

# Technology Snapshot

Oregon Fruit Products

Single-Strength Aseptic Fruit Puree

New 1.5L Portion Pouch



# Brandon Herkert

## R&D Manager

### Oregon Fruit Products



- 17 years experience in New Product Development
- Expertise in biology and microbiology, formulations and product development
- Specialized in applications:
  - Fruit Products
  - Salsas
  - Bean, Cheese, and Dairy Dips
  - Nutrition Bars

- Learn about smaller format packaging innovation
- Why aseptic fruit puree is a great option for clean label
- Learn why aseptic purees can be an excellent sugar substitute
- Understand formulating with single strength puree
- See examples of puree use in a wide variety of food and beverage applications





# New Packaging Innovation: 1.5L pouch

Introduced in 2023

Easy to portion pour spout

Great for smaller projects

Variety of 100% real fruit at your fingertips

Shelf stable, aseptic until opened

Waterproof bag for easy refrigerated storage after opening

Strong handles for easy transportation



# Clean Label with Fruit Puree

- Oregon Fruit Single-Strength Fruit Purees are 100% fruit and can be **listed as a whole fruit** on the **ingredients statement** of finished packaged foods and beverages *in contrast to concentrates, essences and purees with additives or as components in sweetener systems.*
- As an ingredient, Oregon Fruit Purees contribute to a shorter and more consumer/export-friendly ingredient list because they can be listed as just fruit.
- They contain no stabilizers, gums, or additives like other sugar systems.
- Naturally occurring sugars in Oregon Fruit Purees are considered intrinsic and do not need to be listed in the added sugar line of a product's nutrition facts panel.

# Clean and Simple Ingredient Declaration

On a finished food's ingredient statement Oregon Fruit Purees would appear as:

- Aseptic Seedless Blackberry Puree can be listed as "Blackberries"
- Aseptic Seedless Blueberry Puree can be listed as "Blueberries"
- Aseptic Mango Puree can be listed as "Mango"
- Aseptic Passionfruit Puree can be listed as "Passionfruit"
- Aseptic Peach Puree can be listed as "Peaches"
- Aseptic Pineapple Puree can be listed as "Pineapple"
- Aseptic Seedless Red Raspberry Puree can be listed as "Raspberries"
- Aseptic Sweet Cherry Puree can be listed as "Sweet Cherries"



# SINGLE STRENGTH FRUIT PUREE

100% Real Fruit. Taste is Everything.

## MINIMALLY PROCESSED

Our fruit is picked at the peak of ripeness and minimally processed. 100% real fruit and preservative free. No artificial color or flavors. Non-GMO and Kosher.

## CONSISTENT QUALITY

We are all about quality, variety, and convenience. Our purees give you consistent results every time you create. Every batch is tested to meet safety standards, and then packaged aseptically eliminating the chance for contamination.

## SHELF STABLE STORAGE

Our aseptically packed fruit purees provide real fruit flavor, aroma, texture and complexity to your product line. Because they're shelf stable in ambient temperature, you save refrigeration space and save on shipping costs.



**World Health  
Organization**

## **Guideline: Sugars intake for adults and children (2015)**

- Reduce intake of free sugars throughout the life course
- Reduce intake of free sugars to less than 10% of total energy intake
- A further reduction of the intake of free sugars to below 5% of total energy intake is beneficial

**Recommendations do not apply to “intrinsic” sugars**





**World Health  
Organization**



**Sugars in fruits are intrinsic sugars (unless infused with fruit juice concentrate or sugar is added)**

**Traditional dried fruits are an integral part of healthy dietary patterns worldwide, and the WHO's definition of intrinsic sugars is a key aspect to emphasize as the sugar debate intensifies.**

[http://apps.who.int/iris/bitstream/10665/149782/1/9789241549028\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/149782/1/9789241549028_eng.pdf?ua=1)



**World Health  
Organization**

**Free sugars:**

- Monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook or consumer
- Sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates

**Intrinsic sugars:**

- Those incorporated within the structure of intact fruit and vegetables; sugars from milk (lactose and galactose)

[http://apps.who.int/iris/bitstream/10665/149782/1/9789241549028\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/149782/1/9789241549028_eng.pdf?ua=1)

# What Doesn't Count As Added Sugar



FDA: “Fruit purée, without any sugar added will not be considered added sugar.”

Several of the larger U.S. food manufacturers have taken the following position:

## **Not Added Sugar**

- Fruit paste
- Dried fruit – with no added sugar
- Fruit purée (single strength) (must contain whole fruit)
- Single strength fruit juice at FDA standard of identity (21 CFR)

## **Added Sugar**

- (Fruit juice concentrate) – (single strength equivalent) = Added Sugars

**Example:** 70°Brix Apple Juice contains 65.9 grams sugar, 11.5° single strength juice has 10.8 grams.

$(65.9 - 10.8) = 55.1$  grams of fruit sugar that will be counted as “Added Sugars”

# What Doesn't Count As Added Sugar

FDA: “Fruit purée, without any sugar added will not be considered added sugar.”



## Nutrition Facts

servings per container  
**Serving size** (100g)

Amount per serving  
**Calories** **50**

% Daily Value\*

**Total Fat** 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

**Cholesterol** 0mg 0%

**Sodium** 65mg 3%

**Total Carbohydrate** 8g 3%

Dietary Fiber 0g 0%

Total Sugars 8g

Includes 0g Added Sugars 0%

**Protein** 5g

Vitamin D 0mcg 0%

Calcium 171mg 15%

Iron 0mg 0%

Potassium 243mg 6%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

## Nutrition Facts

servings per container  
**Serving size** (100g)

Amount per serving  
**Calories** **70**

% Daily Value\*

**Total Fat** 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

**Cholesterol** 0mg 0%

**Sodium** 65mg 3%

**Total Carbohydrate** 13g 5%

Dietary Fiber 0g 0%

Total Sugars 12g

Includes 5g Added Sugars 10%

**Protein** 5g

Vitamin D 0mcg 0%

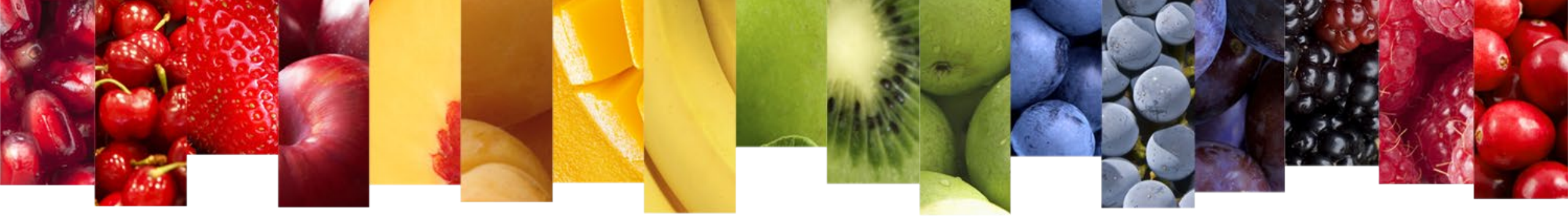
Calcium 171mg 15%

Iron 0mg 0%

Potassium 234mg 4%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



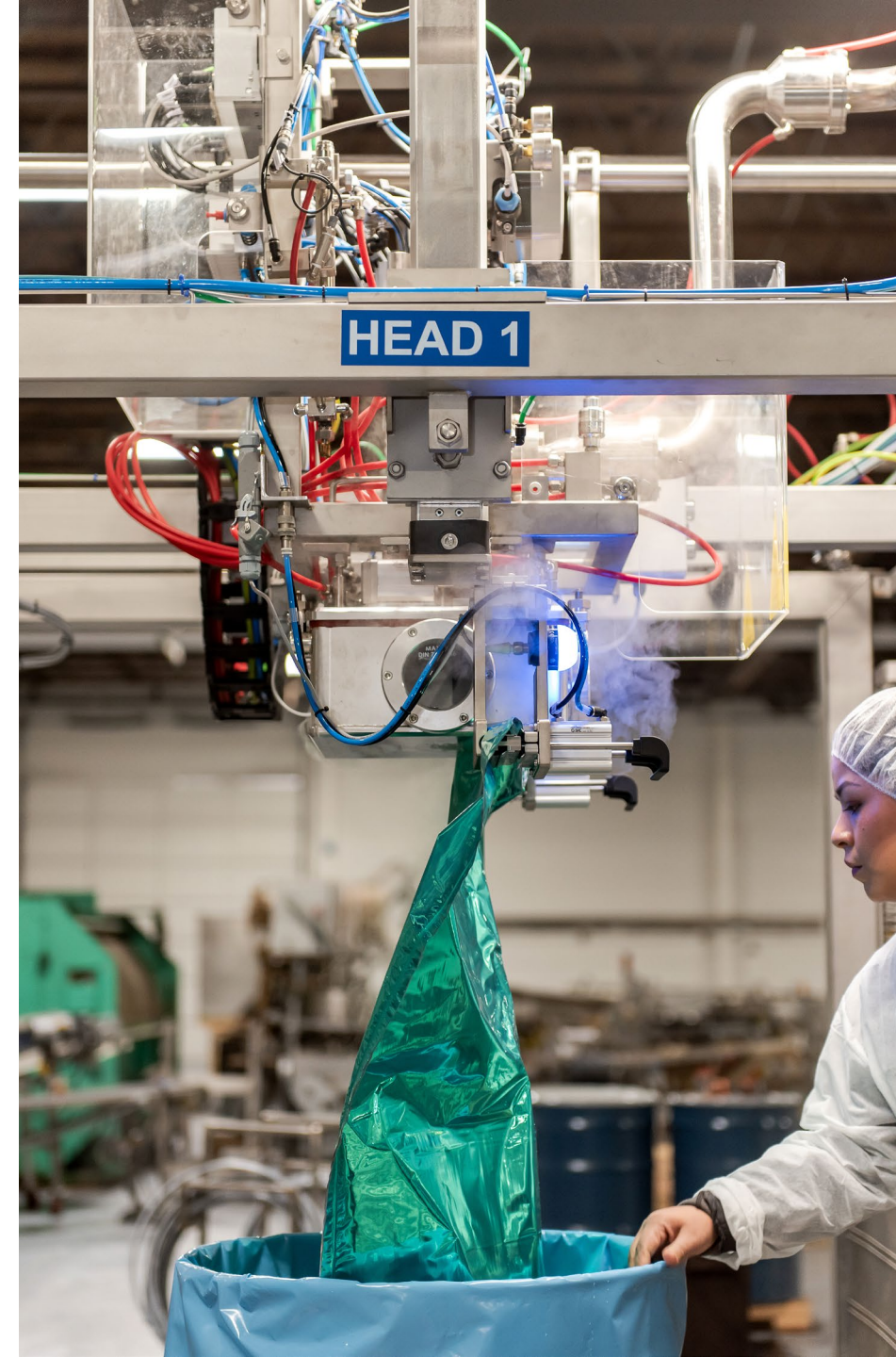


Due to the strong negative connotation of ‘added sugar’ and other sugar alternatives, just replace added sugar with the intrinsic sugar of fruit puree.



# Benefits of Our Fruit Purees

- Aseptically processed
  - Inactivation of foodborne pathogens
  - Inactivation of food degrading enzymes
    - Peroxidase
    - Polyphenol Oxidase
    - Pectin Methyl Esterase
- Extended shelf-life
- Food safety
- Food quality



# Benefits of Formulating with Fruit Purees

- Clean label
- Not included in Added Sugar
- 100% useful, no discarded waste product
- Bright color & flavor from one ingredient



Nutrition Facts	
About 10 servings per container	
<b>Serving size</b>	<b>1/2 cup (140g)</b>
Amount per serving	
<b>Calories</b>	<b>70</b>
% Daily Value*	
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 0mg	<b>0%</b>
<b>Total Carbohydrate</b> 18g	<b>7%</b>
Dietary Fiber 0g	<b>0%</b>
Total Sugars 13g	
Includes 0g Added Sugars	<b>0%</b>
<b>Protein</b> 0g	
<b>Vitamin D</b> 0mcg	<b>0%</b>
<b>Calcium</b> 9mg	<b>0%</b>
<b>Iron</b> 0mg	<b>0%</b>
<b>Potassium</b> 125mg	<b>2%</b>
*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	



# Development Challenges with Fruit Purees

## Natural Color

- Varies by pH of finished product
- Fades over time

Shelf life studies needed

Filtration of fine particles

Water Activity



*Raspberry Juice changing color with only variable pH*







At home in Oregon's  
Willamette Valley





More than 85 years of processing fruit in the heart of the Willamette Valley, working with growers and partnering with customers all over the world



# Oregon Fruit Capabilities



- Single strength aseptic purees
- Frozen purees
- Custom formulations
- Multiple pack sizes

# Sourcing & Consistency

- Source fruits from the PNW and beyond
- Sensory evaluation of every fruit
- Rely on sourcing quality fruit
- Seasonal offerings





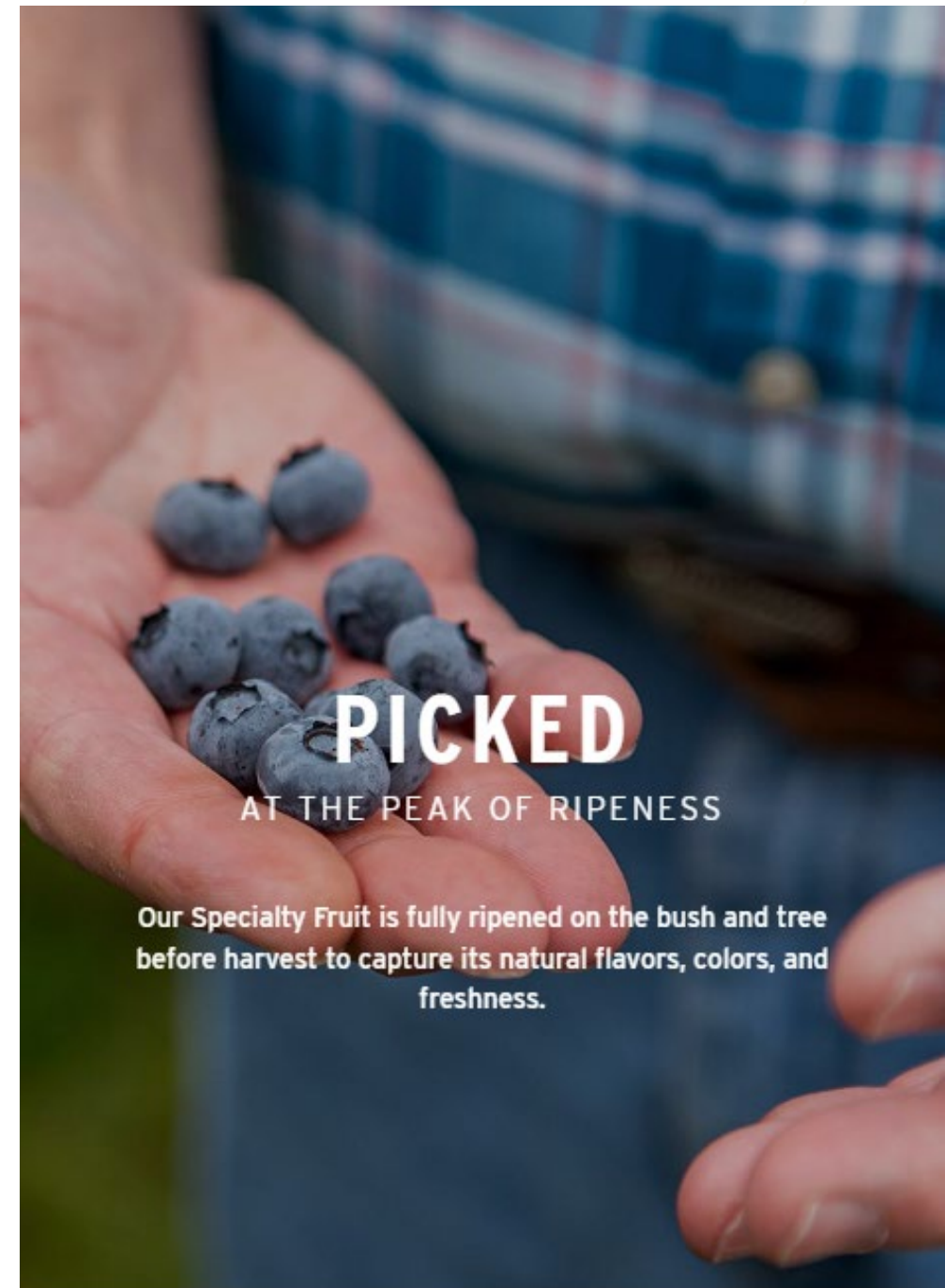
# State of the art facility





# Taste & Quality

- Work with farmers to identify fruit peak ripeness
- Prediction of quality and consumer acceptance
  - Brix-Acid Ratio
- Delicious is a range
  - Dependent on fruit and consumer
  - Group sensory evaluations



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# Other Formats



42 lb  
Box



Drum



Tote



# Sampling & Technical Support

- 1 lb. Aseptic samples available upon request

<https://www.oregonfruit.com/ingredients-for-manufacturing/manufacturing-products/>

- R&D team offers technical expertise
- New product development support
- Custom formulations



# Puree is Great For...



Bakery/Confectionary



Drinkable Yogurt



Non Dairy Ice Cream



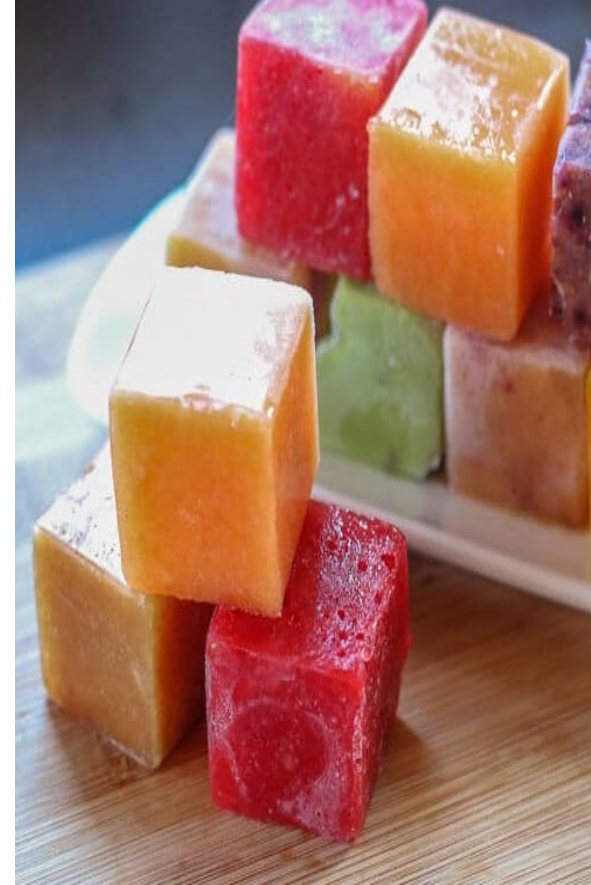
# With puree, create clean label in...



Yogurt



Gelato/Sorbet



***YOUR NEXT BIG IDEA***



# Popular Products

## **Gelato/Ice Cream**





## Popular Products

**Gelato/Ice Cream  
Frozen Desserts**



## Popular Products

**Gelato/Ice Cream**  
**Frozen Desserts**  
**Hot Sauce**





## Popular Products

**Gelato/Ice Cream**  
**Frozen Desserts**  
**Hot Sauce**  
**Marinade/Glaze**



# Popular Products

**Gelato/Ice Cream**  
**Frozen Desserts**  
**Hot Sauce**  
**Marinade/Glaze**  
**Health Drinks/Juice**  
**Blends**





## Popular Products

**Gelato/Ice Cream**

**Frozen Desserts**

**Hot Sauce**

**Marinade/Glaze**

**Health Drinks/Juice**

**Blends**

**Jams & Jellies**







Thank you!



# Q&A

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[oregonfruit.com/ingredients-for-manufacturing](https://oregonfruit.com/ingredients-for-manufacturing)