vintera™
UPCYCLED GRAPE SOURCE

Vintera™
Upcycled Grape Extracts

Upcycled Natural Ingredients

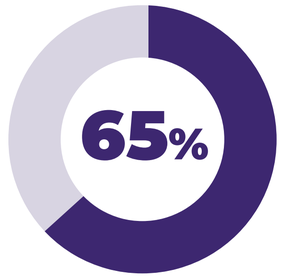
ALVINESA
NATURAL INGREDIENTS

MARKET AND CONSUMER TRENDS

Functional foods, beverages and supplements are playing a key role in consumers' health and wellness goals.



of global consumers are now more likely to pay attention to nutritional benefits when purchasing foods & beverages.[1]



of consumers globally say that they plan to improve their heart health...[2]

What areas of your health do you want to improve/address by using supplements? (NS2102) Top six answers - Global



2022

My heart health	My overall wellbeing	My cognitive/ mental health	My digestive health	My immunity	My energy levels
⬆ 50%	⬆ 79%	⬆ 66%	⬆ 64%	⬆ 76%	⬇ 57%

MARKET AND CONSUMER TRENDS

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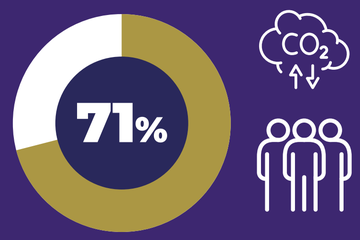
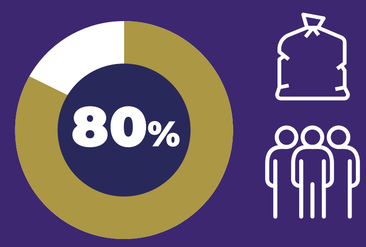
More than 30% of all food produced around the world goes to waste. Agriculture and livestock production account for about 10% of greenhouse gas emissions.[3]



71% of consumers are concerned about carbon emissions.[3]



80% of consumers say it is important to avoid food waste.[3]



70% of consumers said they **intend to purchase upcycled products.[3]**

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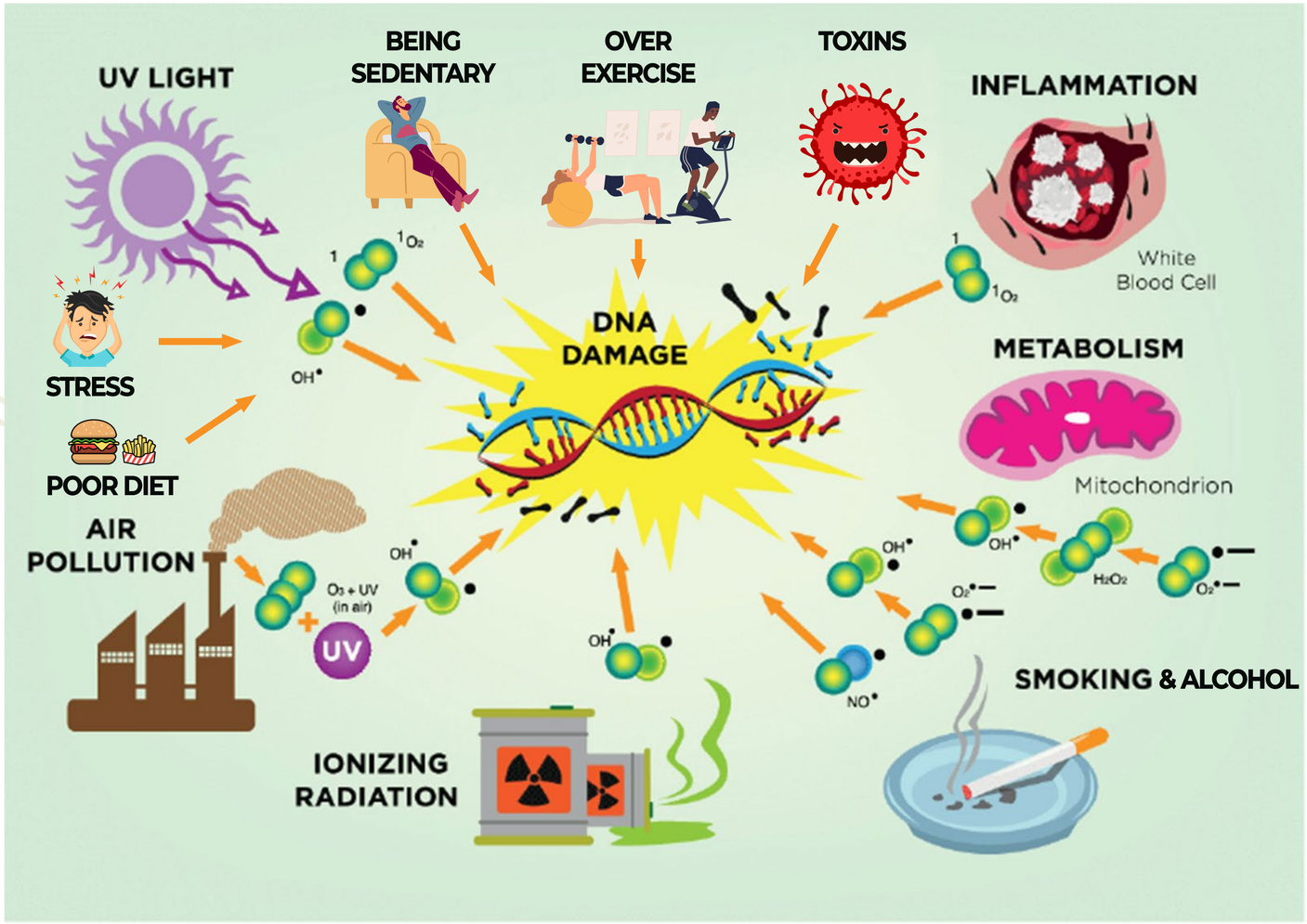
OXIDATIVE STRESS

Oxidative stress occurs when there is an imbalance in our cells due to an increase in free radicals or a fall in antioxidants that leads to the generation of toxic reactive oxygen species (ROS), such as hydrogen peroxide, organic hydro peroxides, nitric oxide, superoxide and hydroxyl radicals, etc. **Oxidative stress plays a crucial role in the development of age-related diseases.**

In young healthy subjects oxygen free radicals are swiftly eliminated from inside cells by natural antioxidants, this elimination is insufficient in chronically sick or elderly people.

Formation of free radicals

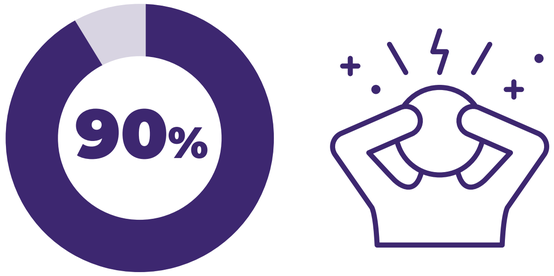


OXIDATIVE STRESS

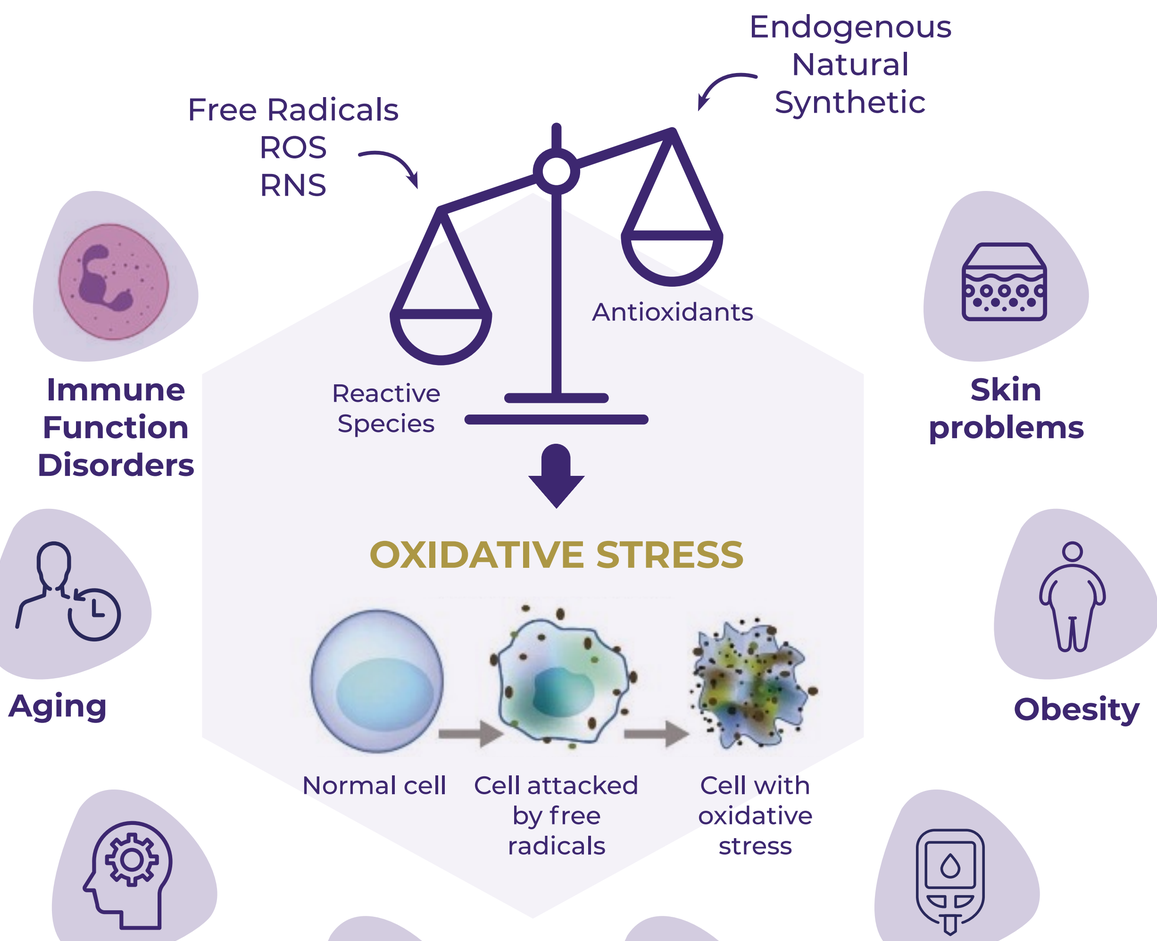
Health effects of chronic oxidative stress

Free radical oxygen exposure triggers chronic inflammation, opening the door to cell aging and genetic deterioration, as well as to the diseases of aging, including all the diseases on the chart and more.

Thus, there is great emphasis on antioxidant supplement therapy that targets reactive oxygen species.



At least 90% of all our modern-day diseases are caused by oxidative stress and inflammation.[4]



THE POWER OF ANTIOXIDANTS AS POLYPHENOLS

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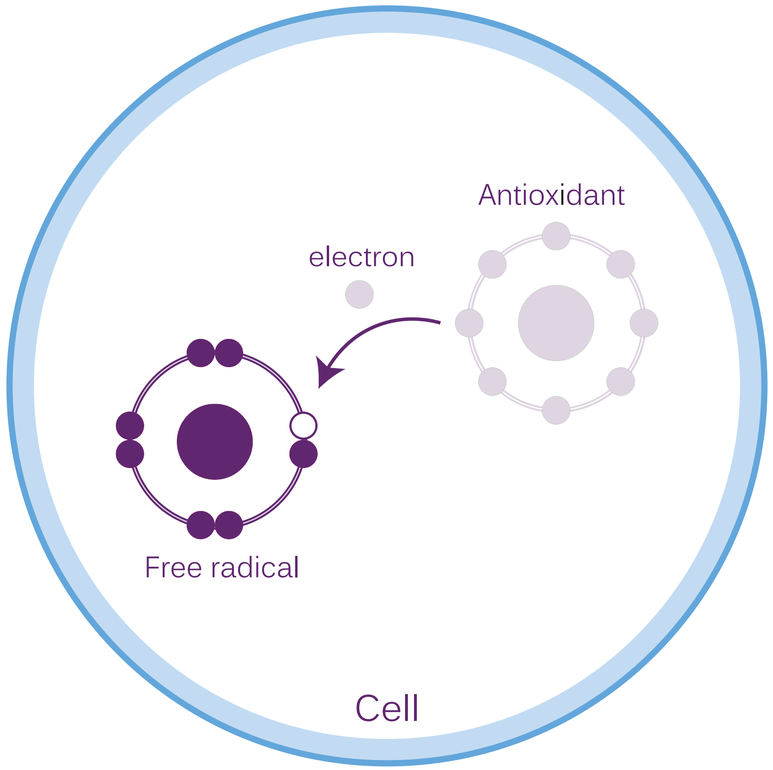
In order to maintain defense against the destructive oxygen species, an appropriate balance of anti-oxidative defenses is necessary.



Polyphenols are a large class of plant compounds that are found in many different foods, including **fruits, vegetables, and beverages like coffee, tea and wine.**

Several studies show that people who have the highest polyphenol intake **live the longest.**

Emerging research evidence has suggested that antioxidants can control the autoxidation by interrupting the propagation of free radicals or by inhibiting the formation of free radicals and subsequently **reduce oxidative stress, improve immune function, and increase healthy longevity.**

Pivotal research from the University of Barcelona in Spain confirmed that people over 65 whose diets contained at least 650 mg of polyphenols a day were **30% less likely to die of any cause** over 12 years of the study.[4]

The US Centers for Disease Control and Prevention says that only **one in ten** of them get the recommended **1 ½ to 2 cups of fruits per day and 2 to 3 cups of vegetables.[4]**

1,000 mg / Day

Experts agree the people need **1,000 mg of polyphenols daily** to attain optimum health, especially over the age of 50. It is not easy to meet that target.[4]

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VINTERA™ GRAPE EXTRACT.
THE RICHEST SOURCES OF POLYPHENOLS

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Grapes are one of the most highly consumed fruits across the world. In ancient Europe **the leaves and the sap of grape plants have been used in traditional treatment for ages.** Besides being a wellspring for **vitamins and fibre,** the skin and seeds of grapes are highly rich in Polyphenols, which can be used as a functional ingredient to address various health issues by boosting the natural bio-processes of the body.

High phenolic compounds in the skin, stem, leaf and seed.

Lower phenolic content in the juice.



- Grape (*Vitis vinifera L.*) extracts have high levels of numerous antioxidants and are considered among the most powerful plant derived antioxidant foods. They are a rich source of polyphenols, including several types of flavonoids like proanthocyanidins, anthocyanins, and flavonols.
- Vintera™ Premium Red Grape contains proanthocyanidins and anthocianins. They are the most powerful antioxidants known to science. They reduce free radical concentration, block their propagation, providing significantly greater protection against oxidative stress damage than vitamins C, E, and β-carotene.[5]

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VINTERA™ GRAPE EXTRACT. BENEFITS

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Cardiovascular Health:

Several studies have investigated the cardiovascular effects of grape extract. These studies suggest that grape extract may have cardiovascular benefits, particularly in improving endothelial function and reducing cardiovascular risk factors such as blood pressure and cholesterol levels.[6,7,8]

Proanthocyanidins exert their cardiovascular protection effects by reducing:[6,7,8]

- LDL cholesterol levels.
- OxLDL cholesterol.
- Atherosclerosis risk.
- Blood pressure.
- Plasma homocysteine concentrations.
- Serum C-reactive protein.
- Triglyceridemia.

These beneficial effects of grapes protect the cardiovascular system through:

- Blood Vessel Protection.
- Prevention of Atherosclerosis.
- Maintain healthy blood pressure levels.

Sport Recovery:

Anthocyanins have gained considerable interest in sport and exercise research due to their potential to facilitate exercise recovery.

A systematic review and meta-analysis evaluated the effects of dietary anthocyanins on exercise recovery. The review concluded that dietary anthocyanins may have a beneficial effect on exercise recovery, particularly in reducing inflammation, oxidative stress, and muscle damage. The review also found that dietary anthocyanins may improve subjective measures of muscle soreness, perceived recovery and improving power after exercise.[9]

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VINTERA™ GRAPE EXTRACT. BENEFITS

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Brain Health:

Evidence suggests that grapes might have a positive effect on cognitive health. In particular, some aspects of the memory domain as well as motor skills and executive functions may derive benefit.[10]

Some of the improvements reported included:[10]

- Enhanced speed in the attention tasks or neurocognitive functions.
- Improvement in immediate spatial memory.
- Improvement in driving performance.
- Reduced semantic interference in memory tasks.
- Motor skills and executive function seemed to be improved.



Polyphenols have been shown to have neuroprotective properties and may improve cognitive function by reducing oxidative stress and inflammation in the brain.

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WHY VINTERA™ GRAPE EXTRACT? & APPLICATIONS

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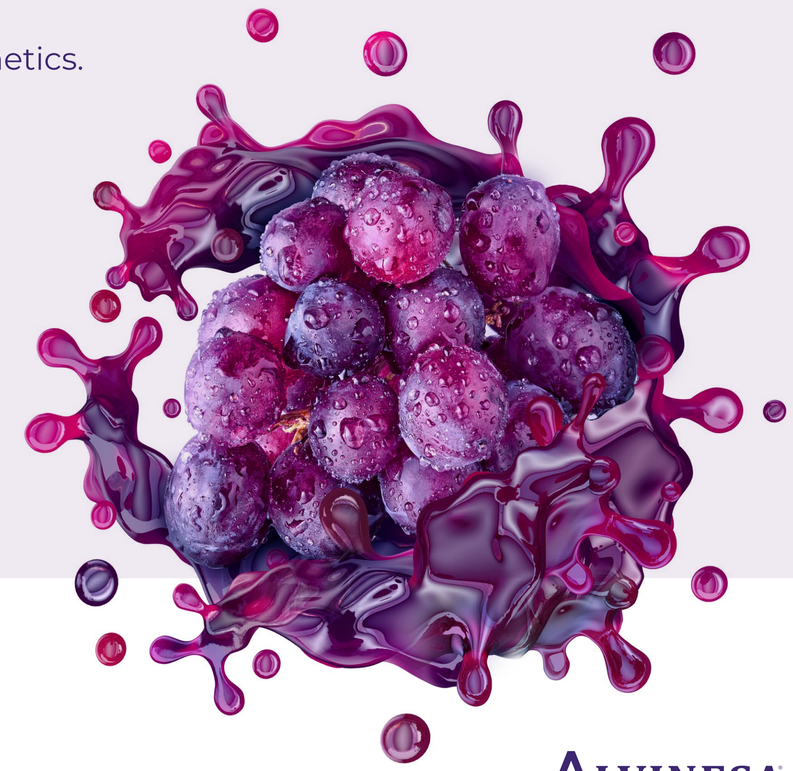
Why Vintera™ Grape extract?

- ✓ By-products from food and wine production.
- ✓ Spain is one of the three largest wine producing countries in the world.*
- ✓ Sustainably sourced.
- ✓ Upcycled ingredients.
- ✓ Highest source of polyphenols (seeds and skin) at the best price.
- ✓ No- and low- pesticide.
- ✓ Raw material 100% used. Zero waste!
- ✓ Water extraction, no solvent.
- ✓ Traceability from the raw material to costumer.
- ✓ Vintera™ Grape extract is also: FSC22000, Kosher, Halal, organic, Non-GMO, vegan, gluten-free, contaminants free.
- ✓ Porter: most accurate method for characterizing proanthocyanidins.
- ✓ Safe for everyday consumption with broad regulatory approvals.

*Statista 2021.

Vintera™ Grape extract is ideal for a variety of product applications.

- Supplements.
- Beverages (e.g., sports nutrition, tea bags, fortified water).
- Food (snacks, bars).
- Dairy (yogurt, functional milk).
- Pet food.
- Nutricosmetics.



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STUDIES BY ALVINESA

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We are conducting a clinical study in Australia that measures the beneficial effect of grape extract in cardiovascular health.

Clinical Study ongoing



Conclusions Alvinesa's in vivo studies:

antioxidants MDPI

Article

A Grape Juice Supplemented with Natural Grape Extracts Is Well Accepted by Consumers and Reduces Brain Oxidative Stress

Miriam Bobadilla [1,†], Carlos Hernández [2,†], María Ayala [2], Ixone Alonso [2], Ana Iglesias [2], Josune García-Sanmartín [1], Eduardo Mirpuri [1], José Ignacio Barriobero [2] and Alfredo Martínez [1,*]

Oral administration of grape juice supplemented with red grape polyphenols:[11]

- ✓ Exerted an antioxidant effect in the brain.
- ✓ Reduced inflammation.
- ✓ Reduced oxidation mechanisms.
- ✓ Increased protection against oxidative stress.
- ✓ Augmented antioxidant enzyme activity.
- ✓ Prevented lipid peroxidation in the brain.

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STUDIES BY ALVINESA

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antioxidants

MDPI

Article

Natural Food Supplements Reduce Oxidative Stress in Primary Neurons and in the Mouse Brain, Suggesting Applications in the Prevention of Neurodegenerative Diseases

Miriam Bobadilla, Josune García-Sanmartín and Alfredo Martínez *



Oral administration of the natural food supplements:[12]

- ✓ Reduces inflammation.
- ✓ Reduces oxidation.
- ✓ Increases the protection against oxidative stress.

Preventive treatment with these natural extracts:

- ✓ Increases the activity of antioxidant enzymes.
- ✓ Prevents lipid peroxidation in the brain.

Thus, our results indicate that some natural bioactive supplements may have important protective properties against oxidative stress processes occurring in the brain.

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VINTERA™'S PORTFOLIO & SPECIFICATIONS

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PRODUCT NAME	SKU	Polyphenols	Proanthocyanidins	Monomers	Anthocyanins
HUMAN & PET NUTRITION					
Vintera™ Premium Red Grape**	55702SS	NLT 100% (OD 280nm) NLT 70% (Folin-Ciocalteu)	NLT 15 (DMACA)	-	NLT 1.0 (HPLC-DAD)
Vintera™ Grape seed extract **	55703	NLT 100% (OD 280nm) NLT 85% (Folin-Ciocalteu)	NLT 99% (Porter)	-	-
Vintera™ Grape seed extract M	55703P	NLT 100% (OD 280nm) NLT 85% (Folin-Ciocalteu)	NLT 99% (Porter)	NLT 5 to 15% (HPLC-DAD)	-
Vintera™ Organic Grape seed extract**	55703E	NLT 100% (OD 280nm) NLT 85% (Folin-Ciocalteu)	-	-	-
Vintera™ White Grape Skin Extract	55705	NLT 65% (OD 280nm)	-	-	-
Vintera™ White Pomace Extract**	55709	NLT 50% (OD 280nm)	-	-	-
ANIMAL NUTRITION*					
Vintera™ Grape Extract Feed	55707	NLT 80% (OD 280nm)	NLT 60% (Porter)	-	NLT 0.75 (HPLC)

Shelf Life	Format	Raw Material	Flavour	Process solvent	Color	Product format	Transport and storage	Lead Times
3 to 4 years	Packaging: 15kg &20kg Double Food grade PE bags in white neutral cardboard box	From Spain	Astringent	Water	Purple to dark red	Powder	Store product in a cool and dry place in its original packaging	6-8 weeks

*Vitamin E substitution. **Functional Pet Nutrition.
DMACA: Dimethylaminocinnamaldehyde; **HPLC-DAD:** High Performance Liquid Chromatography and Diode-Array Detection, **NLT:** Not Less Than, **nm:** nanometer, **OD:** Optical Density.

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SOURCE

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1. FMCG COVID-19 Survey July 2020.

2. FMCG Gurus Understanding Heart Health in 2021 – Global Report.

3. FMCG Gurus Top Ten Trends for 2023.

4. Lemerond T. Polyphenol Power! Polyphenols in fruit and vegetables to prevent and cure: Heart disease, Cancer, Type 2 Diabetes, Alzheimer's and more! TTN Publishing, July 2022.

5. Unusan N. Proanthocyanidins in grape seeds: An updated review of their health benefits and potential uses in the food industry. J Funct Foods. 2020;67:103861.

6. Foshati S, et al. The effect of grape (Vitis vinifera) seed extract supplementation on flow-mediated dilation, blood pressure, and heart rate: A systematic review and meta-analysis of controlled trials with duration- and dose-response analysis. Pharmacol Res. 2022;175:105905.

7. Lupoli R, et al. Impact of Grape Products on Lipid Profile: A Meta-Analysis of Randomized Controlled Studies. J Clin Med. 2020;9(2):313.

8. Feringa HH, et al. The effect of grape seed extract on cardiovascular risk markers: a meta-analysis of randomized controlled trials. J Am Diet Assoc. 2011;111(8):1173-81.

9. Kimble R, et al. The effect of dietary anthocyanins on biochemical, physiological, and subjective exercise recovery: a systematic review and meta-analysis. Crit Rev Food Sci Nutr. 2023;63(9):1262-1276.

10. Bird RJ, et al. The effect of grape interventions on cognitive and mental performance in healthy participants and those with mild cognitive impairment: a systematic review of randomized controlled trials. Nutr Rev. 2022;80(3):367-380.

11. Bobadilla M, et al. A Grape Juice Supplemented with Natural Grape Extracts Is Well Accepted by Consumers and Reduces Brain Oxidative Stress. Antioxidants (Basel). 2021;10(5):677.

12. Bobadilla M, et al. Natural Food Supplements Reduce Oxidative Stress in Primary Neurons and in the Mouse Brain, Suggesting Applications in the Prevention of Neurodegenerative Diseases. Antioxidants (Basel). 2021;10(1):46.

13. Tan BL, et al. Antioxidant and Oxidative Stress: A Mutual Interplay in Age-Related Diseases. Front Pharmacol. 2018;9:1162.

14. Islam MMT, Shekhar HU. Impact of Oxidative Stress on Human Health. Free Radicals in Human Health and Disease. 2014;First Online:59 -73. Available at: https://link.springer.com/chapter/10.1007/978-81-322-2035-0_5. Accessed: May 2023.

15. Gupta M, et al. Grape seed extract: having a potential health benefits. J Food Sci Technol. 2020;57(4):1205-1215.

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Alvinesa is a circular economy leader of sustainable plant-based ingredients.

We upcycle and transform agricultural coproducts, into valuable natural ingredients that promote healthy living for the Nutraceutical, Food & Beverage, Cosmetics and Animal Health industries.

www.alvinesa.com

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