

Oregon Berry Products



	PRODUCTS	PROCESS	CHARACTERISTICS & FUNCTION	PACKAGING	STORAGE
FRESH	Fresh Berries	Ripe, fresh berries (packaged and available through produce channels, stores).	<ul style="list-style-type: none"> • Décor, premium image • Flavor • Desirable Texture 	<ul style="list-style-type: none"> • Consumer packs: clam shells, cello packs • Industrial packs: tray 	Cold Storage at 32° F (1° C), Relative Humidity at 90 to 95%
FROZEN	Straight Pack	Fresh berries are packaged blast frozen at -10° F (-23° C)	<ul style="list-style-type: none"> • Natural color source (range of hues available) • Fresh flavor • Fiber source • Economical 	<ul style="list-style-type: none"> • Plastic pail: 28 lb. • Poly-lined metal drum: 375 and 400 lb. 	0 to 10° F (-18° to 23° C)
	IQF (Individually Quick Frozen)	Individual ripe berries are pre-cooled, individually surfaced frozen, frozen finished so they keep their identity and shape, and packaged.	<ul style="list-style-type: none"> • Décor, eye appeal • Quality flavor • Free flowing • Consumer appeal • Uniform distribution in finished products • Piece identity 	<ul style="list-style-type: none"> • Poly-lined corrugated cartons: 20 and 30 lb. • Retail poly bags to customer specifications 	0 to 10° F (-18° to 23° C)
PUREE	Single Strength Puree	Berries are crushed, finished, pasteurized or cold filled in containers, and frozen. All seeds are removed with a series of screens for the seedless puree.	<ul style="list-style-type: none"> • Smooth texture • Can be pumped, extruded • Blends readily • Natural source of color and flavor • Available at different Brix levels 	<ul style="list-style-type: none"> • Plastic pail: 28 and 30 lb. • Poly-lined metal drum: 47 to 52 gal. and 400 lb. 	0 to 10° F (-18° to 23° C)
	Puree Concentrate 2x	Fresh berries are crushed, heated/enzyme treated, vacuum concentrated pasteurized and packaged frozen. All seeds are removed with a series of screens.	<ul style="list-style-type: none"> • Thickener • Can be pumped, extruded • Sugar substitute • Natural source of color and flavor • Blends readily • Available at different Brix levels 	<ul style="list-style-type: none"> • Plastic pail: 4 and 6 gal, and 28, 30 and 60 lb. • Poly-lined metal drum: 47 to 52 gal. and 400-500 lb. (depending upon desired Brix) 	0 to 10° F (-18° to 23° C)
JUICE	Single Strength Juice	Berries are crushed, pressed/filtered, pasteurized, packaged and frozen.	<ul style="list-style-type: none"> • Natural source of color and flavor • Low pH • Compatible with most beverage bases 	<ul style="list-style-type: none"> • Plastic pail: 5 and 6 gal, 50 and 66 lb. • Poly-lined metal drum: 47 to 52 gal. and 400-500 lb. (depending upon desired Brix) 	0 to 10° F (-18° to 23° C)
	Juice Concentrate	Berries are crushed, heated/enzyme treated, pressed/filtered, vacuum concentrated, pasteurized, packaged and frozen.	<ul style="list-style-type: none"> • Sugar substitute • Available at different Brix levels • Easy to measure, dispense, blend • Adoptable to all fluid processes • Source of color and flavor 	<ul style="list-style-type: none"> • Plastic pail: 5 and 6 gal and 50 and 66 lb. • Poly-lined metal drum: 47 to 52 gal. and 450 to 575 lb. (depending upon desired Brix) 	0 to 10° F (-18° to 23° C)
	Frozen Beverage Base	Berries are diced and mixed with a thickened sweetened sauce.	<ul style="list-style-type: none"> • Use for drink formulations and toppings • Easy handling and pouring • All natural product and ingredients • Ships frozen 	<ul style="list-style-type: none"> • 35 ounce bottles, 6 per case, Red Raspberry, Marionberry 	24 mos. in unopened containers when stored frozen
	Essence	Berries are crushed, heated/enzyme treated, pressed/filtered, volatile flavor components distilled off and packaged.	<ul style="list-style-type: none"> • Clear product • Easy to measure and dispense • Perfect for adding to juices or jams • 150 fold 	<ul style="list-style-type: none"> • Plastic pail: 5 and 6 gal. 	Tightly closed container of 40° F (4° C) of lower
SHELF STABLE	Canned	Fresh or frozen berries are placed in cans, light or heavy syrup added, sealed, heated and labeled.	<ul style="list-style-type: none"> • Shelf-stable • Ready-to-use • Sterile 	<ul style="list-style-type: none"> • 303 can: 16.5 oz • #10 can: 100 oz 	Shelf Stable. Store in a cool, dry place.
	Bakery / Fruit Fillings	Fresh or frozen berries (puree or juice concentrates may also be used) are sweetened; starch/gum-based slurry is added, heated and packaged to specifications.	<ul style="list-style-type: none"> • Level of fruit solids varies depending on supplier • Application specifies viscosity, total solids, water activity 	<ul style="list-style-type: none"> • 55 gal. drums or 5 gal. pails 	Shelf Stable. Store in a cool, dry place.
	Jam/Preserves/ Fruit Spreads/ Conserves/Jellies	Fresh or frozen berries are vac pan cooked, bottled and cooled	<ul style="list-style-type: none"> • With seeds or seedless with fruit definition or smooth 	<ul style="list-style-type: none"> • Consumer Packs various sizes Glass or Plastic Jars • Food Service Containers various sizes • Plastic Pails 	Shelf Stable
	Syrup	Fresh or frozen berries are vac pan cooked, bottled and cooled	<ul style="list-style-type: none"> • Syrups can be made with fruit definition or smooth 	<ul style="list-style-type: none"> • Consumer Packs various sizes Glass or Plastic Jars • Food Service Containers various sizes • Plastic Pails 	Different formulas shelf stable and refrigerated
	Aseptic	Fresh berries are heated, cooled, placed in a sterile container and sealed (processed in a closed system)	<ul style="list-style-type: none"> • No special storage needed • Shelf-stable • Ready-to-use • Sterile 	<ul style="list-style-type: none"> • Bag in box 25 and 42 lb. • Bag in metal drum: 450 lb. • Bag in tote: 1,200 lb. 	Shelf Stable. Store in a cool, dry place.
DRIED	Drum Dried	Fresh or frozen berries are pureed, then drum dried as flakes or ground into powder.	<ul style="list-style-type: none"> • Available in various screen sizes • Moisture level typically at 3–5% • Ideal for low moisture applications i.e. breakfast cereals 	<ul style="list-style-type: none"> • Poly-lined corrugated boxes. • Custom packaging available. 	Stable at room temperature for < 3 months. After 3 months, store at 40° F (21° C)
	Freeze Dried	Fresh berries are flash frozen, placed in a vacuum chamber and sealed in moisture proof packs. Available in whole, pieces, granules and powder.	<ul style="list-style-type: none"> • Available in various screen sizes • Moisture level typically at 3–5% • Ideal for low moisture applications 	<ul style="list-style-type: none"> • Poly-lined corrugated boxes. • Custom packaging available. 	Stable at room temperature for < 3 months. After 3 months, store at 40° F (21° C)
	Belt Dried	Fresh or frozen berries (puree or juice concentrates may also be used) are sprayed on belt (floating over hot water), and dried to flakes or powder.	<ul style="list-style-type: none"> • Moisture level typically at 3–5% • Ideal for low moisture applications 	<ul style="list-style-type: none"> • 30 lb. cases. • Foil laminated bags. 	18 month shelf life at less than 70° F (21° C)

Healthy eating is at the forefront of the minds of most consumers today.

Oregon berries are an excellent addition to any product and will bring high levels of fiber, antioxidants and anthocyanins to any formulation. Recent studies have shown that blackberries are the number one antioxidant food per serving compared to over 1100 other foods. The natural pigmentation of berries like the black raspberry mean that products made with Oregon berries do not have to contain artificial colorants.



Oregon Berries for Every Menu

Oregon berries make the perfect compliment to any gourmet restaurant application. Fresh or individually quick frozen raspberries and blackberries add zest, color appeal and Oregon terroir to savory as well as sweet dishes. Chefs can add a note of sophistication with a Marionberry Port sauce or spice things up with a raspberry chipotle glaze. The high quality of genuine Oregon berries are guaranteed to please the most sophisticated palate.

Berry Characteristics

	SIZE	COLOR	FLAVOR	FRESH FIRMNESS	TEXTURE	FRESH OR PROCESSED MARKET	FRESH SEASON
BLACKBERRY							
Black Diamond	Medium-Large / 5.8 g	Dark purple to black	Medium acid	Firm	Small seeds	Mostly processed	June 28–July 21
Boysenberry	Very large / 8.0 g	Deep maroon	Acid (tart)	Medium firm	Large seeds	Mostly processed	July 10–August 10
Chester Thornless	Medium / 5.0 g	Dark red to black	Mild	Very firm	Large seeds	Mostly fresh	August 11–October 6
Evergreen Blackberry	Medium / 4.0 g	Very dark to glossy black	Low acid, mild	Soft	Large seeds	Mostly processed	August 10–Sept. 15
Kotata	Medium / 5.0 g	Dark red to black	Medium acid	Firm	Small seeds	Mostly processed	July 4–August 1
Marion (Marionberry)	Medium / 5.0 g	Dark red to black	Medium acid, aromatic	Soft	Small seeds	Mostly processed	July 4–August 1
Silvan	Medium-Large / 6.2 g	Dark red to black	Medium acid, aromatic	Soft	Medium seeds	Mostly processed	June 26–July 21
Triple Crown	Large / 7.0 g	Dark red to black	Sweet, pleasant, well balanced	Firm	Large seeds	Mostly fresh	August 4–September 21
RED RASPBERRY							
Chemainus	Medium-Large / 3.7 g	Bright red	Medium acid	Firm	Small seeds	Processed and fresh	June 15–July 20
Heritage	Small / 2.3 g	Dark red	Mild	Very firm	Medium seeds	Mostly fresh	August 17–September 28
Meeker	Medium / 3.1 g	Medium to bright red	Medium acid	Medium firm	Small seeds	Mostly processed	June 15–July 20
Willamette	Medium / 3.2 g	Dark red	Medium acid, full pleasant flavor	Medium firm	Small seeds	Mostly processed	June 27–July 21
BLACK RASPBERRY							
Munger	Small / 2.0 g	Blue to Black	Moderate acid	Medium firm	Small seeds	Processed	July 1st–July 31st



Oregon Berries

Clean air, clean water, a temperate climate and fertile soil are exactly what the Pioneers saw when they crested the Cascade Mountains and first gazed at the Willamette Valley of Oregon and what Oregonians still prize today. The early settlers might not recognize Pioneer Courthouse Square in Portland but they could visit farms in the region and feel right at home. That intense care for the land and the product goes into every pint of caneberrries harvested in the region, making Oregon the nation's finest berry growing area. Raspberries and blackberries, grown on leafy canes and called caneberrries, have been grown in Oregon since the middle of the nineteenth century.

The region has the perfect climate for berries with wet, cool springs lasting well into June and hot summer days with cool nights that let the berries stay on the vine for the perfect sweetness and great taste. This ideal terrain has made Oregon raspberries and blackberries the most sought after berries in the world. Oregon produces 85% of the nation's blackberries and blackberry varieties, 95% of the nation's black raspberries, 50% of the Boysenberries and 10% of the red raspberries harvested commercially in the US.

Oregon caneberrries are grown for taste and not shipping. They are never harvested green and shipped across the globe. Only 5% of Oregon berries are harvested fresh with the remaining 95% being processed for year-round availability. The over 500 berry growers in Oregon operate small to mid-sized farms, many of which have been in families for generations. Oregon processors have technologically advanced facilities that take berries, only hours from harvest, from fresh to frozen in minutes.

Oregon has always been a leader in the development of new berry varieties and additionally has developed state of the art tracking programs for its berries to assure the highest food safety standards. Combine the good manufacturing practices of Oregon processors with the good agricultural practices of our berry farmers and you have a winning combination for great sales.

Pack Type

	FRESH	FROZEN	PUREE	JUICE	SHELF STABLE	DRIED
MARIONBERRY	•	•	•	•	•	
BOYSENBERRY		•	•	•	•	
EVERGREEN BLACKBERRY		•	•	•	•	•
KOTATA		•	•	•	•	•
BLACK DIAMOND		•	•	•	•	•
CHESTER	•	•	•	•	•	•
TRIPLE CROWN	•	•	•	•	•	•
SILVAN		•	•	•	•	•
MEEKER RED RASPBERRY		•	•	•	•	•
HERITAGE	•	•	•	•	•	•
WILLAMETTE		•	•	•	•	•
CHEMAINUS		•	•	•	•	•
MUNGER BLACK RASPBERRY		•	•	•	•	•

Oregon berries may be prepared in all formulations on request.

Oregon Raspberry & Blackberry Commission (ORBC)

ORBC is funded completely by growers to promote Oregon berries worldwide, foster new research into berry cultivation and practices and help educate consumers and manufacturers about the uses and benefits of Oregon berries.



Oregon Berry Co-Products

	RED RASPBERRY: MEEKER, HERITAGE, WILLAMETTE, CHEMAINUS	BLACK RASPBERRY: MUNGER	MARIONBERRY	EVERGREEN BLACKBERRY	BOYSENBERRY	KOTATA	BLACK DIAMOND	CHESTER	TRIPLE CROWN	SILVAN
SINGLE STRENGTH PUREE	8-15 Brix	10.5-18 Brix	9-16 Brix	10.5-18 Brix	8.5-14.5 Brix	11.3-14.95 Brix	10.93-12.70 Brix	9.91-9.93 Brix	13.34 Brix	11.18-14.3 Brix
PUREE CONCENTRATE	28, 32, 38, 40 Brix	28, 32, 38, 40 Brix	28, 32, 38, 40 Brix	28, 32, 38, 40 Brix	28, 32, 38, 40 Brix	28, 32, 38, 40 Brix	28, 32, 38, 40 Brix	28, 32, 38, 40 Brix	28, 32, 38, 40 Brix	28, 32, 38, 40 Brix
SINGLE STRENGTH JUICE	11.38-12.75 Brix	12.75 Brix	13.48 Brix	13.98 Brix	12.5 Brix	13.4 Brix	11.7 Brix	9.92 Brix	13.34 Brix	13.43 Brix
JUICE CONCENTRATE	45, 65 and 68 Brix	47 and 65 Brix	45, 65 and 68 Brix	45, 50, 65 and 68 Brix	45, 65 and 68 Brix	45, 65 and 68 Brix	45, 65 and 68 Brix	45, 65 and 68 Brix	45, 65 and 68 Brix	45, 65 and 68 Brix

Nutrients & Chemical Properties

NUTRIENTS	RED RASPBERRY: MEEKER, HERITAGE, WILLAMETTE, CHEMAINUS				BLACK RASPBERRY: MUNGER		MARIONBERRY			EVERGREEN BLACKBERRY			BOYSENBERRY		
	Straight Pack	IQF	Puree	Juice Conc.	IQF	Puree	Straight Pack	IQF	Puree	Straight Pack	IQF	Puree	Straight Pack	IQF	Puree
Brix (Brix)	10.6-13.0	10.05-15.15	8.0-15.0	45, 65, 68	9.8-11.80	10.5-18	10.4-12.70	11.2-13.40	9.0-16.0	10.2-11.80	10.8-12.40	10.5-18.0	10.8-12.60	11.6-13.40	8.5-14.50
Calories (Kcal)	40.6	44.62	40.43	242.4	72.54	60.11	63.64	54.72	41.43	57.97	45.67	58.66	37.22	50.66	28.62
Cal. from fat (Kcal)	0.36	0.54	0.54	0.9	0.14	0.63	1.08	0.77	0.59	1.53	0.63	0.54	1.26	0.31	0.99
Lipids (g)	0.04	0.06	0.06	0.1	0.02	0.07	0.12	0.09	0.07	0.17	0.07	0.06	0.14	0.03	0.11
Total Carbs (g)	9.18	9.71	8.89	57.9	16.75	14.12	14.46	11.99	8.65	12.76	9.72	12.22	7.81	11.26	6.22
Dietary fiber (g)	1.35	2.6	3.05	0.16	1.68	2.17	4.83	3.1	0.94	5.75	5.62	1.17	2.11	1.75	1.49
Sugar (g)	4.97	5.1	4.89	46.85	5.15	4.44	8.72	5.65	3.6	3.09	5.4	8.89	3.38	4.63	3.52
Protein (g)	0.88	1.31	1.09	3.34	1.35	0.75	1.18	1.5	1.56	1.35	1.54	2.31	1.18	1.33	0.68
Vitamin A (IU)	50	90	68	n/a	38	<30	60	67.75	40.5	372	379	105	n/a	n/a	n/a
Vitamin C (mg)	17.54	15.29	4.26	2.4	2.36	1.47	1.99	1.99	1.87	0.29	2.33	1.44	6.43	6.06	3.1
Calcium (mg)	4.99	13	15	83	32	21	34	25.5	26	29	19	16.43	19	22.67	15.63
Iron (mg)	0.38	0.86	1.06	1.5	1.35	0.91	2	0.85	0.46	0.69	0.44	0.7	0.5	0.56	0.62
Sodium (mg)	0.54	1.5	1.91	65	0.51	1.3	0.56	4.88	1.88	4.4	4.1	1.22	0.28	2.16	3.36
CHEMICAL PROPERTIES															
pH		3.0-3.66			3.1-4.3			2.8-3.8			3.46-3.71			3.0-3.5	
Titrateable Acidity (as % citric acid)		15.53-18.28			13.06			16.66			11.48			9.0-18.3	
Soluble Solids		8.4-11.4 Brix			10-18 Brix			9-14 Brix			n/a			8.82-11.2 Brix	
Total Sugar (in 100 g)		8-15 g			n/a			9-16 g			10-18 g			8.5-14 g	
Glucose		3.5 g			n/a			3.1 g			3.1 g			2.48 g	
Fructose		3.2 g			n/a			4.1 g			4.1 g			3.70 g	
Sucrose		2.8 g			n/a			0.4 g			0.4 g			n/a	

For more information on the following berries contact your Oregon packer. **Kotata:** IQF 13.4 Brix, 3.04-3.51 pH, 17.9 Titratable Acidity. **Black Diamond:** IQF 10.93-12.70 Brix, 3.15-3.51 pH, 13.5 Titratable Acidity. **Chester:** IQF 9.91-9.93 Brix, 3.38 pH, 8.77 Titratable Acidity. **Triple Crown:** IQF 13.34 Brix, 3.48 pH, 8.77 Titratable Acidity. **Silvan:** IQF 13.43 Brix, 3.31-3.70 pH, 14.3 Titratable Acidity

Cover photo by Andrea Johnson.



Oregon Raspberry & Blackberry

Product Development Guide

