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# OMICS International Conferences

OMICS International is a pioneer and leading science event organizer, which publishes around 500 open access journals and conducts over 500 Medical, Clinical, Engineering, Life Sciences, Pharma scientific conferences all over the globe annually with the support of more than 1000 scientific associations and 30,000 editorial board members and 3.5 million followers to its credit.

OMICS Group has organized 500 conferences, workshops and national symposiums across the major cities including San Francisco, Las Vegas, San Antonio, Omaha, Orlando, Raleigh, Santa Clara, Chicago, Philadelphia, Baltimore, United Kingdom, Valencia, Dubai, Beijing, Hyderabad, Bengaluru and Mumbai.



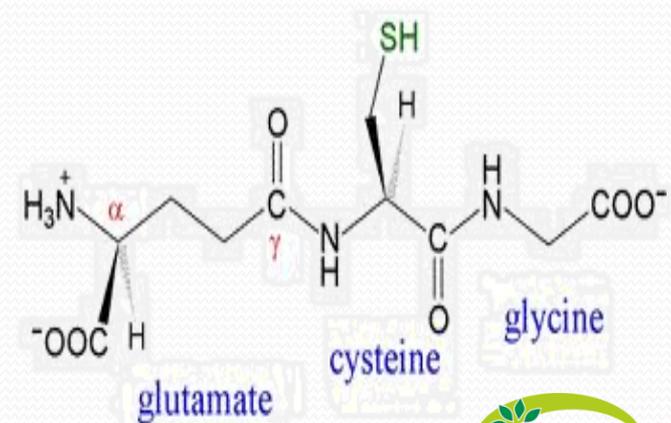
# Glutathione supplement for Skin Lightening & Anti ageing

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Origo Cosmeceuticals Pvt. Ltd., India

# Glutathione

- **Master Anti-oxidant** in the body.
- Is a **small protein** composed of **3 amino acids** called **Cysteine**, **Glutamic acid**, and **Glycine**,
- **Produced normally by the body** in response to today's environment
- The greater the exposure to **toxins**, the faster the body uses up its **supply of Glutathione**.
- acts as an **A I D**,
  - **A - Antioxidants**,
  - **I - Immune system boosters** and
  - **D - Detoxification**

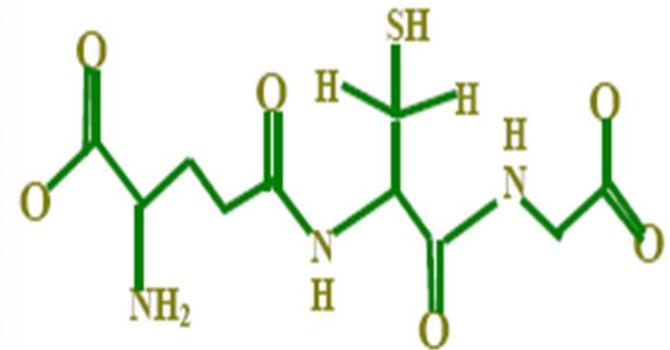


# Glutathione

- The body produces and stores the largest amounts of GSH in the liver, where it is used to detoxify harmful compounds so that they can be removed from the body through the bile.
- The liver also supplies GSH directly to RBC & WBC in the bloodstream
- Helps to keep red blood and white blood cells healthy to maximize the disease-fighting power of the immune system.
- Have an anti-aging affect on the body.
- GSH levels decline with age, and a lack of glutathione has been shown to leave the body more vulnerable to damage by free radicals, thus speeding up oxidation (wearing down) of the body.

# Glutathione

- It is the most powerful **anti-oxidant** occurring naturally in all of **70-100 trillion cells** that make up the human body. That is why it is called the **master antioxidant (MA)**.
- **Glutathione** levels have been shown to **decrease with aging**.
- **Glutathione** inhibits the synthesis and accumulation of **melanin** by interrupting the function of **L-DOPA**



Glutathione (GSH)

# GLUTATHIONE DEPLETION

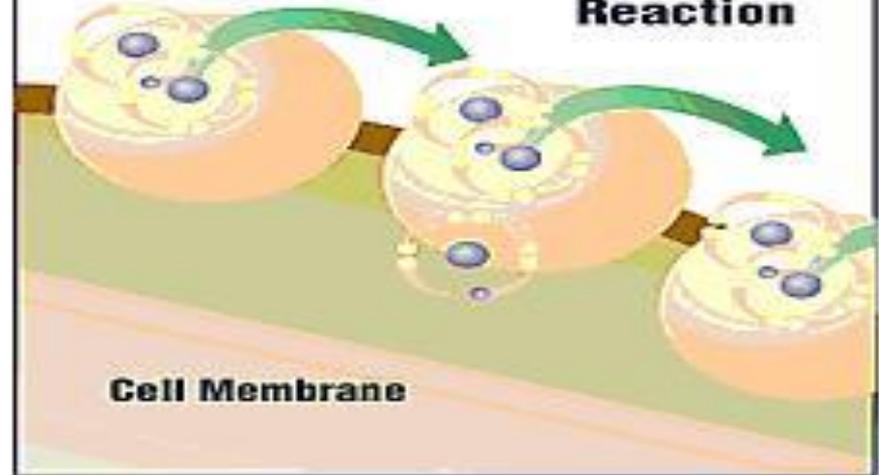


# MECHANISM

### Normal Oxygen Atom



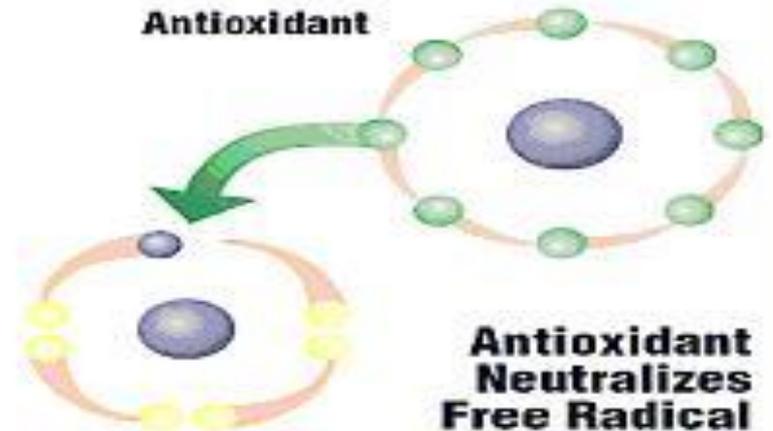
### Free Radicals Set Off Chain Reaction



### Erosion of Cell Membrane



### Antioxidant



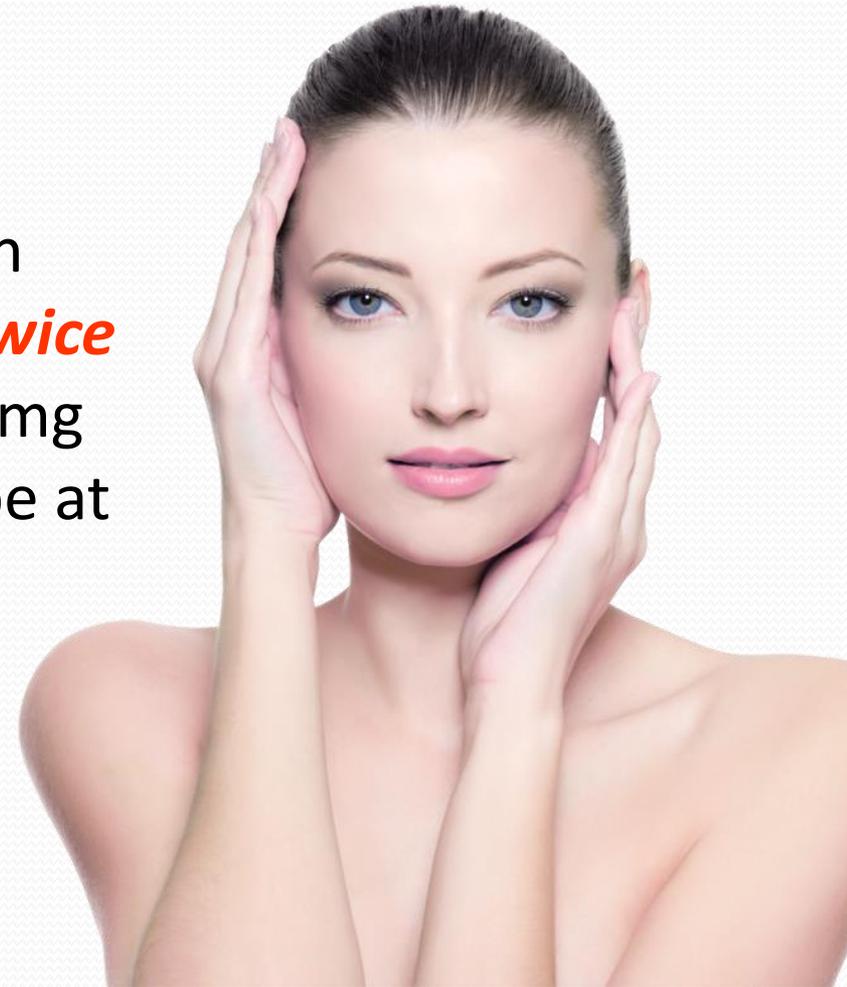
Antioxidants are substances that may protect cells from the damage caused by unstable molecules known as free radicals. Free radicals are molecules with incomplete electron shells which make them more chemically reactive than those with complete electron shells

Antioxidants interact with and stabilize free radicals and may prevent some of the damage free radicals.

- Glutathione supplement with *Vitamin C* for Skin *Lightening* & *Age Defying*
- *Lightens* the skin,
- Helps make the skin smoother with a more even tone,
- Gives a rosy white glow
- Delays *aging*
- Easy to use
- *Revolutionary formula for skin whitening*

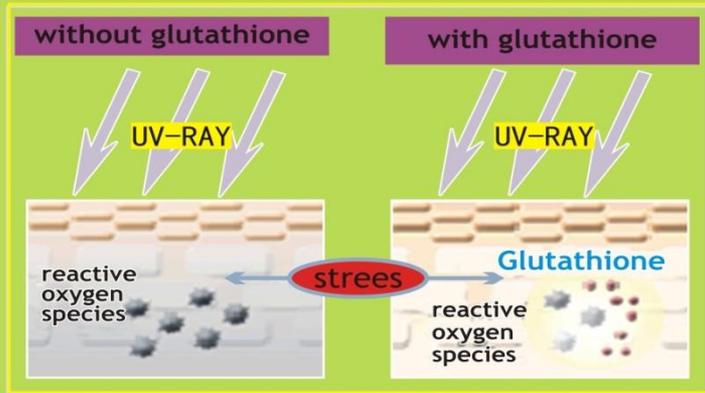


- **Glutathione** not only supply your body with additional **glutathione** it needs but **also** increase the body's efficiency to absorb and produce **glutathione**.
- A **Glutathione** efficacy in **skin Lightening** works only if it is taken **with Vitamin C** at least **equal or twice its dosage**. So if you're taking 500mg of glutathione, Vitamin C should be at least 1000mg.



# *How does Glutathione works*

- Interference with cellular transport of tyrosinase
- Direct inactivation of the enzyme tyrosinase by binding with the copper-containing active site of the enzyme
- Mediating the switch mechanism from eumelanin to phaeomelanin production as GSH is the major physiologic reservoir of cysteine and increase in cysteine levels results in switching of eumelanogenesis to pheomelanogenesis
- Quenching of free radicals and peroxides that contribute to tyrosinase activation and melanin formation
- Modulation of depigmenting abilities of melanocytotoxic agents.



Studies show that *Glutathione acts as a Tyrosinase Inhibitor. Tyrosinase is an enzyme that catalyzes the biosynthesis of melanin which is the culprit for skin darkening*

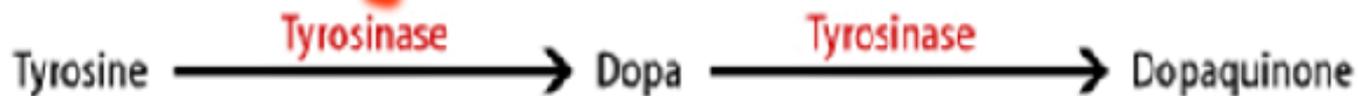
## How does it works

- **Glutathione** is proven to **reverse** the **melanin's metabolism** turning **dark** pigmentations (**Eumelanin**) into **light** pigmentations (**Pheomelanin**).
- Inhibits and blocks **Tyrosinase**, the **enzyme** responsible for the production of dark melanin pigments, The end product becomes **PHEOMELANIN** (Reddish – white pigmentation) instead of **EUMELANIN** (dark brown).
- Continuous and consistent supplementation will result into **gradual skin lightening**



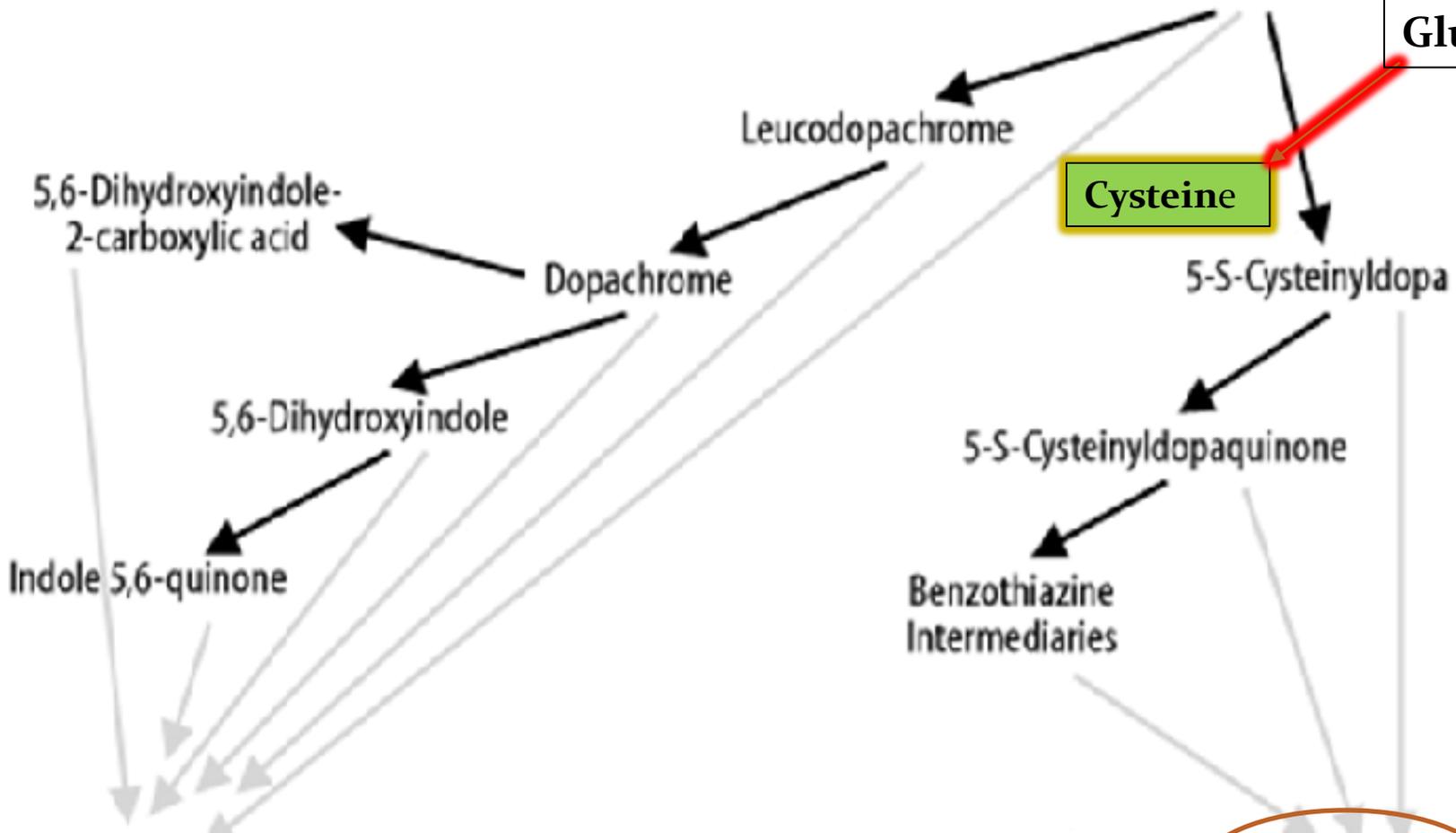
# MELANIN METABOLISM

Glutathione



Glutathione

Cysteine



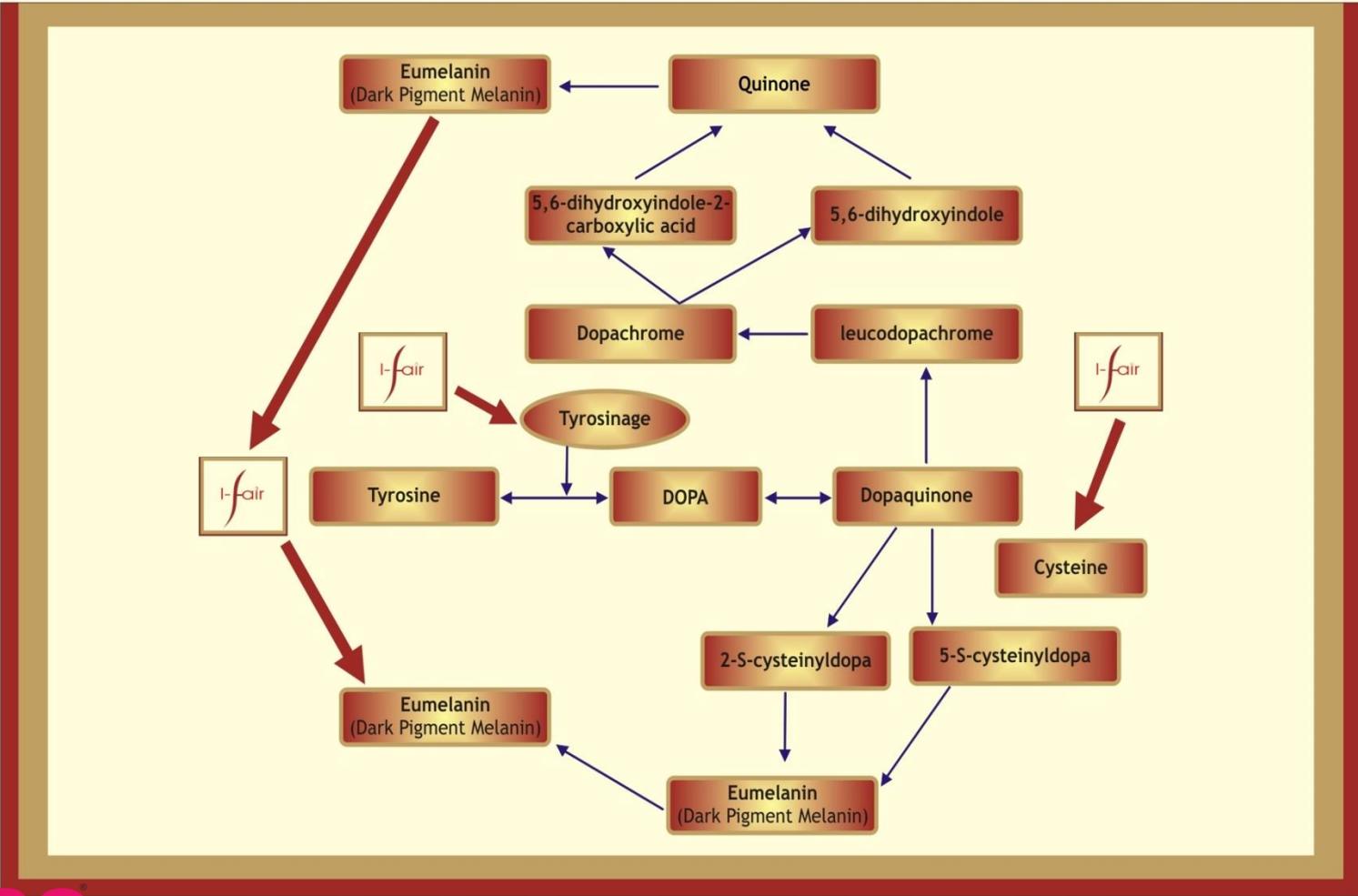
Eumelanin

Glutathione

Phacomelanin

# MOA

*Inhibits the Tyrosinase Activity. As a result the metabolic pathway then reverses its course going to the synthesis of light pigmented melanin called Phaeomelanin instead of synthesizing dark pigmented melanin called Eumelanin. The cycle continuously flow as long as the presence of L-glutathione co-exist in the metabolic pathway of melanin. Finally, light skin will reveal to the surface gradually changing your complexion.)*



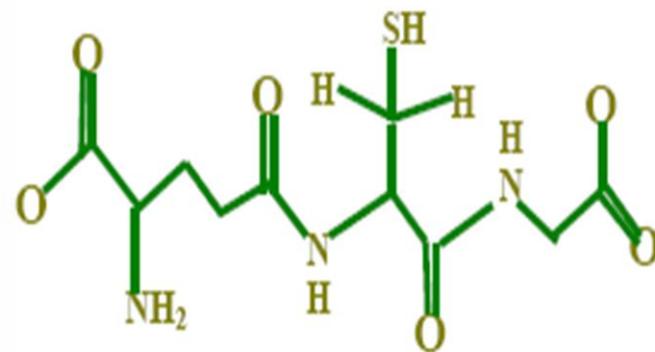
# *How does it works*

- Contains the most powerful *antioxidants* which work synergistically to create what Scientists call as the *Antioxidant Cycling*.
- A process in which *antioxidants* work together to extend each others' lives and make each other more powerful .
- That's the reason why *Glutathione* supplement is very potent and effective in bringing results.



# Natural source of Glutathione

- Glutathione is found in almost all fruits and vegetables.
- Acorn squash, asparagus, avocado, cantaloupe, grapefruit, okra, orange, peach, potato, spinach, strawberries, tomato, watermelon, and zucchini are all good sources of GSH.
- Some vegetables, such as broccoli, cabbage, Brussels sprouts, cauliflower, kale, and parsley

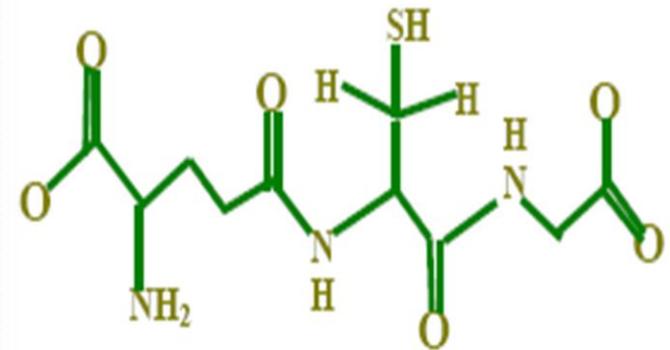


Glutathione (GSH)

# Natural source of Glutathione



- Glutathione dietary supplements are known as L-glutathione, reduced glutathione or GSH.
- They come in
  - pills,
  - capsules,
  - tablets,
  - in powdered and liquid form, as sublingual drops or slow-melt tablets.



Glutathione (GSH)

## *Usage and Indication*

Consume one tablet of I-fair Glutathione and 1 tablet of ***I-Fair Vit C*** along with water once or twice in a day/as directed by the physician.

- Best if taken with meals or at night **2 to 3** hours after your last meal for better absorption.
- Standard dosage is **20-40mg per kilogram of body weight** (50kg x 20mg = 1000mg ) for 3 to 6 month. It is also advisable to put on sunblock cream and lotion for the face and body



Before



After



Before



After



Before



After



Before



After



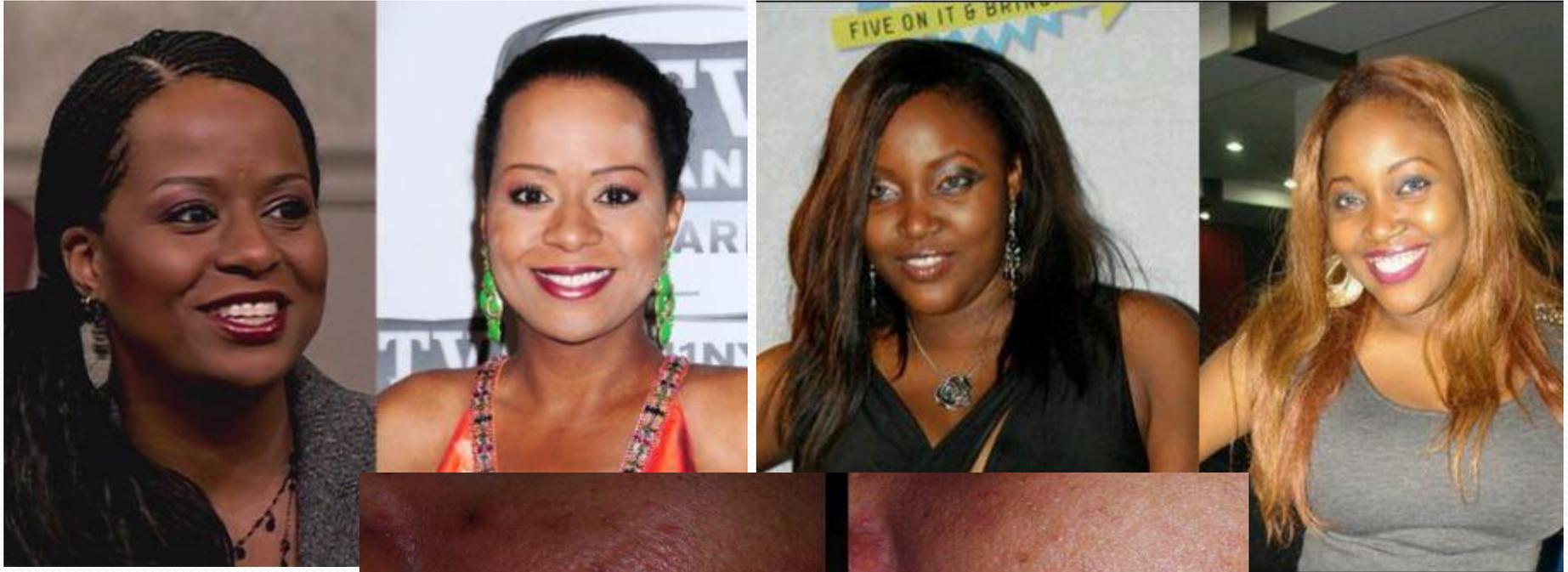
Before



After



# Results



# Results



# Reasonable expectations



One taking it should try to avoid **smoking**, **liquor** or any **alcoholic drink**.

- On average, the first 3 months use of **glutathione** builds its foundation in your body and you will experience lightening gradually.
- speed normally depends on your **metabolism** and body chemical functioning. For some the results take longer.
- As you lighten you will notice that your skin is **shinier and healthier** than before.



# Benefits of Glutathione

- Lightens the skin and gives skin a **radiant glow**.
- Makes **pores finer** and Removes **skin hyper-pigmentations**.
- Skin becomes **smoother and clearer** thereby **nourishes skin**.
- Controls acne and prevents **acne marks**.
- Defies the aging process also protects the skin from sun and **environmental damages**.
- Lightens **skin color, pigmentation**, tan & freckles thereby **Prevent/remove pimples & pimple marks**.
- **Anti-aging & anti wrinkles**- makes your skin smooth, fresh & radiant and Hasten **healing of wounds**.



## "How long will anyone see an improvement?"

- **Light**-medium **brown** skin: 1-3 months
- **Dark brown** skin: 3-6 months
- **Very dark** skin: 6-12 months
- **Black** skin: 2 years and above

*On average will take between 1-4 months before beginning to recognize the benefits. However, it really depends on biological individuality and how efficiently and effectively body absorbs and assimilates these nutritional substances and, of course, the physical and emotional awareness. Generally, the duration and severity of the signs, symptoms, or illness determines the length of time it takes to notice sustained improvements.*



# Usage and Indication

## Dosage

Weight (in Kg)	Daily Dose	I-fair Box / Month	Duration
40-50	1 tab from each bottle	1	6 months
60-70	2 tabs from each bottle	2	6 months
80-90	2-3 tabs from each bottle	2-3	6 months
90-100	3 tabs from each bottle	3	6 months



- For Asians such as Chinese, Japanese, Taiwanese, Korean, Filipino, Indian, Thai or of such descent, pills are said to work well to lighten the skin.
- for African Americans, the same pills also work, but you should not expect them to 'lighten' your skin to achieve the Caucasian white skin appearance

# Brands available

- I-fair Tablet
- Fair Beauty Skin Lightening Tablets
- Ivory Caps Glutathione Pills
- Dr. James GSH whitening pills
- Tatiomax
- MET TATHIONE – Skin Whitening Glutathione Capsules
- Kyusoku Bihaku (KB) Skin Whitening Pills
- BeauOxi White Plus 5-in-1
- Mosbeau Placenta White Advanced Supplement
- Fairtone Skin Lightening Pills
- LUXXE WHITE ENHANCED GLUTATHIONE



# Brands available as Injection

- Tatiomax by Sujie Pharmaceutical, Tokyo Japan
- saluta glutathione is manufactured by QAF Pharmaceuticals Labs
- Germed glutathione is made by Germed Pharma Italy
- Glutanova 900

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# Thank You

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