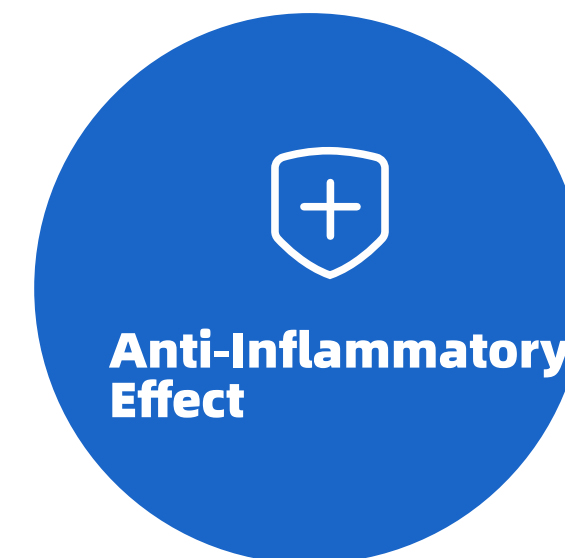


Experimental Model:
Rat Model of Osteoarthritis



Intervention:

Low-dose / High-dose Ca-AKG, Chondroitin Sulfate,
Combination of Ca-AKG & Chondroitin Sulfate



Collagen-Revitalizing Anti-Aging Care

Hygieia Anti-Aging
Skincare Formula:

AKG (Boosts Cellular Energy, Stimulates Collagen Synthesis),
Sodium Hyaluronate (Moisturizing),
Niacinamide (Improves Skin Tone),
Palmitoyl Tripeptide-5 (Supports Collagen Production),
Centella Asiatica Extract (Soothes Skin)



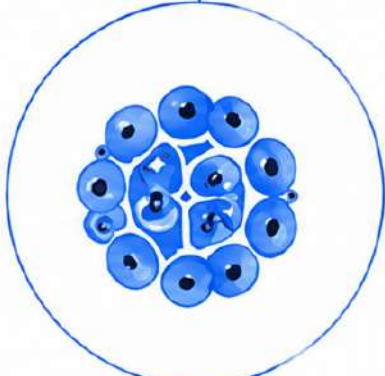
Antioxidation:

DPPH Scavenging Rate of AKG
Anti-Wrinkle Complex:

36.395%

Anti-Wrinkle Efficacy Verification

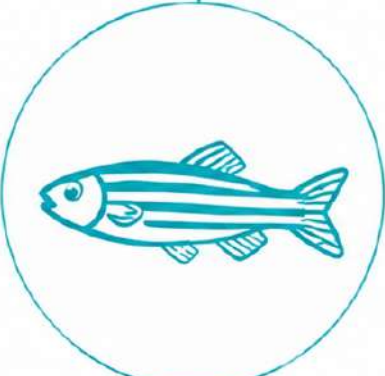
01



Cell Anti-Wrinkle Test

Verify anti-wrinkle potential
at the cellular level

02



Zebrafish Anti-Wrinkle Test

Evaluate anti-wrinkle
efficacy in model organisms

03



Human Anti-Wrinkle Test

Validate real-world anti-wrinkle
performance in human subjects

报告编号: LD202600073-P1b
Report No.

鲁比检验检测(广州)有限公司
LUBI INSPECTION AND TESTING (GUANGZHOU) CO., LTD.

研究报告
RESEARCHING REPORT

委托日期: 2026年4月12日
Date Received

检测日期: 2026年4月28日
Date Analyzed

样品名称: AKG配方
样品数量: 1件

委托单位: 广州普生生物科技有限公司
检测项目: 抗氧化能力

生产单位: 广州普生生物科技有限公司
样品批号: 20260401

生产日期: 2026年4月12日
检测地点: 2026年4月28日

检测类别: 委托检测

检测项目: 抗氧化能力

检测方法: GB/T 15457-2006

检测标准: GB/T 15457-2006

检测结论: 经检测, 该样品符合GB/T 15457-2006标准要求, 抗氧化能力合格。

检测日期: 2026年4月28日
Date Reported

广州市微生物研究所集团股份有限公司

研究报告

报告编号: GQKY202600073-01

检测项目: AKG配方

检测日期: 2026年4月14日

检测地点: 广州普生生物科技有限公司

检测人员: 李小明

检测结论: 经检测, 该样品符合GB/T 15457-2006标准要求, 抗氧化能力合格。

检测日期: 2026年4月28日
Date Reported

AKG Formula Stimulates Collagen Synthesis

HYGIEIA

Shenzhen Hygieia Biotech Co., Ltd.

CONTACT US



info@hygieia.com.cn



0755-27208059



<https://www.hygieiabiotech.com.>



102, Building B, Building 6, No. 1100 Huanli Road, Yungu Community, Xinhua Street, Guangming District, Shenzhen