

Organic Elderberry Powder



What is organic elderberry powder?

Organic Elderberry Powder and Organic Elderberry Juice Powder are premium functional ingredients sourced from *Sambucus nigra*—the European black elderberry celebrated globally for its exceptional immune-supporting properties and rich anthocyanin content. Both products are manufactured using either **freeze-drying** (preserving maximum nutrient integrity) or **spray-drying** (for superior dispersibility) to deliver the concentrated essence of elderberry in two optimized formats.

Two Formats — One Berry, Different Applications

Organic Elderberry Powder (Whole Fruit) Produced from the entire elderberry fruit including skin, flesh, and seeds, this freeze-dried powder retains the full nutritional matrix of the berry: dietary fiber (8g/100g), natural sugars (8–12%), anthocyanins concentrated in the dark purple skin, and the complete mineral and vitamin profile. The natural dark purple color transfers beautifully to final products, while the fruity-slightly-tart flavor profile adds authentic elderberry character.

Organic Elderberry Juice Powder (Juice Concentrate) Produced from concentrated elderberry juice, this spray-dried powder is engineered for **superior water dispersibility** and maximum flavor impact in low-dose applications. The concentrated tartness (20–25% natural sugars) delivers bold elderberry flavor even at small inclusion rates. With excellent heat stability ($\leq 70^{\circ}\text{C}$), it is the preferred choice for gummies, clear beverages, powdered drink mixes, and encapsulated supplements where rapid dissolution and flavor precision are critical.

The Science of Elderberry Anthocyanins

The primary bioactive in both formats is **anthocyanins**—the deep purple-blue flavonoid pigments concentrated in elderberry skin that provide both the characteristic color and the berry's most researched health benefits. Anthocyanins are powerful antioxidants that neutralize free radicals and support the body's natural immune response. Combined with naturally occurring **vitamin C, vitamin A (as beta-carotene), potassium, and iron**, elderberry delivers comprehensive nutritional support for seasonal wellness.

Key Functional Benefits

- **Immune System Support:** Traditionally used to enhance resistance to seasonal stress and support upper respiratory health
- **Antioxidant Defense:** Anthocyanins help combat oxidative stress at the cellular level
- **Nutrient Density:** Naturally rich in vitamins A, C, potassium, and iron in a whole-food matrix
- **Natural Color & Flavor:** Authentic dark purple color and fruity-tart taste without artificial additives
- **Multi-Format Versatility:** Freeze-dried whole fruit for fiber applications; spray-dried juice for maximum solubility

Certifications & Quality

Certified USDA Organic, EU Organic, Non-GMO Project Verified, Kosher, and Halal. Manufactured under ISO22000 and HACCP-compliant conditions. Full batch-specific COA available upon request.

PHYSICAL & CHEMICAL PROPERTIES

Dual-Format Specification Table

Parameter	Organic Elderberry Powder	Organic Elderberry Juice Powder
Botanical Name	<i>Sambucus nigra</i>	<i>Sambucus nigra</i>
Part Used	Whole fruit (skin, flesh, seeds)	Juice concentrate
Appearance	Fine dark purple powder	Fine dark red-purple powder
Flavor / Aroma	Fruity, slightly tart	Fruity, concentrated tart
Processing Method	Freeze-drying (preferred) / Spray-drying	Spray-drying (from juice)
Moisture	≤5.0%	≤5.0%
Ash Content	≤6.0%	≤6.0%
Solubility	Good dispersibility in water	Excellent dispersibility in water
Color	Natural dark purple	Deep red-purple
Natural Sugars	8-12%	20-25% (concentrated)
Dietary Fiber	8g/100g	Minimal (juice only)

Parameter	Organic Elderberry Powder	Organic Elderberry Juice Powder
Heat Stability	Tolerates ≤180°C baking	Stable ≤70°C
Anthocyanins	Naturally rich (skin-concentrated)	Naturally rich (concentrated)
Packaging	25kg kraft drum or customized	25kg kraft drum or customized
Shelf Life	24 months	24 months
Storage	Cool, dry, shaded place; keep sealed, away from direct sunlight	Cool, dry, shaded place; keep sealed, away from direct sunlight

Product Format Selection Guide

Application Need	Recommended Format
Gummies & Confectionery	Elderberry Juice Powder (uniform dissolution, concentrated flavor)
Clear Beverages & Powdered Drinks	Elderberry Juice Powder (excellent dispersibility)
Capsules & Encapsulated Supplements	Elderberry Juice Powder (rapid dissolution, precise dosing)
Bakery & High-Heat Applications	Elderberry Powder (stable up to 180°C)
Protein Bars & Energy Bars	Elderberry Powder (fiber content, texture contribution)
Breakfast Cereals & Granola	Elderberry Powder (fiber, natural color)
Smoothies & Frozen Desserts	Elderberry Powder (whole fruit matrix, fiber)
Functional Food Coloring	Elderberry Powder (natural deep purple pigment)

MICROBIOLOGICAL & CONTAMINANT STANDARDS

Test Item	Specification	Testing Method
Total Plate Count	≤100,000 CFU/g	ISO 4833
Yeast & Mold	≤1,000 CFU/g	ISO 21527
Coliforms	≤100 CFU/g	ISO 4831
E. coli	Negative/g	ISO 16649
Salmonella	Negative/25g	ISO 6579
Lead (Pb)	≤0.5 ppm	ICP-MS
Arsenic (As)	≤0.5 ppm	ICP-MS
Cadmium (Cd)	≤0.3 ppm	ICP-MS
Mercury (Hg)	≤0.1 ppm	ICP-MS
Pesticide Residues	Compliant with USDA NOP and EU MRL	LC-MS/MS, GC-MS

Note: Full batch-specific COA available upon request for all test parameters.

CERTIFICATIONS

Certification	Status	Issuing Body
USDA Organic (NOP)	✓ Available	USDA NOP
EU Organic	✓ Available	EU 834/2007
Non-GMO Project	✓ Verified	Non-GMO Project
Vegan	✓ Verified	Self-declaration
Gluten-Free	✓ Verified	Third-party lab
Kosher	✓ Certified	Certified agency
Halal	✓ Certified	Certified agency
ISO 22000	✓ Compliant	Bureau Veritas/SGS
HACCP	✓ Compliant	Third-party audit

APPLICATIONS & USAGE GUIDELINES

Primary Application Matrix

Application Category	Form Recommendation	Usage Rate
Immune Support Supplements	Juice Powder (capsules, sachets)	200-500mg per serving
Gummies	Juice Powder (concentrated flavor)	1-3% inclusion
Functional Beverages	Juice Powder	1-3g per serving
Powdered Drink Mixes	Juice Powder	1-2g per sachet
Smoothies & Frozen Desserts	Elderberry Powder	2-5g per serving
Protein Bars & Energy Bars	Elderberry Powder	3-8% inclusion
Bakery (Cakes, Cookies)	Elderberry Powder (heat-stable)	2-5% inclusion
Breakfast Cereals & Granola	Elderberry Powder	2-5% inclusion
Chocolate & Confectionery	Either format	Per formulation spec

Formulation Guidelines

Immune Support Supplement Formulation

- **Recommended format:** Elderberry Juice Powder for capsules and tablets
- **Typical serving:** 200-500mg elderberry powder per capsule or tablet
- **Combine with:** Vitamin C, zinc, echinacea, ginger for synergistic immune formulations
- **Custom immune blend MOQ:** 25kg (can combine elderberry + echinacea + ginger)

Gummy Formulation

- **Recommended format:** Elderberry Juice Powder (critical: uniform dissolution + concentrated flavor)
- **Why not whole fruit powder?:** Contains fiber that increases viscosity and affects gummy texture
- **Heat consideration:** Juice Powder stable $\leq 70^{\circ}\text{C}$ —suitable for standard gummy cooking processes
- **Flavor pairing:** Elderberry pairs excellently with raspberry, blackcurrant, honey, and lemon
- **Color contribution:** Deep red-purple anthocyanin color; adjust pH to maintain color stability

Heat-Sensitive Applications

Format	Heat Stability	Best Applications
Elderberry Powder (Freeze-dried Whole Fruit)	Tolerates $\leq 180^{\circ}\text{C}$	Baking, cookies, cakes, granola
Elderberry Juice Powder (Spray-dried)	Stable $\leq 70^{\circ}\text{C}$	Gummies, beverages, capsules

Sugar Content Considerations

- **Elderberry Powder (Whole Fruit):** 8–12% natural sugars per 100g
- **Elderberry Juice Powder (Concentrated):** 20–25% natural sugars per 100g
- Both are naturally occurring sugars—no added sugars in certified organic products
- Factor into total sugar calculations for nutrition labeling

Anthocyanin Color Stability

- Anthocyanins are pH-sensitive: more stable in acidic conditions (pH 2–4)
- Color intensifies at lower pH; may appear more blue at higher pH
- Protect from excessive heat and light during storage
- Natural color makes elderberry ideal for clean-label coloring applications

Stability Notes

Anthocyanins may fade slightly over time—this is a natural characteristic

Stable in original sealed packaging (24 months shelf life)

Protect from heat, moisture, and direct sunlight

Low moisture specification ($\leq 5\%$) supports long-term stability

FAQ

Q: Which elderberry powder format is better for gummies?

A: **Elderberry Juice Powder** is the preferred choice for gummy formulations. It provides **uniform dissolution** in the gummy matrix, delivers concentrated tart elderberry flavor even at low inclusion rates (1-3%), and does not add fiber that would increase viscosity or affect texture. Using **whole fruit Elderberry Powder** in gummies would introduce insoluble fiber that disrupts the smooth gummy texture and creates an undesirable gritty mouthfeel.

Q: What is the sugar content of each elderberry powder format?

A: The sugar content varies significantly between the two formats:

Elderberry Powder (Whole Fruit): Contains **8-12% natural sugars** per 100g, with the sugar naturally present in the whole fruit matrix alongside 8g dietary fiber per 100g

Elderberry Juice Powder: Contains **20-25% natural sugars** per 100g, concentrated from the juice.

This higher sugar content contributes to the intense tart-sweet flavor and rapid dissolution

Both figures represent naturally occurring sugars—no added sugars or sweeteners are used in certified organic production.

Q: What is the minimum order quantity for custom immune blend formulations?

A: The standard MOQ for bulk orders is **25kg**. For **custom immune blend formulations** combining elderberry with complementary ingredients such as **echinacea, ginger, vitamin C, or zinc**, the 25kg MOQ applies to the total blended product. This allows brands to create differentiated immune support formulations with synergistic ingredient combinations while meeting minimum volume requirements.

Q: How heat-stable are the elderberry powders for baking and cooking applications?

A: Heat stability differs significantly between the two formats:

Elderberry Powder (Whole Fruit): Tolerates **up to 180°C**, making it suitable for **cookies, cakes, breads, granola bars, and other baked goods** where high-temperature processing is required.

Freeze-drying preserves anthocyanin and nutrient integrity through heat exposure.

Elderberry Juice Powder: Stable at **≤70°C**, making it suitable for **gummy manufacturing, low-temperature beverage processing, and encapsulated supplement production**, but not recommended for high-temperature baking applications.

Q: What are the main health-supporting properties of elderberry?

A: The key health-supporting properties include: (1) **Immune System Support**—traditionally used to enhance resistance to seasonal stress and support upper respiratory health; (2) **Antioxidant Defense**—anthocyanins help neutralize free radicals and combat oxidative stress; (3) **Nutrient Density**—naturally rich in vitamins A (as beta-carotene) and C, potassium, and iron in a whole-food matrix.

Q: What is the minimum order quantity and lead time?

A: Standard bulk packaging is **25kg per kraft drum or carton**. Lead time is **10-20 days** from order confirmation. Free samples are available via FedEx, UPS, or EMS for quality evaluation prior to bulk ordering.

Q: Can elderberry powder be combined with other immune-supporting ingredients in custom blends?

A: Yes. We offer **custom immune blend formulations** at our standard 25kg MOQ, combining elderberry with complementary immune-supporting ingredients such as **echinacea, ginger, astragalus, andrographis, vitamin C, and zinc**. Contact our sales team to discuss your specific formulation requirements and synergy goals.

Q: Is elderberry powder suitable for vegan and gluten-free formulations?

A: Yes. ORGANICWAY Organic Elderberry Powder and Organic Elderberry Juice Powder are **100% plant-based** with no animal-derived ingredients, making them inherently **vegan and vegetarian**. As certified organic products from fruit, they are naturally **gluten-free** and **allergen-free**. Both formats are suitable for clean-label vegan, vegetarian, and allergen-sensitive supplement and food formulations.

PACKAGING & STORAGE



Standard Packaging Options

Package Size	Material	Units/Pallet
25 kg	Food-grade kraft drum	40 drums/pallet
25 kg	Food-grade carton	40 cartons/pallet
Custom	Foil bag or consumer-pack format	Upon request

Storage Conditions

Parameter	Specification
Temperature	Cool, dry, shaded place (recommended $\leq 25^{\circ}\text{C}$)
Humidity	Low humidity; avoid moisture
Packaging	Airtight, sealed original container
Shelf Life	24 months from production date
Light	Protect from direct sunlight (anthocyanins are light-sensitive)

For more information, please visit our website:

<https://www.organic-way.com/products/organic-elderberry-powder/>