

In the saturated health & beauty market, there is still an opportunity for a focused scientific approach to fight ageing process, and get a

Radiant Healthy Supple White Skin

There is VIČUA.





SUMMARY



- 1. VIQUA Pomegranate
- 2. The product: Composition, Technology
- 3. Mechanism of Action, Proof of penetration
- 4. In-Vitro test
- 5. Clinical Test: moisturizing anti-wrinkle lightening
- 6. Formulation guidelines: IN & OUT
- 7. References
- 8. Concept

Conclusion







NATURES'S SUPER FRUIT



POMEGRANATE



- Nature's Super Fruit: Pomegranate juice has more antioxidants than any other fruit juice
- Raw Pomegranate fruit has 0.2% to 1% antioxidants, mainly anthocyanins, catechins, ellagic tannins, and gallic and ellagic acids
- Key antioxidants: Punicalagin, a ellagic acid precursor
- A highly celebrated medicinal food plant
 - Recognized by Chinese TCM as antibacterial, antiinflammatory and hemostasis application
 - chosen as the symbol of medicine for the 2000 UK Millennial Festival of Medicine.

SAFEST & BEST ORIGIN: SPAIN



POMEGRANATE

Long tradition of pomegranate in Spain





Alicante



Sea view from Santa Barbara Castle, Alicante

 Pomegranate in VIQUA are harvested from plantations on the sea shore in Alicante, center of pomegranate production in Europe (40,000 Tons / year)



« MOLLAR DE ELCHE » POMEGRANATE



POMEGRANATE

- Using a special variety: GRANADA MOLLAR DE ELCHE
- Developped in collaboration with Miguel Hernández University of Elche
- th Elche

- Grown only in Alicante
- 10 times more antioxidant capacity in its skin than in its edible interior
 - Superior polyphenols quantity
 - Wider range of different polyphenols



Miguel Hernández

EXTRACTED FROM FRESH WHOLE FRUIT



POMEGRANATE

- Using exclusively sea water for irrigation: this natural stressed environment allows plants to develop much more effective polyphenols
- Harvested by hand at the right time
- Slightly green colour indicates the peak of antioxidant production before rippening
- Pomegranate extract in VIQUA is extracted from whole pomegranate fruits (peel, seeds, juice) of Mollar de Elche variety to benefit from the synergic composition of polyphenols in all parts of the plant (10 times more antioxidant capacity in its skin than in its edible interior)







EXTRACT RICH IN A MIX OF POLYPHENOLS

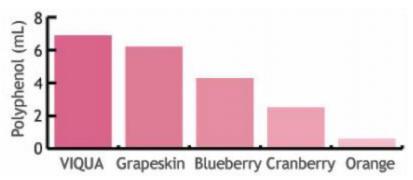


POMEGRANATE

- Punicalagin
- Resveratrol
- Anthocyanins
- Ellagic acid



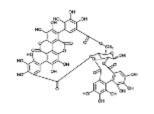
 Other Nutrients: Vitamins B1, B2, C and Niacin, Potassium, Glutanic acid, Aspartic acid, Hydrolysable tannins, ellagitannins, Flavonoids, Pelletierines, psuedopelletierine, Isopelletierine, Methylisopelletierine, Genistein, Diadzein, Estrone.



UNIQUE POLYPHENOLS MIX



Punicalagin

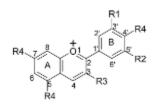


- Lipid peroxidation inhibitory activity
- Capacity to activate antioxidant enzymes

Resveratrol

- Anti-inflammatory effect
- inhibitor of LDL oxidation and lipid peroxidation
- Inhibits ribonucleotide reductase

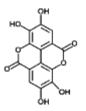
Anthocyanins



- Antioxidant mechanisms
- Reduce capillary permeability and fragility

- Antioxidant
- Anti-inflammatory
- Anticarcinogenetic properties

Ellagic Acid







ENCAPSULATED IN ADS TECHNOLOGY



PRODUCT & TECHNOLOGY

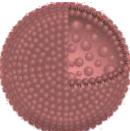
- "Mollar de Elche" Pomegranate extract encapsulated using French ADS nanotechnology
 - 40% polyphenols (10% Punicalagin)
- Benefits of encapsulation
 - 1. Higher stability of all nutrients in the formulation
 - Higher absorption by human body
 - 3. Higher bio efficacy



+







ADS Capsule
Phosholipids extracted from
pomegranate seed oil (~200 nm)

Pomegranate Extract 40% polyphenols (10% Punicalagin)

Pomegranate Extract

ADS® stabilizes Pomegranate Flavonoids



PRODUCT & TECHNOLOGY



70°C Testing Results		90°C Testing Results	
Sampling time	Content of Punicalagins	Sampling time	Content of Punicalagins
T0	10.00 %	T0	10.00 %
30 mn	9.98 %	30 mn	9.95 %
60 mn	9.90 %	60 mn	9.83 %
90 mn	9.91 %	90 mn	9.76 %
120 mn	9.50 %	120 mn	9.46 %
100°C Testing Results		200°C Testing Results	
Sampling time	Content of Punicalagins	Sampling time	Content of Punicalagins
T0	10.00 %	T0	10.00 %
30 mn	9.95 %	30 mn	9.91 %
60 mn	9.82 %	60 mn	9.76 %
90 mn	9.74 %	90 mn	9.51 %
120 mn	9.40 %	120 mn	9.12 %

- Suitable for non-preserved beverage (support autoclaving 10 mn at 130 deg)
- Suitable for baked products (200 deg at 10~75 mn)

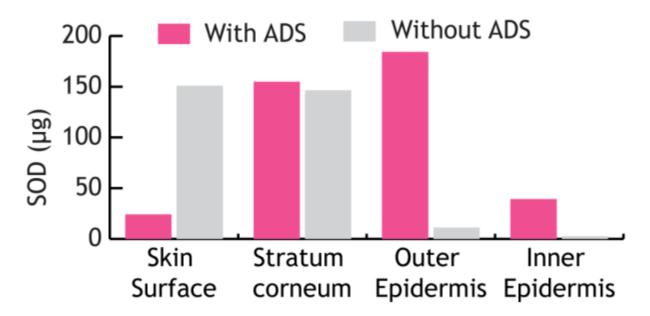
Stable over a wide pH range: 3~9

ADS® enhances penetration in the skin



PRODUCT & TECHNOLOGY

 With ADS, SOD doesn't stay at the skin surface but reach deeper in the epidermis)



<u>Protocol:</u> application of ADS with SOD or free SOD formulations on the forearms of 20 volunteers. Measure of SOD penetration by stripping after 5h.

HIGH PURITY

Vi**Q**UA.

PRODUCT & TECHNOLOGY

- Non GMO
- No additives
- No pesticides
- No food allergens
- No gluten
- No phtalates
- Size > 100nm and so not considered nano-particules (as per the definition of nanomaterial 2011/696/UE).



PERFECT SAFETY



PRODUCT & TECHNOLOGY

- LD50 > 2000mg / Kg
- No cutaneous irritaton
- No ocular irritation
- Food grade: Classified GHS5 or very low toxicity substance (UNECE)
- Oral & topical products, in beverage / food supplement / cosmetic / mouth wash for more than 10 years
 - EU & Turkey
 - US, Mexico
 - Japan, China, South-East Asia



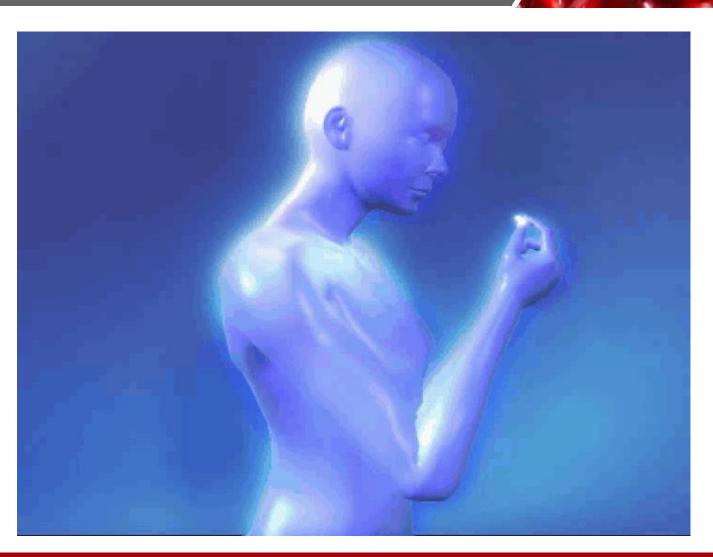


A POWERFUL ACTION



MECHANISM

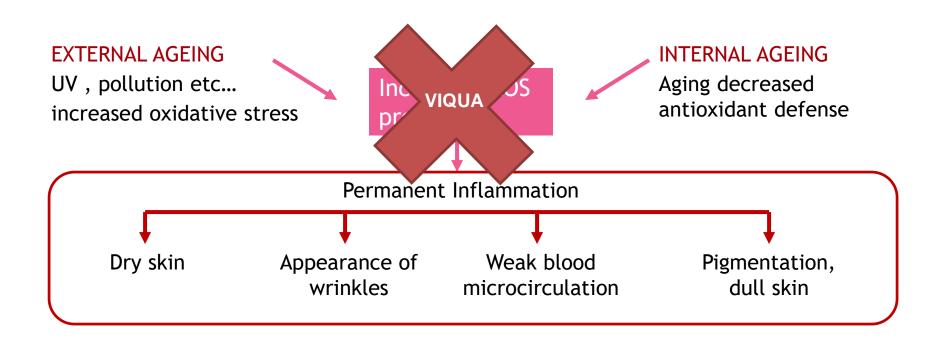
ADS Movie explains how VIQUA delivers its benefits



ALL ROUND SKIN MANAGEMENT SOLUTION



MECHANISM OF ACTION



By effectively reducing ROS in the cell mitochondria VIQUA® is expected to improve all aspects of skin health

BENEFITS OF VIQUA

MECHANISM OF ACTION



Cell Level

- Boost Cells energy and repair
- Enhances metabolism of cells in human body
- Stimulate body's own defenses, in particular antioxidant protection
- Inhibition of tyrosinase (ellagic acid)
- Inhibition of collagenase and elastase activity in human fibroblasts
- Blood vessels remodelling, boosting microcirculation

Skin Level

- Improve water retention in epidermis
- Protection of UV consequences & Skin whitening
- Anti-aging: dermis balance
- Nourishement & Detox harmful environment toxin









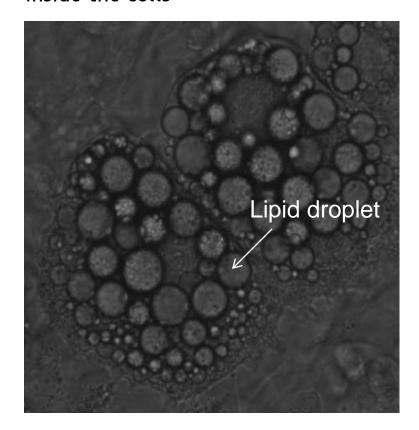
Adipocytes as model for Viqua localization



MECHANISM OF ACTION

- Adipocytes are human fatty cells located in the deepest layers of the skin
- They have abundant mitochondria, located around the lipid droplets
- If Viqua is also located around the droplets, it indicates Viqua is in the mitochondria

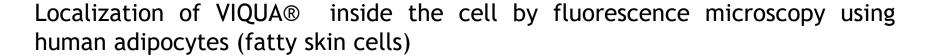
Microscope picture of two human adipocytes showing the lipid droplets inside the cells



VIQUA® PENETRATES INSIDE THE MITOCHONDRIA



MECHANISM OF ACTION

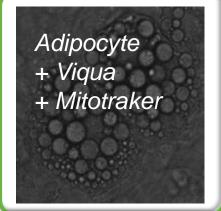


Human adipocytes incubated with:

- ■red labeled VIQUA®
- •and green labeled mitotraker known to accumulate in the mitochondria

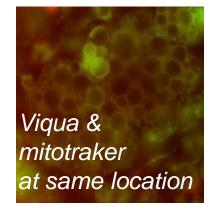
Viqua® and the mitotraker are inside the same cell and are located at the same spot, therefore:

VIQUA® accumulates in the mitochondria









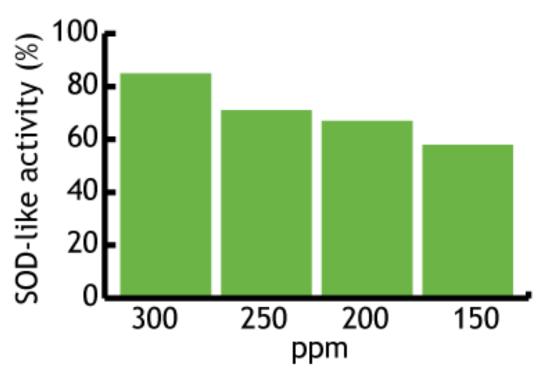




SOD-LIKE ACTIVITY



IN-VITRO TEST



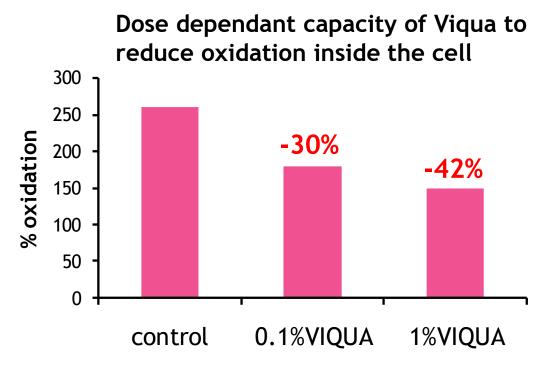
Concentration of VIQUA®

VIQUA® REDUCES OXIDATION INSIDE THE CELL



MECHANISM OF ACTION

VIQUA® effectively reduces oxidation by H₂O₂ inside human adipocytes



<u>Protocol:</u> Differentiated adipocytes or human breast adenocarcinoma MCF-7 cells were subjected to oxidation with 5 μ M H₂O₂ in the presence and in the absence of VIQUA®

PROTECTION OF DERMIS

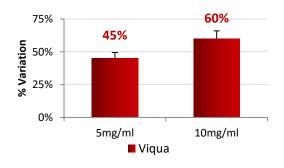
VI**Q**UA.

IN-VITRO TEST

COLLAGENASE INHIBITION

Collagen maintains appropriate elasticity and strengh of the skin.

VIQUA® at a low concentration inhibited collagenase, inhibiting the degration of collagen.

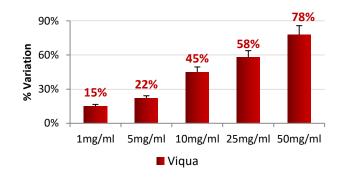


Concentration of VIQUA®

ELASTASE INHIBITION

When elastase is activated and elastin is degraded, wrinkles and sags grow as ageing phenomena of the skin.

VIQUA® inhibits elastase at a low concentration, and decreases the degradation of elastin.



Concentration of VIQUA®





CLINICAL STUDY: PROTOCOL



CLINICAL EVIDENCE

<u>Summary</u>

- A placebo-controlled
- Double-blind ingestion study
- 250 mg VIQUA® supplement / day (2 x 125 mg)
- 30 subjects: female aged between 30 and 55 years; skin phototype I-IV.
- 4 weeks

Evaluated parameters:

- Hydration
- Tonicity, Elasticity.
- Smoothness, Roughness, Wrinkles
- Inflammation, Whitening



Follow-up

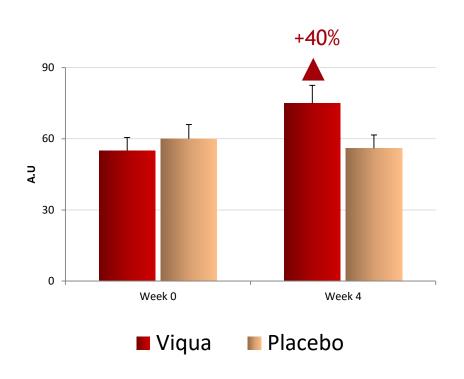
During the study, subjects were asked to give a self-assessment of their visual skin appearance using a Visual Numerical Scale (0-10).

All skin measurements were carried out at baseline and at 4 weeks.

SKIN HYDRATATION: +40%



CLINICAL EVIDENCE

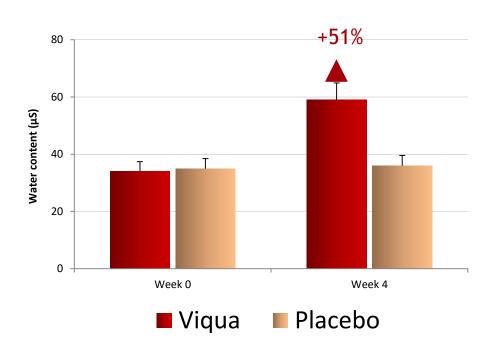


Skin hydratation measured by Corneometer improved significantly under treatment, whereas the placebo group showed a decrease (-0.3%)

WATER CONTENT in STRATUM CORNEUM



CLINICAL EVIDENCE



The water content of stratum corneum, measured by Skicon, has significantly increased only after treatment.

SKIN MOISTURIZATION

Vi**Q**UA.

CLINICAL EVIDENCE

VIQUA Group



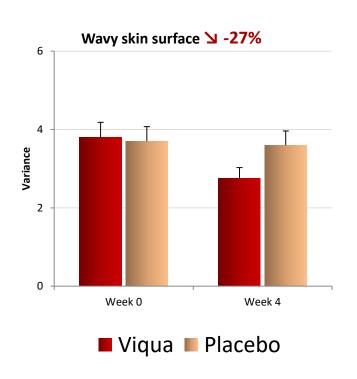


Re-establish the natural healthy balance of the skin. Improve dry skin by boosting the health and strength of the layers of the skin so that it naturally keeps hydration locked in.

SKIN SMOOTHNESS: -27%



CLINICAL TRIAL



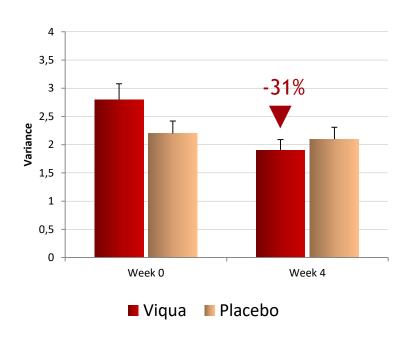
The surface is a parameter measured with Visioscan VC98, which calculates the size of the wavy skin surface, is an indirect measurement of skin smoothness. High smoothness will lead to decreased surface values. In this case, the surface has significantly decreased only after the active treatment.

The skin smoothness has improved only after the active treatment, decreasing the size of way skin surface by 27%

SKIN ROUGHNESS: -31%

Vi**Q**UA.

CLINICAL TRIAL



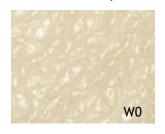
The skin roughness, measured with Visiocan VC98, has significantly decreased only after the active treatment.

SKIN SMOOTHNESS

VI**Q**UA.

CLINICAL EVIDENCE





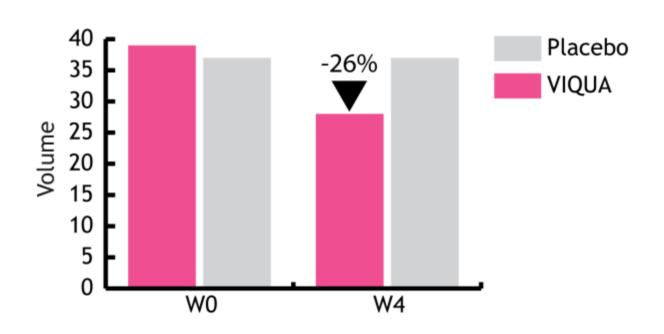


The active treatment increased the health and strength of the dermis, epidermis and supporting structures, resulting in healthier, younger looking skin.

DEPTH OF WRINKLES: -26%



CLINICAL TRIAL



The volume parameter, measured with Visioscan VC98, is indicator for the depth of wrinkles. In this study, the volume has significantly decreased only with the active treatment.

BOOST BLOOD MICROCIRCULATION



CLINICAL EVIDENCE

VIQUA Group





At W0 it was observed high permeability of bloods vessels.

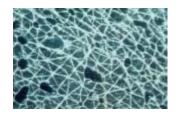
At W4 the permeability was significantly reduced and blood circulation increased, suggesting significant inhibition of the inflammation process

REDUCING DARK SPOTS

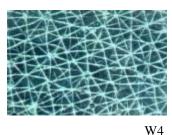


CLINICAL EVIDENCE

VIQUA Group



W0



Benefit of microcirulation

TONING DOWN SKIN COLOUR



CLINICAL EVIDENCE

VIQUA Group



W0



W4

Source of inflammation, dark spots have disappeared only after the active treatment.

VISIBLE EFFICACY (clinical trial, oral intake)



CLINICAL EVIDENCE

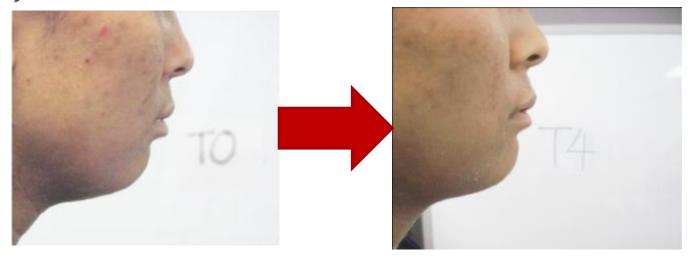
CL	INICAL EVIDENCE		
		Before	After
1.	Moisturizing: +40% increase in hydration		
2.	Anti-wrinkle: +30% smoother skin, -26% decrease in wrinkle depth		
3.	Anti-Inflammatory: source of inflammation, dark spots have disappeared		
4.	Whitening: dark spots' size have decreased		
5.	Blood microcirculation improved thanks to reduced blood vessel permeability	West 1	

VISIBLE EFFICACY: ACTION ON MELASMA



CLINICAL EVIDENCE

 Melasma tends to appear during pregnancy (mask of pregnancy) and in women who take oral contraceptives, although it can occur in anyone.

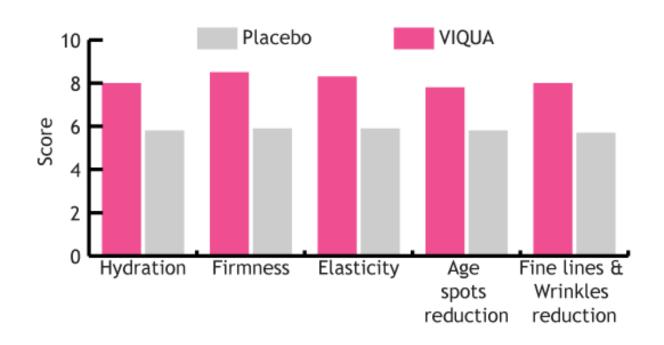


- Skin tone became generally brighter
- Dark spot/blemish color attenuated.

EFFICACY PERCEIVED BY THE CONSUMER



CLINICAL TRIAL



The self-assessment test by volunteers shows evident perception's differences of all the estimated parameters that are correlated to the product's efficacy.

The subjects treated with VIQUA have always expressed a higher satisfaction score compared with the one's assuming the placebo.





EASY TO FORMULATE: FOOD



Daily dosage: 125mg~500 mg

In-vivo dosage: 250 mg

Solubility:

Stability:

Autoclaving:

Nutrition facts:

Water

Polyphenol residual content at 1% in water after 12 months: > 99% (Internal test)

OK (1 mn @ 130 deg)

COMPOSITION	PERCENTAGE
Carbohydrates % Sugar%	60~65 53~57
Lipids %	0.05 ~ 0.01
Proteins (N x 6.25) %	1 ~ 1.5
Ash %	1 ~ 1.5
Moisture %	32 ~ 36
Energetic value (Kcal / 100g)	240 ~ 260

EASY TO FORMULATE: COSMETIC



• INCI: Pomegranate extract

• Dosage: 0.5~1%

Solubility: water

• pH: 3~9

Heating: yes

Safety: no skin irritation

no occular irritation





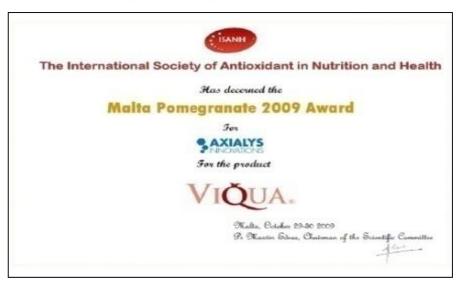


SCIENTIFIC AWARDS



PROVEN SUCCESS STORIES

ISANH, Best Pomegranate Ingredient
 Polyphenol conference, Malta, Nov 2009



- In-Cosmetics, Singapore, October 2009Selected in "Imagine Section"
- PCHI, Guangzhou, Feb 2009 "Top 5 innovations"

REFERENCES: BEVERAGES

PROVEN SUCCESS STORIES



Brand: Sunlover Origin: Portugal / Spain **Product:** Regenerator

Ingredient: Pomegranate Extract (VIQUA®). Rich in: Vitamins B (B2, B3, B5, B6, B8, B9, B12), Vitamin C, E, and Mineral Salts (Zinc, Copper, Selenium).

Brand: Clair D'Orient **Origin:** China Active ingredient: 250mg



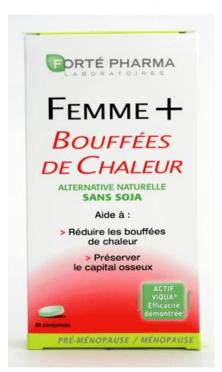
Health and White ©Axialys 2015

REFERENCES: PILLS, POWDER STICK



Viqua food supplement

Forte Pharma (France)



Brand: Elken

Origin: Malaysia

Product: EL MARINO

Official launch December 2011 at French

Embassy (Kuala Lumpur)



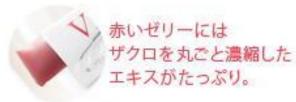
REFERENCES: JELLY



Brand: VIBLANC Origin: Japan

Active ingredient: 250mg Viqua





REFERENCES: BACKED PRODUCT



By Chef Keiko NAGAE (Japan)





Cup Cake



REFERENCES: COSMETIC

VI**Q**UA.

Brand: Ninapharm

Origin: Japan

Product: soap, mist, cream

PROVEN SUCCESS STORIES

Brand: Estee Lauder

Origin: USA

Product: Nutritious Series



Infuse. Recharge. Reveal that healthy glow.

New Nutritions Collection

They make the value of per sense plan. The make help beyond without the last of village and also and make the last of village to the last of village and the village to the last of village and the village and villag

How to Use CHARLE



STEP2 うるおいを届けて肌をほぐす

スプレータイプのみずみでし、ライトな完起水が横くなりがらな大人の 関にすっとないみ、やわらか(ほくしながら角度全性を行るが、で満た) ます。自らかは早の地川・1位間数野が近点でも取った場合ます。





た。(3) (2) 化粧水で満たした紙布業型フェルがつかり発音をして、うる が、他、っかりと特に込めます。ターンコーバーをすこれかに整えること で、動か運用板が楽まり、参いない。実践に出台えます。



Brand: Chando (China #1 local brand) Origin: China

Product: lotion, mask





VIQUA

Viqua mist and Viqua lotion (Cosmetic, Japan)

POSITIVE CONSUMER FEEDBACK



PROVEN SUCCESS STORIES

Pictures taken by consumers of EL MARINO (ELKEN, MALAYSIA)













LIMITLESS APPLICATIONS WITH "ADS"



BEVERAGE

No Age (Japan) By Towako and Kiwijima



世界抗糖化学会(ISANHI)





HEALTH DRINK

ACTIAGE TOTAL Ninapharm (Japan)



MOUTH WASH

(with VIQUA, Japan)



FOOD SUPPLEMENT

(in capsule, France)



POWDER DRINK

Japan





BAKERY

Japan



COSMETIC (with VIQUA,

Japan)



Health and White ©Axialys 2015





A BRAND

Vi**Q**UA.

CONCEPT: TELLING THE STORY



As a brand, the spirit of VIQUA stands for

The all-transforming radiance

&

the magic of pomegranate science

HOW SHE DESCRIBES VIQUA?

VI**Q**UA.

CONCEPT: TELLING THE STORY

- Magical & transformational: She believes that there is magic in nature and there is always hope for the better for every woman
- Dedicated & results-driven: She is set to make the most of the innovative power of science defy all beauty expectation
- Prestigious but inclusive: She redefines elegance and beauty perfection but never discourages others to follow
- Luxuriously French: Her personality is radiant and alluring



FOR ALL DEMOGRAPHIC



CONCEPT: TELLING THE STORY

Definition and evenness

Hydrated and glow

MOISTURIZED SKIN



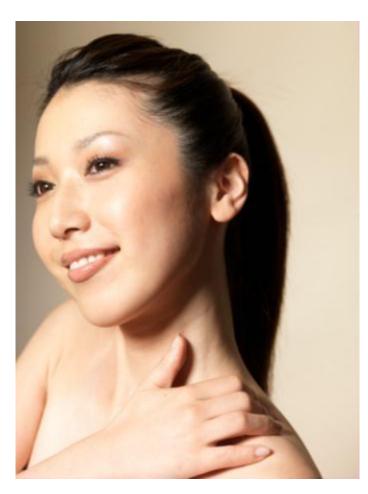
Hydrated and firm

Natural coloration & glow

WHY SHE LOVES VIQUA

VI**Q**UA.

CONCEPT: TELLING THE STORY



She just wishes for...

The total, natural, uncomplicated solution that address all her key aging concerns

Viqua as a new brand can answer her...

- Functionally: by providing whitening, antiageing, solution that understand Asian skin
- Emotionally: by leveraging French prestige and scientific quality, but also empathetically local Asian needs.

VIQUA is a credible premium solution that is a great value that she would use with trusted confidence to keep her at the ladder of success

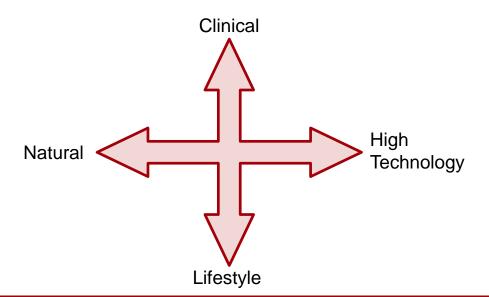
SUGGESTION OF BRAND DIRECTIONS



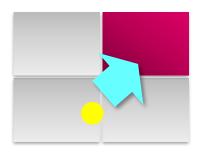
CONCEPT: TELLING THE STORY

Clinical Expert France
+ Mystical Orient



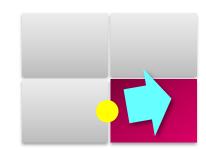


Clinical Expert France
+ Premium Technology



Lifestyle

+ Premium Technology France



ATTRACTIVE DESIGN

CONCEPT: TELLING THE STORY









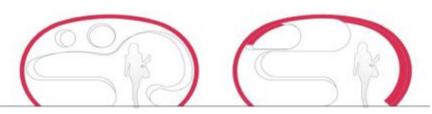
MODERN CONCEPT STORE



CONCEPT: TELLING THE STORY

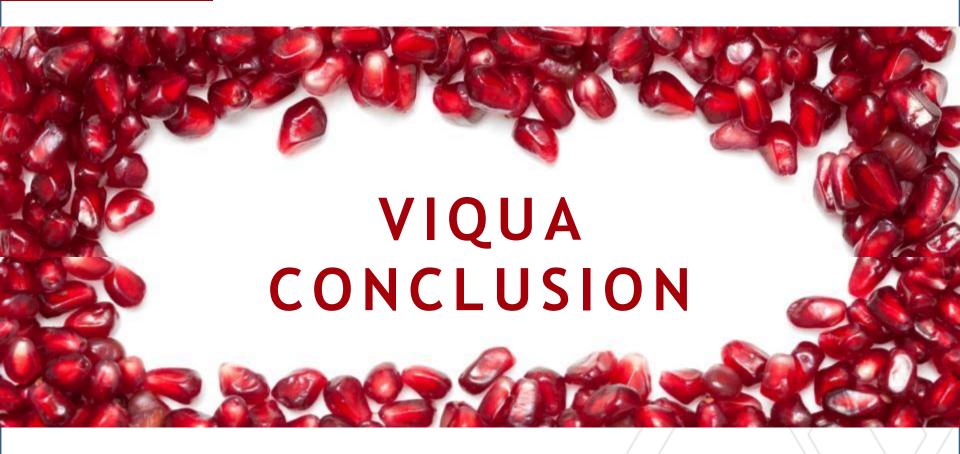












ALL IN ONE SOLUTION FOR THE SKIN



UNIQUENESS

BEST ORIGIN, SUSTAINABLE

- From the beautiful Alicante fields in Spain, produced in a sustainable way
- Extracted from Unique geographically protected pomegranate variety "Mollar de Elche"
- Whole fruit extract guarantee the synergic composition in different polyphenols

UNIQUE TECHNOLOGY

- Encapsulated by patented French nano-technology
- Superior stability and bioavailability
- Breakthrough cell penetration mechanism

TOTAL SAFETY

Natural product, tested, proven for 10+ years

PROVEN EFFICACY: VISIBLE SMOOTHER, SOFTER & MORE RADIANT SKIN

- All-in-one solution: 1. hydrating, 2. Anti-wrinkle anti-ageing 3. Whitening
- Efficacy you can feel and see within 14~28 days

CREDIBILITY

- Scientific credibility recognized by awards
- International references

STRONG CONCEPT

- Strong personality, Emotional story: can be easily adapted to any consumer
- Promotional support

UNLIMITED APPLICATION

• Easy to formulate in: personal care, food supplement, beverage, oral care...

THE SCIENCE OF POMEGRANATE



UNIQUENESS

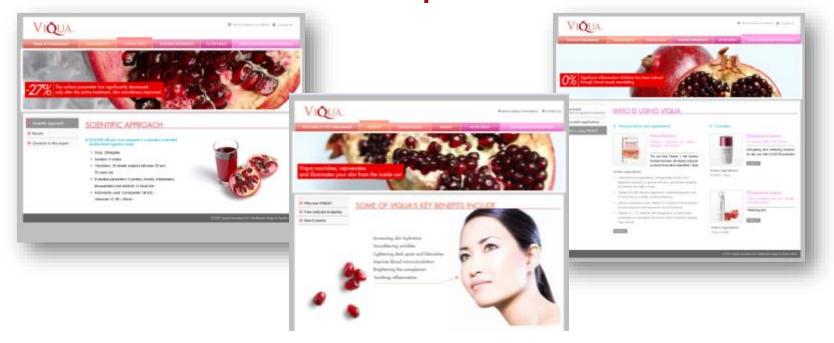


Health and White

CONTACT US



www.viqua.info



THANK YOU





1 Place Marie Curie - 74000 Annecy, France www.axialys-innovations.com