

Proven Bioavailability

oxxyne3®

Polyphenol concentrate as in 5-A-DAY





5-A-DAY FRUIT & VEGETABLES TO PREVENT NCDs

Low consumption of fruit & vegetables is associated with a higher risk of developing non-communicable diseases (NCDs)¹

According to World Health Organization (WHO), up to 2.7 million people could be saved each year if fruit and vegetables intake was increased ²



Based on this evidence, WHO issued recommendations for a 5-a-day minimum varied intake of fruit & vegetables – 400 g daily (5 servings 80 g)³

1 Leenders et al. 2013 2 WHO, 2002 3 WHO, 2004

THE NECESSITY OF ANTIOXIDANT CONSUMPTION

- Importance of fruit & vegetables to maintain antioxidant homeostasis is now demonstrated
- But no specific recommendations to date by health authorities in terms of daily antioxidant
- Phenolic compounds are the main contributors of the antioxidant pool in fruit and vegetables



PHENOLIC COMPOUNDS IN 5-A-DAY FRUIT AND VEGETABLES

POLYPHENOLIC CONTENT IN 5-A-DAY



Most consumed fruit and vegetables in France (Kantar Worldpanel, 2017) 1 serving = 80g



5-A-DAY BIOAVAILABILITY



- Each meal provides a diversity of phenolic compounds from a varied intake of fruit & vegetables
- The diversity ensures a 24-hour presence of circulating phenolic metabolites for a whole day protection

Phenol-Explorer database



NUTRITIONAL GAP versus 5-A-DAY

WORLDWIDE

WHO's recommendation for a 5-a-day intake of fruit & vegetables is not achieved

EUROPE > 75%

don't eat the recommended five servings of F&V daily

EUROPE < 5 servings Kantar TNS, 2017 71% 76% 81% 82% 65% 77% 60% United Kingdom Finland Sweden France Spain Norway Denmark GERMANY DGES1, 2013 Men Women 2.4 servings/day 3.1 servings/day 90% < 5 servings 85% < 5 servings

Eurostat, 2017

OXXYNEA - POLYPHENOL CONCENTRATE



VARIETY OF SOURCES

- Green olive
- Grape
- Pomegranate
- Green tea
- Grapefruit
- Bilberry
- Orange

DIVERSITY OF FAMILIES

- Flavan-3-ols
- Flavanones
- Ellagitanins
- Secoiridoids
- Anthocyanins
- Other flavonoids

> 150 polyphenols identified by HPLC MS

-	E (280 nm,	350 nm, 52 0) nm)	
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ini	_		Ha Ha	
- Ellagitar	Havan-3-o			
Acid phenol	- Flavan-3-ol id phenol svan-3-ol	- Flavan-3-ol	Havanone Flavanone Secolidaic	
MU	Mallen	alin	Anth	ocyanins

Oxxynea HPLC fingerprint

PHENOLIC CONTENT



OXXYNEA BENEFITS AS IN 5-A-DAY

DOUBLE-BLIND, RANDOMIZED, CROSS-OVER CLINICAL STUDY

Spain, Murcia

Research Center University of Murcia

10 subjects

Acute
Acute
Oxxynea
450 mg/day

1- Registered study at clinicaltrials.gov: NCT03432104

OUTCOMES

- Pharmacokinetics of phenolic compounds
- Preventive effect of Oxxynea on dyshomeostasis in oxidative stress & arterial pressure

STUDY DESIGN





24-HOUR PHENOLIC LOAD

DIVERSITY OF POLYPHENOLS





SUSTAINED PROTECTION AGAINST DYSHOMEOSTASIS

OXXYNEA LIMITS MDA PRODUCTION





MDA: accurate biomarker of oxidative stress from lipid peroxidation

An increase in reactive oxygen species induced by high-fat/carbs meal causes overproduction of MDA in placebo



OXXYNEA IMPROVES VASCULAR FUNCTION





relationship between Oxxynea circulating phenolic metabolites and 24hour MAP variation

pressure

Average MAP variation 0-24 h (mmHq)



OXXYNEA AS IN A 5-A-DAY



Most consumed fruit and vegetables in France (Kantar Worldpanel, 2017) 1 serving = 80g

EQUIVALENT POLYPHENOLIC CONTENT

FOLIN CIOCALTEU



230 mg Gallic Acid eq.

EQUIVALENT BIOAVAILABILITY





OXXYNEA BENEFITS AS IN A 5-A-DAY



APPLICATIONS

oxxynea°

Description

Olive, grape, pomegranate, green tea, grapefruit, bilberry, orange GMO free, vegan compliant, gluten free

Active compounds

Total polyphenols (eq. gallic acid) $\geq 51\%$

ORAC Value ≥ 7000 µmol/g

KRL-RESEDA Value ≥ 850 µmol/g

Recommended dosage 450 mg/day

Applications



EUROPE: BOTANICAL PENDING CLAIMS

CLAIMS AVAILABLE WITH THE COMPOSITION OF OXXYNEA

Green tea (1/2)

ID 1103 - Protection of body tissues and cells from oxidative damage

Goodness of tea antioxidants/contains-source of antioxidants/ tea consumption helps to reinforce the antioxidant defenses of the body antioxidants help to protect our body by reinforcing the body's natural defense against the harmful effects of free radicals

ID 1108 – Glucose metabolism

Helps to maintain a normal blood glucose level as part of a healthy lifestyle

ID 3698 – Supports metabolism/fat oxidation

Natural green tea extract with EGCG helps to enhance metabolism/contributes to fat oxidation

ID 1104 - Physical and mental stimulation (hydration and caffeine) Tea helps refresh body and mind/Tea helps to revive you/Tea helps keeping you alert

ID 1222 - Mental & Cognitive health

Supports natural sleep/relaxing/promotes concentration/ theanine from tea contributes to soothing effect

ID 2812 – Mental state of performance

Improves concentration and learning

ID 2765 – Renal elimination of water

Recognized to promote the renal elimination of water

ID 1116 – Gut flora

Maintain healthy digestive system. Improve intestinal environment and functionality. Improve the beneficial bacterial after antibacterial drug intake. Improve intestinal environment and functionality. Support good digestive function. Maintain healthy gut flora

ID 1105/2813 – Oral protection

Tea helps reduce plaque in your mouth/Tea helps reduce acid production by plaque bacteria/Tea contains fluoride and tannins that help protect teeth

ID 1111 – Dental health

Tooth friendly-oral care-promotes healthy tooth and gums-Helps to protect from plaque attacks-Protects from dental caries



EUROPE: BOTANICAL PENDING CLAIMS

CLAIMS AVAILABLE WITH THE COMPOSITION OF OXXYNEA

Green tea (2/2)

ID 1109 – Bone health

Maintenance of healthy bones/can help to strengthen the bones

ID 1110 – Skin health

Helps protect the skin from UV-induced oxidative damage/helps protect against UV-induced erythema/contributes to healthy ageing by maintaining intact cell DNA

ID 1273 – Immune health

Contributes to the natural defenses of the body. Support of the body's defense. Supports the immune system

Blueberry

ID 3706 – Antioxidant

Antioxidants can protect from free radicals and helps in case of foods intake deficiency or increased amount of nutrients

Bilberry

ID 1295/2050 - Eye health

The antioxidant anthocyanosides in bilberry help maintain the proper retina functions/ support visual acuity / support blood flow to the eye / Provide antioxidant support for the eyes

ID 1296 - Stabilization of collagen formation in eye

Bilberry anthocyanosides could help in stabilizing the healthy collagen level in the eye

ID 1298 – Mucous membranes in stomach and small intestine

The anthocyanosides in bilberry may help maintain healthy, functioning mucous membranes in stomach and ine small intestine

ID 1297 - Capillary and vessels

Bilberry anthocyanosides can help capillary wessels health and elasticity of veins against harmful effect of free radicals



EUROPE: BOTANICAL PENDING CLAIMS

CLAIMS AVAILABLE WITH THE COMPOSITION OF OXXYNEA

Grape

ID 2144 – Antioxidant protection system

Contains naturally occurring antioxidants /for cells protection/ helps protect cells from free radical damage, antioxidants help protect the body cells from radicals which cause cell damage / antioxidants help protect the body cells and tissues from oxidative damage

ID 2145 – Skin health/Antioxidant activity

Clinically/scientifically proven to improve the overall health and appearance of the skin

ID 2557 – Drain, obesity, treat localized lipodystrophy

Help as part of a slimming diet. Natural drainer. At use against orange peel

ID 2558 - Nervous system: grape seed have adaptogenic and nootropic activities

Helps you to feel relaxed with the stress of a busy lifestyle/ Contributes to decrease tenseness and irritability/Helps organism to adapt for emotional stress, Improve the body's resistance to stress. Improve mental function and performance





Certified equivalence

Fytexia

OXXUNE3®0 Certified Organic

ORGANIC GRADE: OXXYNEA O



DIVERSITY OF SOURCES

- Rosemary
- Olive
- Grape
- Artichoke

Extracts certified by Ecocert



DATA SUPPORTING THE EQUIVALENCE



Polyphenol content as in 1 average serving of fruit and vegetables.

Most consumed fruit and vegetables in France (Kantar Worlpanel 2017)





NUTRITIONAL CONTENT IN POLYPHENOLS

Folin ciocalteu





