



B'utyQuin™

STANDARDIZED, BIOAVAILABLE AND STABLE
COLD PRESSED BLACK CUMIN OIL
with 3% thymoquinone

INCI: *Nigella Sativa Seed Oil*

**A BEAUTY SECRET
USED BY THE
QUEENS OF EGYPT**



B'utyQuin™

INCI: Nigella Sativa Seed Oil

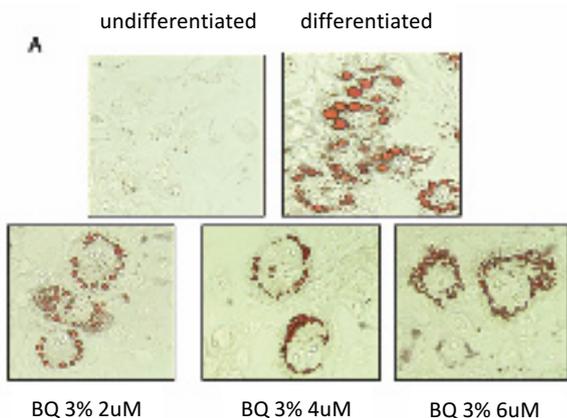
COSMETICS BENEFITS

- Anti-aging – boost mitochondrial functions that slowdown with age
- Skin energizer - optimize and improve energy production
- Diminishing InflammAging – powerful anti inflammatory
- Hydration - improved metabolism = more H₂O formation
- Tightening the skin, restoring the barrier
- Smoothing the silhouette due to efficient fat metabolism
- Soothing – after sun, after shave sensitive skin
- Relief skin redness, calm the skin, restore the harmony of sensitive skin
- Protection from pollution
- Scalp soothing and relief

TOOLS

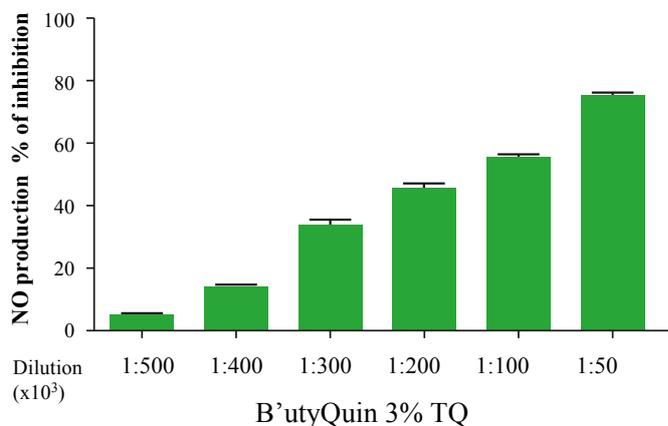
- Boosts cell respiration, metabolism, ATP production and mitochondrial functions
- Anti inflammatory - inhibits NO production and inflammatory response
- Anti oxidant
- Improved fat and carbohydrates metabolism
- Protection of DNA from UV damage
- Anti microbial, especially active against Malassezia furfur, an opportunistic pathogen that is associated with seborrhoea, dandruff and other dermatological conditions
- Uniquely low Free Fatty Acids (FFA) content – more stable and safe than similar products

B'utyQuin effect on adipogenesis and adipocytes size



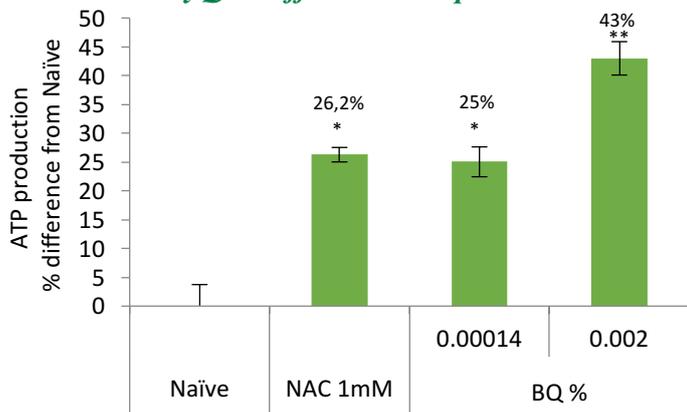
Effect of B'utyQuin (3% thymoquinone oil) on oil droplets formation in 3T3 adipocytes showed a significant reduction of lipid droplets formation at day 6. (n=4)

B'utyQuin - anti inflammatory performance



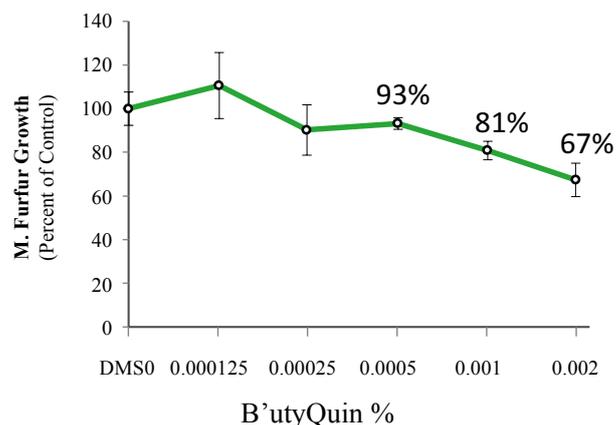
Effect of B'utyQuin on NO production in LPS stimulated macrophages

B'utyQuin effect on ATP production



The effect of B'utyQuin on production of ATP in Keratinocytes (HaCaT cells) compare to baseline (Naive cells) and positive control (N-Acetylcysteine (NAC) 1mM)

Anti Fungal - Malassezia Furfur



Effect of B'utyQuin on growth of Malassezia furfur in liquid culture

B'utyQuin™, a cold pressed black cumin oil, was part of the beauty secrets and regimen of Cleopatra and Nefertiti, the beautiful queens of Egypt.

B'utyQuin™ contains high level of thymoquinone, a potent and active molecule that possess strong anti-inflammatory, anti-oxidant and additional beneficial properties.

Nigella sativa is an annual flowering plant in the family Ranunculaceae native to South and West Asia. Its seeds and the oil derived from them are widely used as spices in Indian and Middle eastern cuisine and in folk traditions for its skin and health benefits.

Black seed oil (*Nigella sativa* seed oil) is widely used in various traditional medicines, Eastern and Ayurvedic, and is already mentioned in the Bible and by the Islamic Prophet, Mohamad. Greek physicians used it to treat everything from headache, general malaise, congestion, intestinal worms, toothache, and more. A Persian physician named Avicenna described black seed oil in The Cannon of Medicine as being useful for stimulating the body's energy and spirit, having anti-fungal and anti-parasitic properties, as well as headache reliever.

B'utyQuin (*N. sativa* seed oil) contains linoleic acid, oleic acid, palmitic acid and other minor constituents. The seeds and the derived oil contain aromatics with the major one being thymoquinone at minimum of 3%. Other aromatics such as P-Cymene (>1%), Carvacrol (<0.1%) and lowest level of free fatty acid (FFA) (< 2%) act synergistically to maximise the anti-inflammatory effect of the oil, a patented composition of ours. The low FFA makes B'utyQuin especially stable and its unique composition, much more bioavailable.

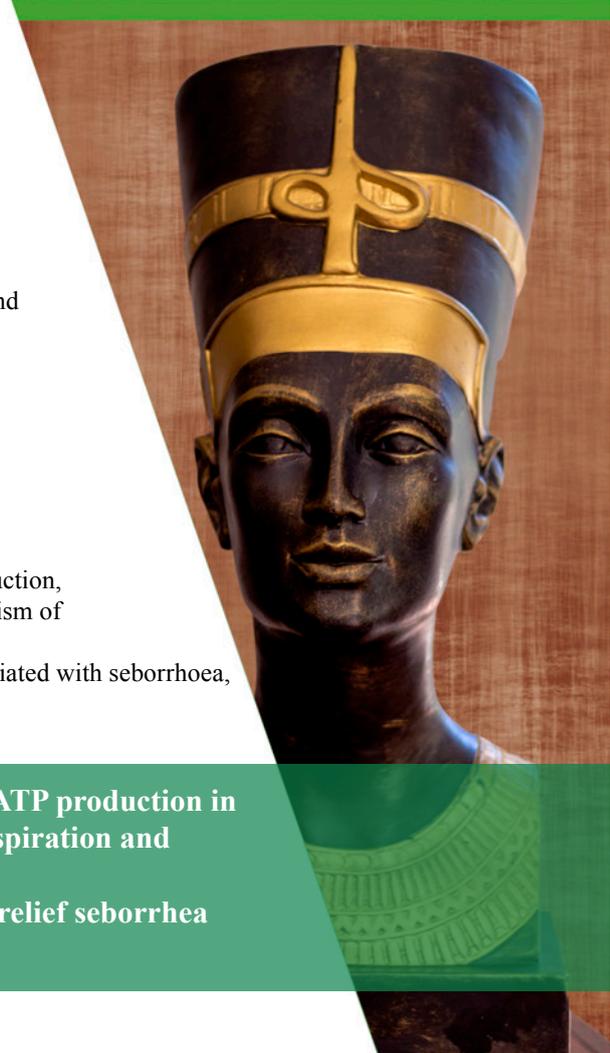
Multiple benefits to skin are attributed to Black seed oil including anti-oxidant, anti inflammatory, detox, anti microbial, control of pigmentation, skin barrier and moisture as well as wound healing. We have demonstrated some of those.

Mitochondria and aging: Several changes may occur to mitochondria during the aging process while the main and most common one is the decrease in enzymatic activity of the proteins of the respiratory chain leading to less efficient respiration, and subsequent reduction in ATP production.

UNIQUELY

1. We researched its effects on mitochondrial functions expressed in ATP production, linked to efficient energy production through improved respiration and metabolism of sugars and fat.
2. Anti fungal against *Malassezia furfur*, an opportunistic pathogen that is associated with seborrhoea, dandruff and other dermatological conditions

1. B'utyQuin 3% thymoquinone has shown ability to increase ATP production in cultured cells indicating improved mitochondrial functions, respiration and metabolism of sugars and fats.
2. B'utyQuin significantly inhibits *M. furfur* and is targeted to relief seborrhea and dandruff





*B'utyQuin*TM

INCI: Nigella Sativa Seed Oil

Use level: 2%-5%

STUDIES

IN VIVO

1. ANTI AGING: Skin appearance – brightening, smoothing, hydrating, evening skin tone and surface
2. SCALP: Relief for seborrhea and/or dandruff

IN VITRO

1. effects on key regulators of mitochondrial biogenesis and ATP production
2. anti oxidant
3. inhibition of NO and inflammatory cascade
4. protecting DNA from UV damage
5. anti microbial – inhibition of *Malassezia furfur* and *Staphylococcus aureus*
6. anti viral (flu)
7. anti-inflammatory synergies with other actives

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NIGELLA
SATIVA'S WIDE RANGE OF APPLICATIONS
TRINUTRA.COM - SERVICE@TRINUTRA.COM



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