



ALGAKTIV

Greenaltech
Microalgae Technologies



GloryActives

Sustainable Actives made of Microalgae

Protection and Repair
following the Archetype of Nature

THE BEAUTIFUL GENESIS OF LIFE



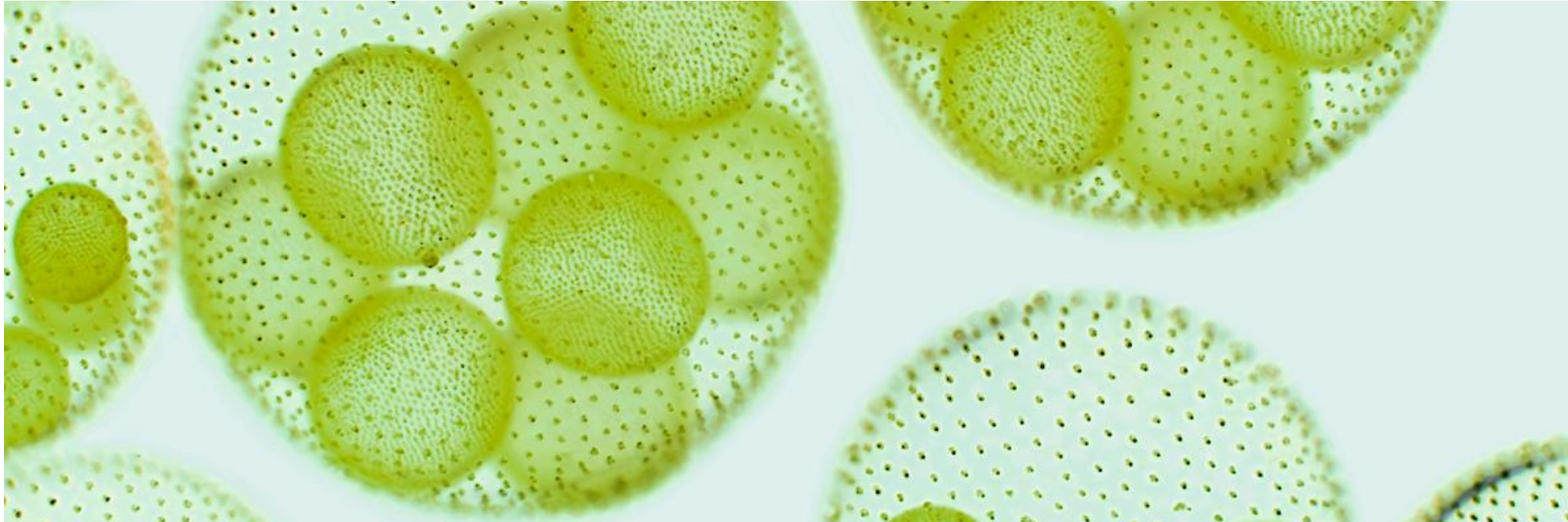
*Earth four thousand million years ago – an inhospitable and stark environment, fully exposed to the **sheer radiation of the sun.***

ANCESTRAL DEFENSE AND REPAIR MECHANISMS



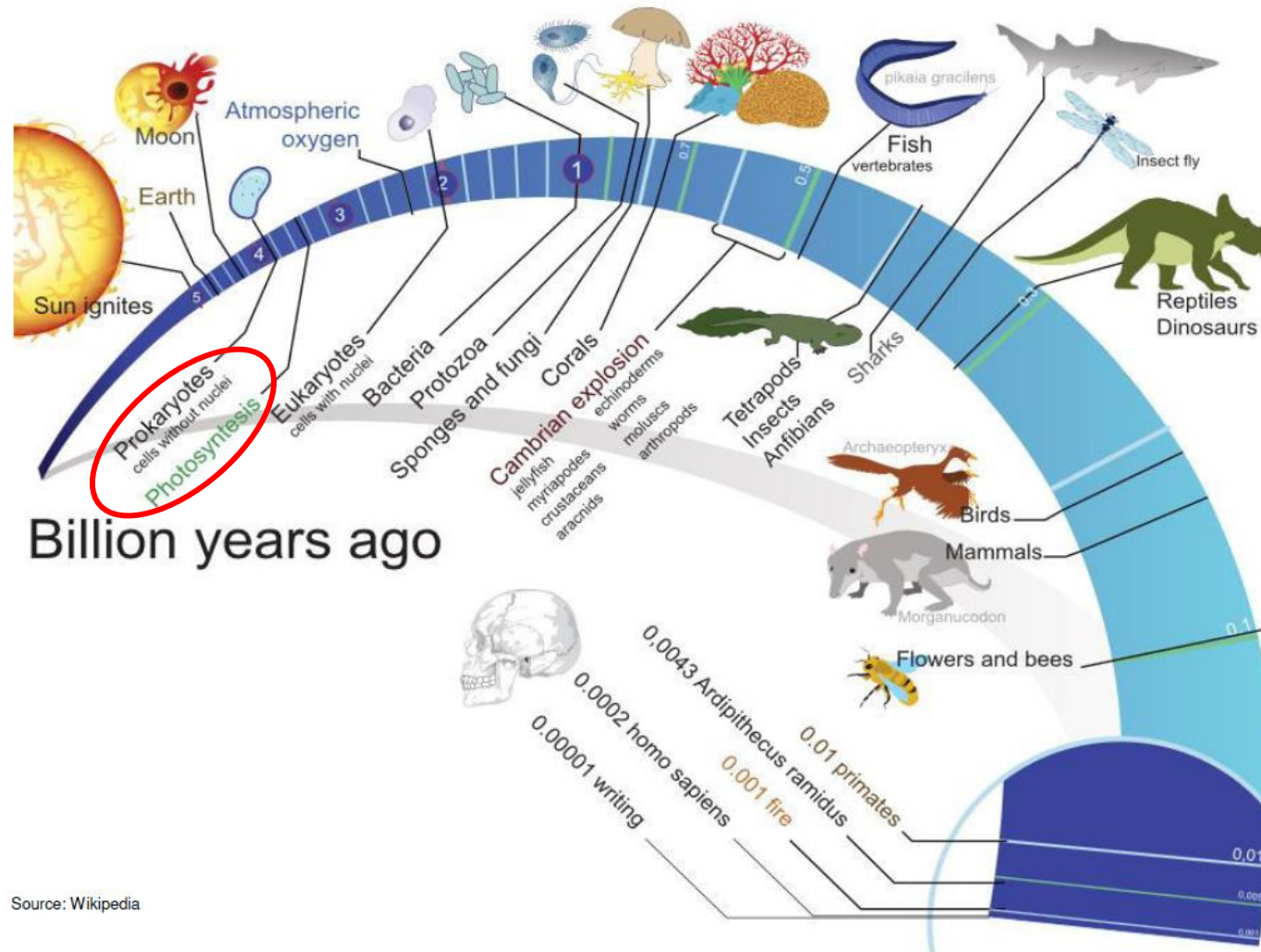
*Life under **extreme conditions**. The ancestral defense and repair mechanisms of microalgae are available for the next generation of skin care products.*

THE BEGINNING

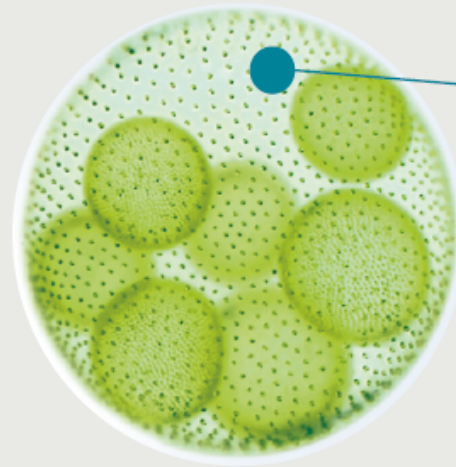


*Microalgae were not only able to survive but **created photosynthesis**, the magic process to harness the sun and create life. They are the **original stem cells**.*

Introduction



SUSTAINABLE CULTIVATION



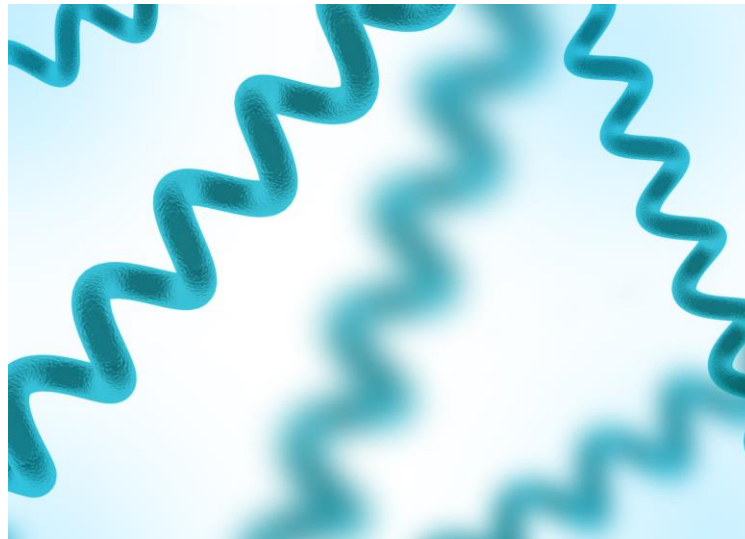
Microalgae

- ✓ **Unicellular** Algae
- ✓ Photosynthetic
- ✓ **H₂O** and **Light**
- ✓ Individually Viable

Microalgae are unicellular photosynthetic organisms which are individually viable with light and H₂O.

LIGHT POWERED SKIN CARE

Spirulina maxima is a **3.6-billion-year-old** blue microalgae that brings an **ancient solution** to a **present need**: it combats **photo** and **digital aging**.

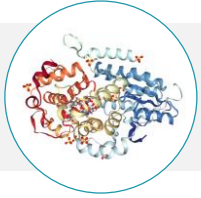


*The first cells to transform **light energy** into **life** (atmosphere/oxygen)*

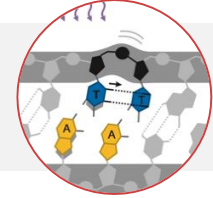
*Key step in **life evolution***

*The blue light **experts***

*The masters in **DNA repair***



PHOTOLYASE CPD – THE DNA REPAIR ENZYME



Photolyase CPD repairs the DNA directly by **cleaving CPD bonds**.

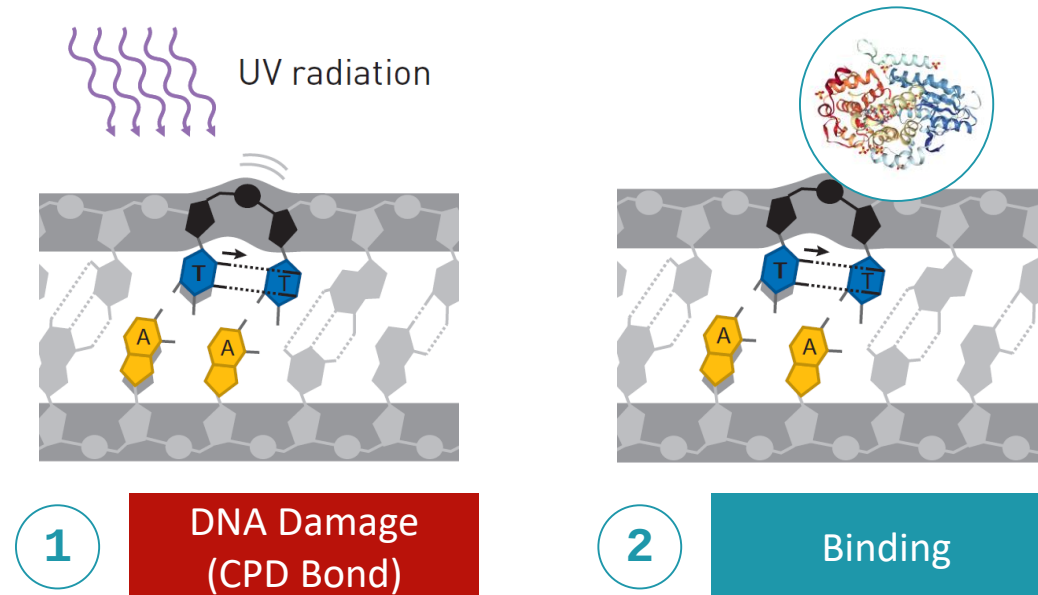
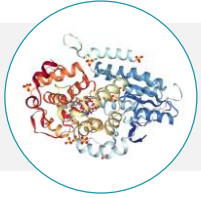
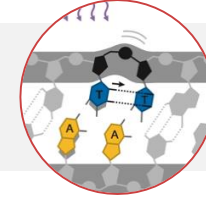


Image source: Adapted from The Nobel Prize in chemistry 2015 & photolyase mechanism of action.

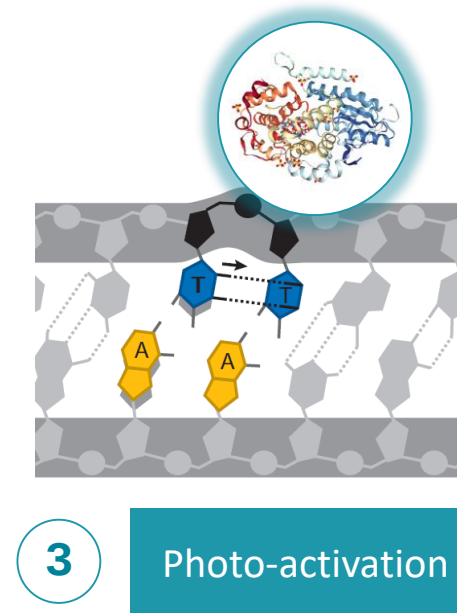
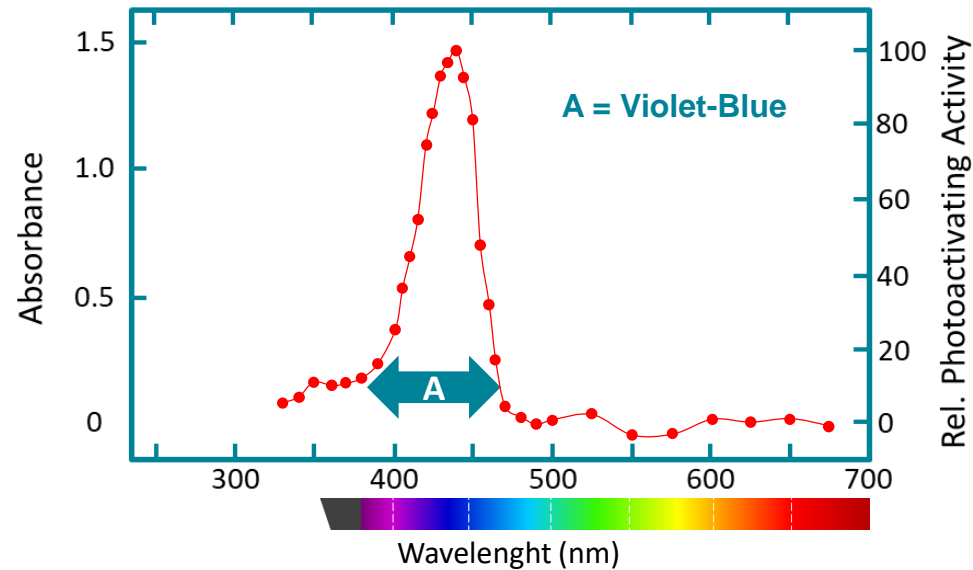
Photolyase CPD: Ancestral enzyme from microalgae, photo-activated by visible light, directly cleaves CPD bond and allows DNA to reconnect normally.



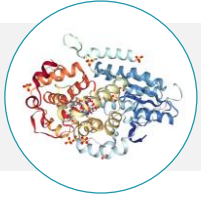
PHOTOLYASE CPD – THE DNA REPAIR ENZYME



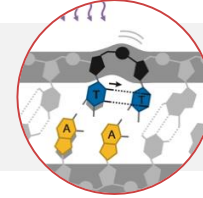
Photolyase CPD works **light activated**, especially active with **blue light**.



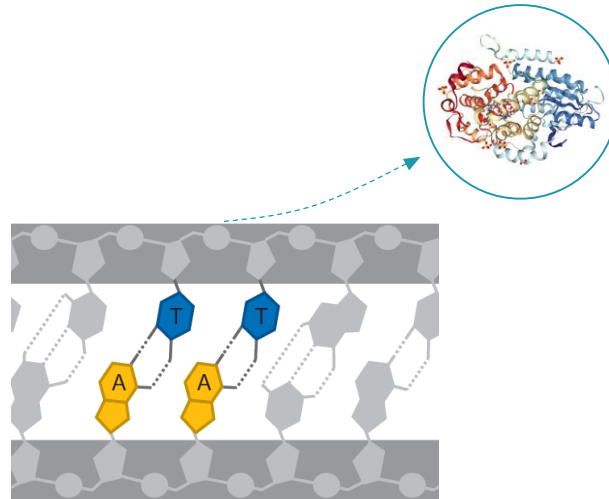
Graphic Source: Adapted from Eker, A. P., et al. "DNA photoreactivating enzyme from the cyanobacterium..." *Journal of Biological Chemistry* 265.14 (1990): 8009-8015.
Photolyase CPD photoactivation peak between 390 and 460 nm (violet-blue light spectrum).



PHOTOLYASE CPD – THE DNA REPAIR ENZYME



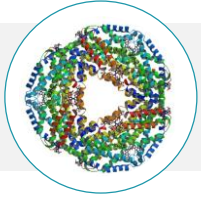
Photolyase CPD repairs the DNA directly by **cleaving CPD bonds**.



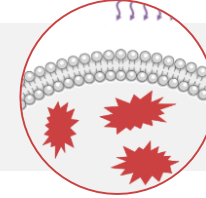
*10 to 100 times faster than
untreated cells.*

Image source: Adapted from The Nobel Prize in chemistry 2015 & photolyase mechanism of action.

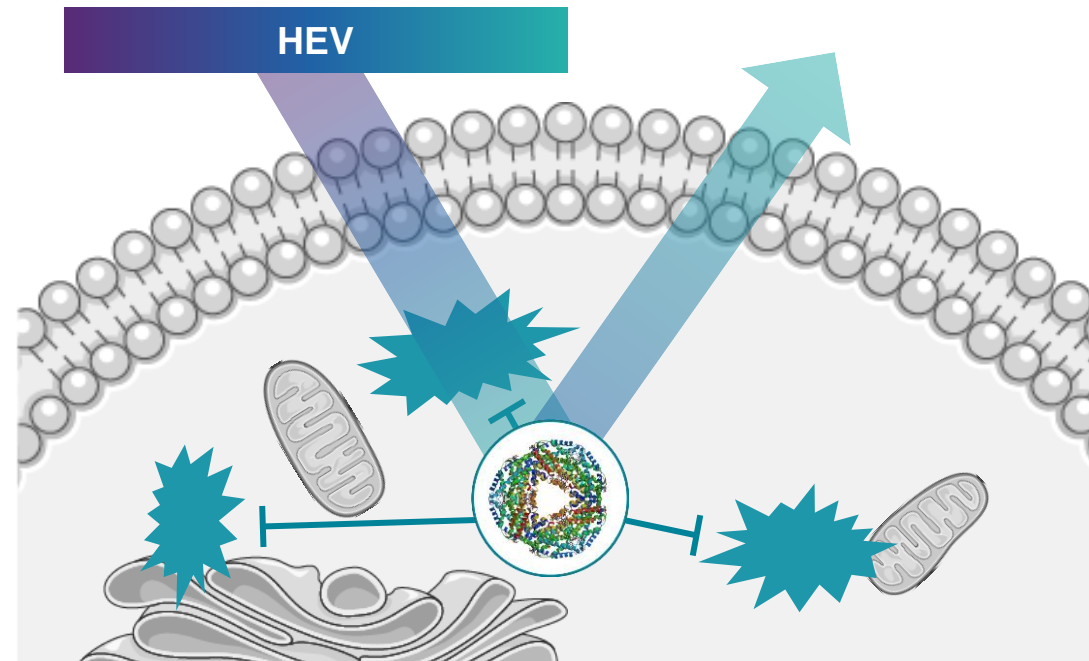
Photolyase CPD: Ancestral enzyme from microalgae, photo-activated by visible light, directly cleaves CPD bond and allows DNA to reconnect normally.



PHYCOCYANIN – THE PROTECTIVE SHIELD

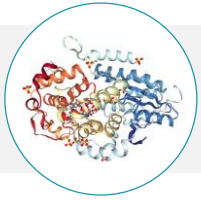


Phycocyanin prevents **digital aging** by **shielding** cells from **blue light**.



Phycocyanin is a characteristic blue pigment and a potent antioxidant that delivers a dual action in shielding the skin from the effects of HEV light via blue light reflection and ROS scavenging.

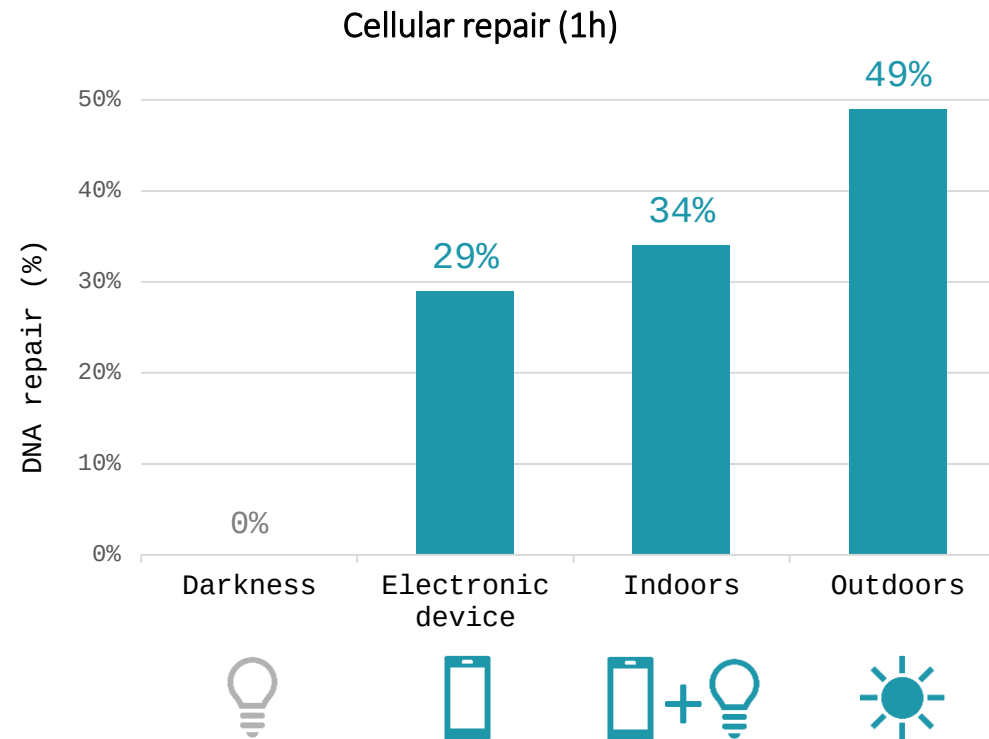
HEV: High Energy Visible Light



LIFESTYLE PROOF PERFORMANCE



Cellular **repair** thanks to light activated enzymes – **even with your smartphone!**



In Vitro brief: Cellular repair assay in naked DNA (analyzed by immunofluorescence).

GenoFix Day (0.1%) repaired UV damaged DNA in just 1 hour when exposed to white light (outdoors), hybrid white light & electronic device (indoors) and electronic device.

IN VIVO EFFICACY



10 volunteers (female), 25 to 50 years



28 days, application once a day



GenoFix Day: 0.2% vs. placebo



Boosts Skin Radiance



Rapidly Corrects Age Spots



Improves Firmness



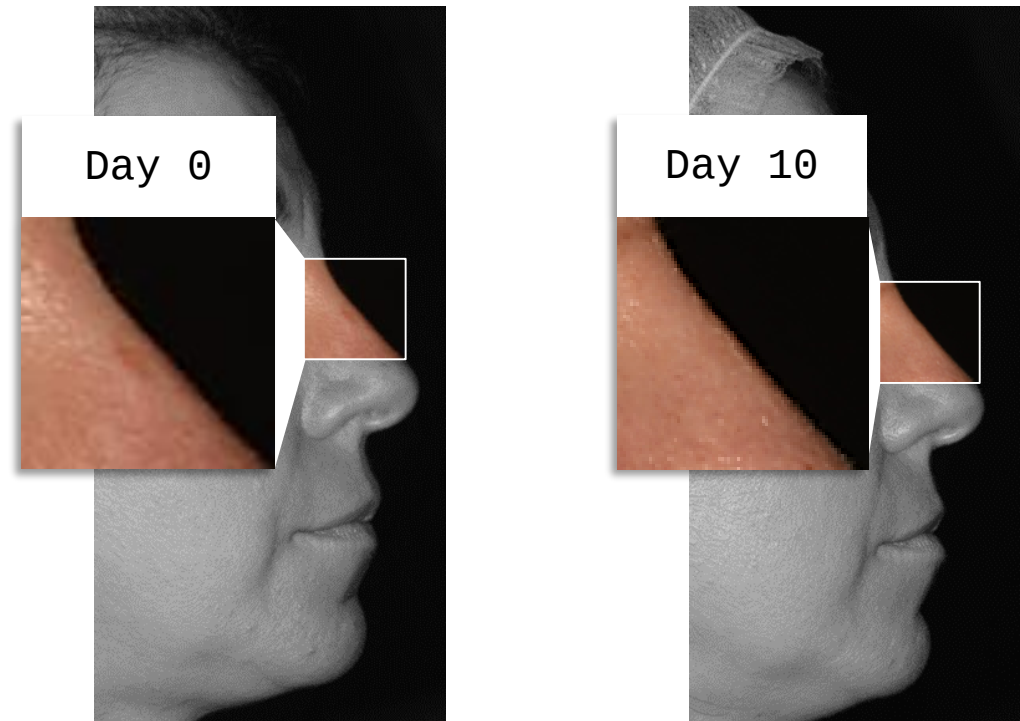
Reduces Wrinkle Depth

In Vivo study: Double blind placebo controlled randomized study with volunteers working with electronic devices (PC, tablet, smart phone, etc..) and also doing sport outdoors and who are exposed to sun radiation; GenoFix Day (0.2%) and placebo applied once a day (half face each, randomly chosen).

IN VIVO EFFICACY – AGE SPOTS CORRECTION



Corrects age spots by shielding melanocytes with its **photo activated enzymes**.

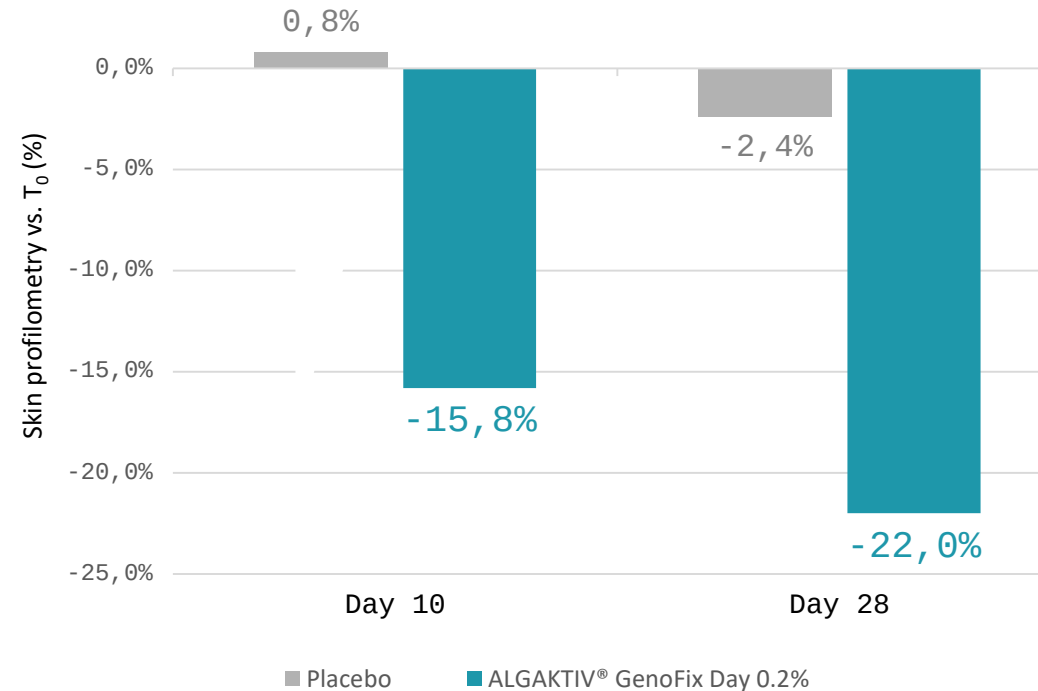


In Vivo Study: See previous slide for demographics.
Volunteer 2: ALGAKTIV® GenoFix Day demonstrates its age spot removal effectiveness.

IN VIVO EFFICACY – WRINKLE DEPTH REDUCTION



Combats **digital and photo aging** with its active enzymes – **reducing wrinkle depth** by more than 20%.



In Vivo Study: See previous slide for demographics.

Wrinkle reduction in the eye area. Measurements made by skin profilometry (PRIMOS – wrinkles) $p < 0.05$.

MICROALGAE TECHNOLOGY & LIGHT POWERED SKIN CARE

- Microalgae are key step in **life evolution**, created **photosynthesis**, **original stem cells**.
- Their **ancestral defense and repair mechanisms** are available for the next generation of skin care products.
- **Sustainable cultivation**: individually viable with light and H₂O.
- **GenoFix Day** combats the signs of **photo** and **digital aging** thanks to its **light powered skin care technology**:
 - **DNA repair enzyme Photolyase CPD** which enables an extremely fast repair, light activated and especially active with **blue light (smartphone)**.
 - **Blue pigment Phycocyanin** offers dual action in **shielding the skin** from the effects of HEV light via blue light reflection and ROS scavenging.
 - **In vivo** proven: GenoFix Day addresses the most common clinical signs and symptoms of digital and photoaging.

PORTFOLIO



ALGAKTIV® GenoFix Day
Light powered skin care



ALGAKTIV® GenoFix Nite
Deep night repair



ALGAKTIV® BodySKN
Upcycling skincare,
lifting sustainability



ALGAKTIV® BioSKN
The ultimate skin super food



ALGAKTIV® RestoreSKN
Dermal renewal for rapid lifting



ALGAKTIV® LightSKN
Correct age spots for an even tone



ALGAKTIV® Optimunist
Protect and care for sensitive skin



ALGAKTIV® UrbanSKN
Shield the skin from urban life



ALGAKTIV® Zen
Prevent lifestyle skin aging

ALGAKTIV World of Microalgae



VEGAN



CHINA LISTED



SUSTAINABLE



COSMOS
APPROVED

ALGAKTIV
Greenaltech
Microalgae Technologies

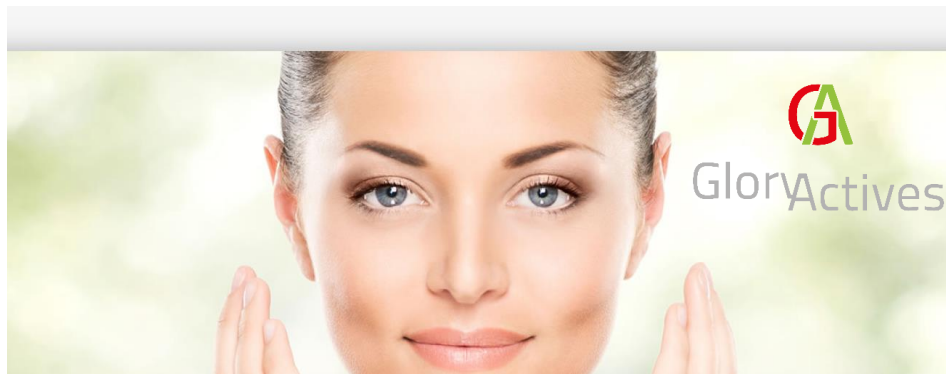


GloryActives

Thank you for your attention!

Please visit us at
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We look forward to meeting you there!



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