

Organic Raspberry Powder



What is Organic Raspberry Powder?

Organic Raspberry Powder by ORGANICWAY is available in two complementary formats to serve the full range of food and beverage formulation needs. Both products are derived from certified organic *Rubus idaeus* (red raspberry) and are produced with zero additives, zero carriers, and zero artificial ingredients.

Organic Raspberry Powder (Freeze-Dried Whole Fruit) is made from entire organic raspberries — flesh, skin, and seeds — freeze-dried at sub-zero temperatures and micronized to a fine powder. This format preserves the complete nutritional matrix of the fresh fruit, including dietary fiber, seed oils, and the full spectrum of raspberry polyphenols. Ideal for protein bars, keto formulations, baked goods, and dietary supplements.

Organic Raspberry Juice Powder (Spray-Dried) is made from cold-pressed organic raspberry juice, concentrated, and spray-dried into a free-flowing powder. Optimized for instant dissolution in cold water and maximum color intensity, this format is ideal for RTD beverages, confectionery, instant drink mixes, and applications where dissolution speed and visual impact are paramount.

Specifications

Product Comparison

Specification	Organic Raspberry Powder (Freeze-Dried Whole Fruit)	Organic Raspberry Juice Powder (Spray-Dried)
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Source	Whole organic raspberries (<i>Rubus idaeus</i>)	Cold-pressed organic raspberry juice
Processing	Freeze-drying + low-temperature micronizing	Cold-press + concentration + spray-drying
Anthocyanin Content	≥8%	≥5%
Ellagic Acid Content	≥3%	≥2%
Dietary Fiber	≥15%	≤2%
ORAC Value	≥20,000 μmol TE/g	≥25,000 μmol TE/g
Natural Sugars	Fructose + glucose (~24g/100g)	≥75% (predominantly fructose)
Vitamin C	≥25 mg/100g	≥20 mg/100g
Moisture	≤6%	≤4%
Ash	≤3%	≤2%
Particle Size (D90)	≤120 μm	≤60 μm
Solubility	Partial — best dispersed in matrix	Instant in cold water
Color	Deep ruby red (with fine seeds)	Bright pink-red (vivid)
pH (10% Solution)	3.2–3.8	2.8–3.5
GI (Glycemic Index)	32	Higher (≥75g sugars/100g)
Shelf Life	24 months (sealed, cool, dry)	18–24 months (sealed, cool, dry)
Keto-Friendly	Yes	Not recommended

Anthocyanin Profile — HPLC Typical Composition

Compound	Whole Fruit Powder	Juice Powder	Flavor & Color Contribution
Cyanidin-3-sophoroside	40–50%	35–45%	Deep ruby red
Cyanidin-3-glucoside	20–30%	25–35%	Red-violet
Cyanidin-3-rutinoside	10–15%	15–20%	Bright red
Pelargonidin derivatives	5–10%	5–15%	Orange-red tint
Cyanidin-3-arabinoside	3–8%	3–5%	Minor pigment

Note on color: Whole fruit powder produces a deep ruby/burgundy color due to seed tannins and skin pigments. Juice powder produces a brighter, more vivid pink-red due to the concentration of free anthocyanin pigments without seed interference.

Ellagitannin & Polyphenol Profile

Compound	Whole Fruit Powder	Juice Powder	Health Significance
Sanguin H-6	60-70% of ellagitannins	20-30%	Potent antioxidant; anti-inflammatory
Lambertianin C	20-30%	10-20%	Synergistic with anthocyanins
Free Ellagic Acid	5-15%	50-70% (concentrated)	Anti-carcinogenic; UV-protective

Both forms contain ellagitannins that are metabolized by gut microbiota into **urolithins (Urolithin A and B)** — compounds with well-documented anti-inflammatory, anti-carcinogenic, and mitochondrial health (mitophagy) effects. (Nutrients 2021, Molecules 2019, Frontiers in Nutrition 2020)

Heavy Metals & Contaminants

Test	Specification	Test	Specification
Lead (Pb)	≤0.1 mg/kg	Patulin (mycotoxin)	≤10 ppb
Cadmium (Cd)	≤0.05 mg/kg	Pesticide Residues	500+ substances — ND
Arsenic (As)	≤0.05 mg/kg	—	—

Microbiological Limits

Test	Specification
Total Plate Count	≤10,000 CFU/g
Yeast & Mold	≤100 CFU/g
E. coli	Negative (<3 MPN/g)
Salmonella	Negative / 25g

Regulatory Status

Market	Status
USA	GRAS — food ingredient, no pre-approval required. Anthocyanins approved as natural color (CI 52000 / E 163)
EU	Food ingredient + natural color (E 163 — Anthocyanins). Organic status under EU Reg 2018/848
Japan / FOSHU	Approved as food ingredient
China (GB)	Approved as food ingredient; anthocyanin extracts under GB 2760-2014 natural color category
Codex Alimentarius	Approved as general food ingredient

Certifications

Certification	Freeze-Dried Whole Fruit	Juice Powder	Issuing Body
USDA Organic	<input type="checkbox"/>	<input type="checkbox"/>	USDA-accredited certifier
EU Organic	<input type="checkbox"/>	<input type="checkbox"/>	EU-authorized control body
Non-GMO Project Verified	<input type="checkbox"/>	<input type="checkbox"/>	Non-GMO Project
Vegan	<input type="checkbox"/>	<input type="checkbox"/>	Third-party vegan certifier
Gluten-Free	<input type="checkbox"/>	<input type="checkbox"/>	GFCO or equivalent
Common Food Allergens	None declared	None declared	—

Each shipment includes: Certificate of Analysis (COA), Organic Transaction Certificate, Non-GMO Verification Certificate, Technical Data Sheet (TDS), and Safety Data Sheet (SDS).

Applications & Usage

Application Guide

Application	Recommended Format	Typical Usage Level	Notes
Protein Bars & Energy Bites	Freeze-Dried Whole Fruit	10-20% w/w	Fiber adds bulk and texture; tartness balances sweetener bitterness
Keto & Low-Carb Snacks	Freeze-Dried Whole Fruit	5-15%	GI=32; fiber dilutes net carbs; tart flavor complements keto formulas
RTD Beverages (clear)	Juice Powder	2-5% w/w	Instant dissolution; vivid pink color; intense flavor
RTD Beverages (opaque/milky)	Either format	1-3%	Color + flavor contribution
Instant Drink Mixes	Juice Powder	3-8%	Instant cold-water solubility; single-serve stick packs
Protein Powders	Freeze-Dried Whole Fruit	2-5%	Fiber complement; tart contrast; antioxidant profile
Baked Goods (muffins, cookies)	Freeze-Dried Whole Fruit	5-15%	Whole-fruit authenticity; fiber; natural ruby color
Frozen Desserts (ice cream, sorbet)	Either format	5-15%	Flavor; color; functional benefit claim
Confectionery (gummies, chocolate)	Juice Powder	10-25%	Intense color; concentrated flavor; dissolves in hot sugar syrup
Yogurt (dairy or plant-based)	Either format	2-5%	Flavor swirl; color; antioxidant claim

Application	Recommended Format	Typical Usage Level	Notes
Sauces & Glazes	Juice Powder	0.5-2%	Natural acidity; vivid color; flavor depth
Dietary Supplements (capsules)	Freeze-Dried Whole Fruit	500-1,000 mg/capsule	Ellagic acid + anthocyanin content; metabolic health claim
Baby Food & Toddler Snacks	Freeze-Dried Whole Fruit	3-5%	Fiber enrichment; clean ingredient; natural source
Dry Mixes (oatmeal, cereal)	Either format	5-10%	Flavor; color; nutritional claim support

Choosing the Right Format

Choose Organic Raspberry Powder (Freeze-Dried Whole Fruit) when you need:

- Dietary fiber ($\geq 15\%$) for "high fiber" label claims or structural texture
- Whole-fruit authenticity and natural positioning ("includes real raspberry seeds")
- Ellagitannin profile for skin health or UV protection marketing claims
- Lower sugar content and favorable GI (32) for keto and protein bar applications
- Maximum ellagic acid ($\geq 3\%$) for supplement and nutraceutical formulations
- Natural color with depth — deep ruby/burgundy with subtle seed texture

Choose Organic Raspberry Juice Powder (Spray-Dried) when you need:

- Instant dissolution in cold water — no mixing, no agitation required
- Maximum color intensity and vibrancy — vivid pink/red for beverage and confectionery visual impact
- High ORAC value per weight ($\geq 25,000 \mu\text{mol TE/g}$) for antioxidant potency claims
- Fructose-forward sweetening for berry-forward flavor in beverages
- Clear or lightly colored beverage applications ($D_{90} \leq 60 \mu\text{m}$ = no sediment)
- Maximum convenience for single-serve and instant drink applications

Formulation Tips

Color Stability:

- Anthocyanins degrade significantly above 70°C . For maximum color retention in pasteurized beverages, add the powder post-pasteurization or use HTST processing.
- Color shifts with pH: red (pH 1-3) \rightarrow violet (pH 4-6) \rightarrow blue (pH 7+). Both formats maintain excellent red color in the pH 2.8-3.8 range typical of berry beverages.

- UV light degrades anthocyanins by 20–40% within 24 hours. Use opaque packaging for retail products.

Oxidative Protection:

- Air exposure in solution causes browning. Include ascorbic acid (vitamin C, 50–200 ppm) or rosemary extract (50–100 ppm) as co-additives. Vitamin C also has a synergistic stabilizing effect on anthocyanin pigments.

Blending Both Formats:

- Combine freeze-dried whole fruit powder + juice powder for layered berry effect: fiber and texture (whole fruit) + instant color and flavor punch (juice powder).
- Both formats blend well with Organic Erythritol, Organic Allulose, and Organic Stevia for keto-friendly berry-flavored products.

FAQ

Q1: What is the difference between Organic Raspberry Powder (Freeze-Dried) and Organic Raspberry Juice Powder (Spray-Dried)?

A: These two products serve very different formulation needs, despite sharing the same raspberry origin. **Organic Raspberry Powder (Freeze-Dried Whole Fruit)** retains the complete fruit — flesh, skin, and seeds — through freeze-drying. Key advantages: $\geq 15\%$ dietary fiber, $\geq 8\%$ anthocyanins, $\geq 3\%$ ellagic acid, GI=32, and the natural depth of whole fruit. Best for protein bars, keto snacks, baked goods, and any application where fiber content, texture, or whole-fruit marketing matters.

Organic Raspberry Juice Powder (Spray-Dried) is made from cold-pressed juice only, with no fiber or seeds. Key advantages: instant dissolution in cold water, vivid pink-red color, $D90 \leq 60 \mu\text{m}$ (no sediment in beverages), and $\text{ORAC} \geq 25,000 \mu\text{mol TE/g}$. Best for RTD beverages, instant drink mixes, confectionery, and color-critical applications.

Q2: Are these products suitable for vegan, gluten-free, and allergen-free formulations?

A: Yes. Both products are made from 100% organic raspberries — nothing else. They contain no animal-derived ingredients, no gluten-containing grains, and none of the "Big 8" major food allergens (milk, eggs, fish, shellfish, tree nuts, peanuts, wheat, soy). Both are certified gluten-free and verified vegan. Confirm with ORGANICWAY whether dedicated allergen-free production lines are available for your compliance requirements.

Q3: What is the shelf life and how should these products be stored?

A: Both products have a shelf life of 18–24 months from manufacturing date when stored sealed in a cool ($\leq 25^{\circ}\text{C}$), dry environment away from direct light. For maximum anthocyanin retention, store at $\leq 15^{\circ}\text{C}$ when possible. After opening, transfer to an airtight container with a desiccant pack. Anthocyanins degrade rapidly under UV light (20–40% loss within 24 hours of direct sunlight) and in humid conditions. Nitrogen-flushed packaging is available for bulk orders.

Q4: Can these products be used for natural color in food and beverages?

A: Yes — both products function as natural food colorants (EU classification E 163 — Anthocyanins). However, anthocyanin color is sensitive to a few conditions: **Heat:** Degrades significantly above 70°C — use HTST pasteurization or add color post-pasteurization for best results. **pH:** Color shifts from red (pH 1–3) to violet (pH 4–6) to blue (pH 7+). **Light:** UV degrades color rapidly — use opaque retail packaging. **Oxidation:** Air causes browning — include ascorbic acid (50–200 ppm) as a stabilizer. The Juice Powder format delivers the most intense and vibrant pink-red color; the Freeze-Dried Whole Fruit format produces a deeper ruby/burgundy tone with subtle seed particles.

Q5: Which format is best for keto or low-carb products?

A: Organic Raspberry Powder (Freeze-Dried Whole Fruit) is well-suited for keto products. With $\text{GI}=32$ and $\geq 15\%$ dietary fiber, the net carbohydrate impact is significantly diluted. At a typical 5–15% inclusion rate in food applications, it contributes approximately 1.2–3.6g net carbs per 100g finished product. The tart raspberry flavor also effectively counterbalances bitterness from stevia or erythritol in sugar-free formulations.

Organic Raspberry Juice Powder (Spray-Dried) is **not recommended for strict keto or very low-carb products**. With $\geq 75\text{g}$ natural sugars per 100g and $\leq 2\text{g}$ fiber, it provides approximately 73–78g net carbs per 100g. It is suitable for "reduced sugar" or "no added sugar" positioning, but not for ketogenic claims.

Q6: Are there clinical studies supporting the health benefits of raspberry extract?

A: Several well-documented health benefits of raspberry anthocyanins and ellagitannins have peer-reviewed support: **Metabolic Health:** Clinical studies (Nutrients 2021) show raspberry anthocyanins reduce postprandial blood glucose peaks by approximately 30% when consumed with carbohydrates. **Skin / UV Protection:** Ellagic acid ($\geq 3\%$ in freeze-dried format) inhibits collagenase and MMP enzymes induced by UV exposure. **Antioxidant Capacity:** Both formats provide ORAC values among the highest

of common food ingredients ($\geq 20,000\text{--}25,000 \mu\text{mol TE/g}$). **Gut Health / Cellular Health:** Ellagitannins are metabolized by gut bacteria into urolithins (A and B), which have demonstrated anti-inflammatory, anti-carcinogenic, and mitophagy (mitochondrial renewal) effects in human clinical trials (Molecules 2019, Frontiers in Nutrition 2020).

Q7: Can I use both formats together in a single formulation?

A: Yes — many premium formulations use both formats together to leverage the complementary strengths of each. The Freeze-Dried Whole Fruit powder provides fiber, texture, and whole-fruit authenticity; the Juice Powder provides instant color and flavor dissolution. A typical ratio is 2:1 to 4:1 (whole fruit:juice powder) depending on whether fiber and texture or color and instant flavor are the primary objectives.

Q8: What documentation is provided with each shipment?

A: Every shipment includes: **Certificate of Analysis (COA):** Batch-specific results for anthocyanin assay, ellagic acid (HPLC-DAD), dietary fiber, moisture, ash, pH, particle size (D90), heavy metals, patulin, pesticide residues, and microbiology. **Technical Data Sheet (TDS):** Full specifications and handling instructions. **Safety Data Sheet (SDS):** GHS-compliant safety information. **Organic Transaction Certificate:** Documents organic chain of custody from certified farm through processing. **Non-GMO Project Verification:** Per-batch documentation. **Country of Origin Statement:** China. Contact sales for Kosher and Halal certification timeline.

Packaging & Storage



Available Packaging

Package Size	Material	Freeze-Dried Whole Fruit	Juice Powder	MOQ
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1 kg	Aluminum foil pouch with PE liner	☐	☐	Trial
5 kg	Drum with food-grade PE liner	☐	☐	Standard
10 kg	Drum with food-grade PE liner	☐	☐	Standard
20 kg	Bulk bag / fiber drum	☐	☐	Commercial
Custom	Bulk bag / customized	Contact	Contact	Commercial

All packaging materials comply with EU 10/2011 and FDA 21 CFR food-contact regulations. Nitrogen flushing is available for bulk orders to maximize anthocyanin stability during storage and transit.

Storage Conditions

- **Temperature:** ≤25°C (≤15°C preferred for maximum anthocyanin retention)
- **Relative humidity:** ≤55% RH
- **Light:** Protect from UV — anthocyanins degrade 20–40% within 24 hours of direct sunlight
- **Seal:** Keep airtight at all times; both formats are hygroscopic
- **After opening:** Transfer to airtight container with desiccant; use within 6 months
- **Do not freeze** the powder (moisture ingress on thaw causes caking and quality loss)

For more information, please visit our website:

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