6 Bakery Formula Recipes

Artisan Baking

Whole Grain & Sugar Free

Developed by Craig Ponsford
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San Rafael, CA
Schiacciata (ski-a-cha-ta) means crushed or flattened, and Zibibbo refers to a specific grape variety, popular in Italy for making into raisins or wine.

Sciacciatella con Zibibbo with Blood Orange Raisins

**Preferments**

Biga

**Mixing**

Type of Mixer: Spiral

**First Fermentation**

Length of Time: 12 hours

Temperature: 75°F

**Final Dough**

Mixing

Type of Mixer: Spiral

Mix Style: Traditional

1st Speed: 20 minutes

Dough Temp: 75°F

First Fermentation

Length of Time: 2 hours

Number of Folds: 2

Timing for Folds: 40 minutes

**Shaping**

Divide: 300 g or 3 kg

Resting Time: 45 minutes

Shape: 6” cake pan or 1/2 sheet pan

**Proof and Bake**

Final proof: 15 minutes

Oven Type: Deck

Steam: No

Total Bake: 25 minutes

Temperature: 350°F

**Formula**

Total Dough Weight: 6,000 kg

Yield: 20

Total Flour Prefermented: 30%

**Ingredients**

<table>
<thead>
<tr>
<th>Total Dough</th>
<th>Total Formula</th>
<th>Biga</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>2,206 kg</td>
<td>59%</td>
</tr>
<tr>
<td>95.00%</td>
<td>2,096 kg</td>
<td></td>
</tr>
<tr>
<td>100.00%</td>
<td>1,996 kg</td>
<td></td>
</tr>
<tr>
<td>99.00%</td>
<td>1,986 kg</td>
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</tr>
<tr>
<td>98.00%</td>
<td>1,976 kg</td>
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</tr>
</tbody>
</table>

**Ingredients Breakdown**

- **Total Flour**
- **Hard White Winter Wheat Flour**
- **Rye Flour, Fine**
- **Butter**
- **Water**
- **Eggs**
- **Blood Orange Olive Oil**
- **Applesauce**
- **Instant Yeast**
- **Anise Seeds**
- **Salt**
- **Macerated Blood Orange Olive Oil**
- **Mixed Raisins**

**Final Dough**

Total Flour: 2,206 kg

- **Total Dough**
- **Hard White Winter Wheat Flour**
- **Rye Flour, Fine**
- **Water**
- **Butter**
- **Eggs**
- **Blood Orange Olive Oil**
- **Applesauce**
- **Instant Yeast**
- **Anise Seeds**
- **Salt**
- **Macerated Blood Orange Olive Oil**
- **Mixed Raisins**
- **BICG**

**Procedure**

- 24 hours in advance, macerate raisins in blood orange amaretto.
- Toast and grind anise seeds.
- 12 hours before final mixing: mix the sponge ingredients until a cohesive dough is formed. Move to a covered container and let rest for 12 hours at 75°F.

**Final Dough**

- Break biga into small pieces and mix with flours, salt, yeast, water, and orangish juice concentrate in a spiral mixer on low for 15 min to get an improved mix.
- Slowly drizzle olive oil and mix over a 5-minute period, on low speed until absorbed.
- Mix in soft butter over 1 minute more, on low speed until it is absorbed.
- Add raisins and mix to disperse evenly, reserving 50 g per 300 g of dough for topping.

**Shaping and Proofing**

- Let dough ferment for two hours in a covered container with 2 folds at 30-minute intervals.
- Turn out dough after the second hour and divide into 300 g or 3 kg (1/2 sheet) pieces, and gather loosely into a ball.
- Set in generously oiled 6” round cake pans flipping once to coat well (for the 1/2 sheet, oil the top well)
- Dimple heavily with fingers.
- Proof for 45 minutes, top with 50 g each of raisins and applesauce and dimple again (for 1/2 sheet, 500 g on each).
- Proof for 15 minutes more.

**Baking**

- Bake at 350°F on low convection for 25 minutes.
- De-pan and cool on rack.

- Any citrus infused olive oil will do, or, using water and try accenting with a dash of muscato wine, zest or Grand Marnier.
# Pumpernickel

## Formula

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>TOTAL FORMULA</th>
<th>PREFERMENTED DOUGH</th>
<th>FINAL DOUGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Flour</td>
<td>100.00%</td>
<td>5.578%</td>
<td>3.578%</td>
</tr>
<tr>
<td>Hard Red Winter Wheat Flour</td>
<td>80.00%</td>
<td>8.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Pumpernickel Rye</td>
<td>20.00%</td>
<td>2.00%</td>
<td>1.073%</td>
</tr>
<tr>
<td>Water</td>
<td>5.00%</td>
<td>0.50%</td>
<td>0.001%</td>
</tr>
<tr>
<td>Salt</td>
<td>0.80%</td>
<td>0.08%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Instant Yeast</td>
<td>0.60%</td>
<td>0.06%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Natural Raisin Paste</td>
<td>0.20%</td>
<td>0.02%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Maceration Liquid</td>
<td>25.00%</td>
<td>2.50%</td>
<td>1.491%</td>
</tr>
<tr>
<td>Mixed Raisins</td>
<td>15.00%</td>
<td>1.50%</td>
<td>1.491%</td>
</tr>
<tr>
<td>Sour Seed</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

**Total**: 100.00% 8.400 kg 173.30% 2.474 kg 8.457 kg

## Procedure

- **12 hours prior to final mixing**, take sourdough seed and mix with sponge ingredients until a cohesive dough is formed. Let rise, covered, for 12 hours at 74°F.
- Also, 12 hours in advance, macerate raisins in enough water*, just until covered. Drain well prior to mixing (ideal macerated weight is reflected in the formula).

### Final Dough

- Mix pumpernickel, salt, yeast, raisin paste and water on low for 2 minutes.
- Break the mature sour into small pieces and mix on low for 15 minutes more (desired dough temperature is 75°F).
- Add drained raisins and mix to disperse evenly.
- Remove dough from mixer and place in a covered container to bulk ferment for 45 minutes.

### Shaping and Proofing

- After fermenting for 45 minutes, divide with thoroughly wet hands, smooth into a round shape and coat with a medium grind pumpernickel rye, sunflower seeds or commeal and press evenly into a small loaf pan.
- Proof for 1 hour, even though it is a dense bread there will be noticeable expansion.

### Baking

- Bake at 400°F for 15 minutes, lower the oven to 350°F and bake for approximately 45 minutes.
- After the first 45 minutes, remove bread from the pans in order to firm up the sides and finish the bake on sheet pans.
- Cool on rack. Traditional pumpernickel has a seven day shelf life, it is best after at least 12 hours.

* To add character, consider accenting with a dash of PX Sherry, balsamic vinegar or caraway liquor.

## Preferments

### Sour Dough

**Mixing**
- Type of Mixer: Spiral

**First Fermentation**
- Length of Time: 4 hours at room temperature
- Temperature: 78°F

### Final Dough

**Mixing**
- Type of Mixer: Spiral
- Mix Style: Short
- 1st Speed: 5-10 minutes
- Dough Temp: 73°F

**First Fermentation**
- Length of Time: 45 minutes

**Shaping**
- Divide: 600 g
- Shape: Mini loaf pan

**Proof and Bake**
- Final proof time: 45 min.
- Oven Type: Deck
- Steam: No
- Total Bake: 60 minutes
- Temperature: 400°F (15 min) 350°F (45 min)
**Morning Bun**

### Preferments

**Biga**

**Mixing**
- Type of Mixer: Spiral

**First Fermentation**
- Length of Time: 12 hours
- Temperature: 75°F

### Final Dough

**Mixing**
- Type of Mixer: Planetary
- Mix Style: Improved
- 1st Speed: 3 minutes
- 2nd Speed: 3 minutes
- Dough Temp: 75°F

**First Fermentation**
- Length of Time: 1 hour

**Shaping**
- Divide: 1600 g
- Number of folds: 3 single
- Resting Time: 50 minutes
- Shape: Danish roll

**Proof and Bake**
- Final proof time: 1 hour
- Oven Type: Deck
- Total Bake: 12-15 minutes
- Temperature: 375°F

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**Formula**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Total Formula</th>
<th>Polish</th>
<th>Final Dough</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total flour</td>
<td>0.900 kg</td>
<td>0.900 kg</td>
<td>0.3790 kg</td>
</tr>
<tr>
<td>Bread bakers</td>
<td>0.1000 kg</td>
<td>0.1000 kg</td>
<td>0.2390 kg</td>
</tr>
<tr>
<td>Water</td>
<td>0.230 kg</td>
<td>0.230 kg</td>
<td>0.899 kg</td>
</tr>
<tr>
<td>Milk</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
</tr>
<tr>
<td>Eggs</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
</tr>
<tr>
<td>Sugar</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
</tr>
<tr>
<td>Applesauce</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
</tr>
<tr>
<td>Salt</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
</tr>
<tr>
<td>Yeast</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
</tr>
<tr>
<td>Malt</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
</tr>
<tr>
<td>Deactive yeast</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
</tr>
<tr>
<td>Butter</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
<td>0.001 kg</td>
</tr>
<tr>
<td></td>
<td><strong>Totals</strong></td>
<td><strong>1.800 kg</strong></td>
<td><strong>1.1790 kg</strong></td>
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**Procedure**

**Preferment**
- 12 hours before final mixing, mix the sponge ingredients until a cohesive dough is formed. Move to a covered container and let rise for 12 hours at 75 °F.
- Also, 12 hrs in advance, macerate raisins in water for 30 minutes covered. Drain well prior to mixing. Total macerated weight is reflected in the formula.

**Final Dough**
- Place flour, water, milk, eggs, sugar, applesauce, salt yeast, malt, and deactive yeast in the bowl of a planetary mixer fitted with a dough hook. Mix 3 minutes on low.
- Break biga into small pieces and mix on 2nd speed for 3 minutes. Add in water and mix on medium speed until fully absorbed, 2 minutes.
- Let dough ferment at room temperature for 1 hour in a covered container.
- Divide into 1600 g pieces, flatten to about 15 cm wide and 12 cm long. Roll up tightly and press flat into a block. Cover the width and half the length of the dough. Place on a floured board, cover and freeze for one hour.
- Measure 400 g butter for roll-in, pound into a block that covers the width and half the length of the dough. Place butter block in center of dough and fold both sides of dough to meet in the center.
- Roll out on a sheeter and give 2 single folds, aligning all edges and corners.
- Refrigerate for 30 minutes, roll out one final single fold on the sheeter.
- Set dough on a coated board, cover and refrigerate for a minimum of 1 hour.

**Shaping**
- Sheet each 2 kg of dough until it is 12 cm wide and 46 cm long.
- Egg wash and dust heavily with cinnamon sugar mixture (450 g), leaving an undusted strip on the near edge.
- Sprinkle raisins evenly over cinnamon sugar mixture, 600 g per 2 kg of dough.
- Starting from the far left corner, roll into a tight log, using the egg washed edge to seal the seam.
- Beginning at one end, mark dough in 3 1/2 inch increments.
- Cut into rolls with a chef’s knife and press flat into a well-oiled muffin pan.

**Proofing**
- Preheat oven to 375°F. Proof in an enclosed, slightly humid, 75 to 78°F environment until they become rounded and soft, about 1 to 1 1/2 hours.
- Bake in a 375°F convection oven until bottoms are golden, 12-15 minutes.
- Remove from oven and immediately roll in cinnamon and sugar.
- To add character, consider accenting with a dash of orange blossom water or brandy, or add clove, cardamom and nutmeg to the cinnamon sugar mixture.
**Walnut-Raisin English Muffin**

**Formula**

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>TOTAL FORMULA</th>
<th>PREFERMENTED DOUGH</th>
<th>FINAL DOUGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Flour</td>
<td>100%</td>
<td>25.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Hard White Bakers Flour</td>
<td>1.488 kg</td>
<td>0.3721 kg</td>
<td>1.488 kg</td>
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<tr>
<td>Powdered Milk</td>
<td>5.00%</td>
<td>0.0794 kg</td>
<td>0.116 kg</td>
</tr>
<tr>
<td>Water</td>
<td>35.00%</td>
<td>0.5029 kg</td>
<td>0.5029 kg</td>
</tr>
<tr>
<td>Salt</td>
<td>0.75%</td>
<td>0.0111 kg</td>
<td>0.0111 kg</td>
</tr>
<tr>
<td>Instant Yeast</td>
<td>0.00%</td>
<td>0.0000 kg</td>
<td>0.0000 kg</td>
</tr>
<tr>
<td>Applesauce</td>
<td>5.00%</td>
<td>0.0794 kg</td>
<td>0.0794 kg</td>
</tr>
<tr>
<td>Butter, Unsalted</td>
<td>1.00%</td>
<td>0.015 kg</td>
<td>0.015 kg</td>
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<tr>
<td>Walnuts</td>
<td>20.00%</td>
<td>0.288 kg</td>
<td>0.288 kg</td>
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<td>Maceration Liquid</td>
<td>15.00%</td>
<td>0.223 kg</td>
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<td>Natural Raisins</td>
<td>25.00%</td>
<td>0.372 kg</td>
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<td><strong>Totals</strong></td>
<td>268.75%</td>
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<td><strong>Yield:</strong> 40</td>
<td><strong>Total Flour:</strong> 4.000 kg</td>
<td><strong>PREFERMENTED DOUGH:</strong> 0.639 kg</td>
<td><strong>FINAL DOUGH:</strong> 0.639 kg</td>
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</table>

**Procedure**

- 12 hours before final mixing, mix the sponge ingredients until a cohesive dough is formed. Move to a covered container and let rise for 12 hours at 75°F.
- Also 12 hrs in advance, macerate raisins in water*, just until covered. Drain well prior to mixing (ideal macerated weight is reflected in the formula).

**Final Dough**

- Break biga into small pieces and mix with flour, powdered milk, salt, yeast, water and applesauce in a spiral mixer for 3 min.
- Flake in butter and mix for 3 minutes on 2nd speed
- Add drained raisins and walnut pieces. Mix on speed 1 to disperse evenly (desired dough temp 75°F).

**Shaping and proofing**

- Let dough ferment for two hours in a covered container, folding twice with thoroughly wet hands (the dough is very loose), at 45-minute intervals.
- Using a generous dusting of flour, turn dough out onto bench and divide into 100 g pieces, premold into rounds.
- Arrange on a well-floured wooden board leaving plenty of room for spread.
- Proof for 1 hour.

**Cooking**

- Heat a griddle on low and grill to a toasted brown on each side. May be finished in a 350°F oven if needed.

*To add character, consider accenting with a dash of nocello, amaretto or vin santo.
BARLEY-CURRANT PRETZEL

PREFERMENTS
Biga

Mixing
Type of Mixer: Spiral

First Fermentation
Length of Time: 12 hours
Temperature: 75°F

FINAL DOUGH
Mixing
Type of Mixer: Spiral
Mix Style: Improved
1st Speed: 3 minutes
2nd Speed: 3 minutes
Dough Temp: 72°F

First Fermentation
Length of Time: 2 hours
Number of Folds: 1
Timing for Folds: 1 hour

Shaping
Divide: 150 g
Preshape: 5” log
Resting Time: 20 minutes
Shape: Pretzel

Proof and Bake
Final proof time: Variable - bring to room temperature
Oven Type: Deck
Total Bake: 8-12 minutes
Temperature: 380°F

FORMULA
Total Dough Weight: 6,000 kg
Yield: 40
Total Flour Preferred: 90%

INGREDIENTS
TOTAL FORMULA
Prefermented Dough
Final Dough

Total Flour
100.00% 2,675 kg
30.00% 0.791 kg

Hard Red Winter Wheat Flour
70.00% 1,840 kg
30.00% 0.791 kg

Barley Flour
90.00% 0.791 kg

Water
75.00% 1.978 kg
65.00% 0.514 kg
5.00% 0.030 kg

Salt
2.00% 0.053 kg
0.70% 0.006 kg

Instant Yeast
0.50% 0.015 kg
0.05% 0.000 kg

Butter, Unsalted
3.00% 0.079 kg

Raisin Juice Concentrate
4.00% 0.105 kg

Powdered Milk
3.00% 0.079 kg

Maceration Liquid
15.00% 0.395 kg

Zante Currants
25.00% 0.659 kg

Totals
227.50% 6,000 kg
169.00% 1,306 kg

PROCEDURE
- 12 hours before final mixing, mix the sponge ingredients until a cohesive dough is formed. Move to a covered container and let rise for 12 hours at 75°F.
- Also, 12 hrs in advance, macerate currants in water, just until covered. Drain well prior to mixing (ideal macerated weight is reflected in the formula).

Final Dough
- Mix flours, salt, yeast, powdered milk, water and raisin juice concentrate in a spiral mixer on low for 3 minutes.
- Add biga and mix for 3 minutes, on 2nd speed.
- Add butter and mix for 1 minute, on speed 3.
- Add currants and mix to disperse evenly on low speed.

Shaping and Proofing
- Let dough ferment for two hours in a covered container with a fold after the first hour.
- Turn out dough after the second hour and divide into 150 g pieces. Flatten dough pieces into rectangles and preform tight 5” cylinders.
- Let rest for 20 minutes, roll into tapered strand roughly 24” long. Grabbing each end, pick up and twist 360°. Set the ends down over the ring of dough, pressing them in the opposite side, to make a pretzel.
- Lay gently on a lightly floured board, freeze or chill until an hour before use, then pull and bring to room temperature.

Lye Bath
- Make a 4% lye solution and bring to a boil (use caution as lye is a corrosive chemical). Briefly submerge each pretzel in the bath, drain well and transfer to a sheet pan, sprinkle with sugar crystals or sesame seeds.

Baking
- Bake at 380°F on low convective for 8-12 minutes, cool on rack.

* To add character consider accenting with a dash of whiskey, madeira or barley wine.
Cinnamon-Raisin Challah

**Formula**

<table>
<thead>
<tr>
<th>Total Dough Weight: 8,000 kg</th>
<th>Yield: 20</th>
<th>Total Flour: 25%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INGREDIENTS</strong></td>
<td><strong>TOTAL FORMULA</strong></td>
<td><strong>PREFERMENTED DOUGH</strong></td>
</tr>
<tr>
<td>Total Flour</td>
<td>100.00%</td>
<td>3,325 kg</td>
</tr>
<tr>
<td>Hard White Winter Wheat Flour</td>
<td>100.00%</td>
<td>3,325 kg</td>
</tr>
<tr>
<td>Applesauce</td>
<td>10.00%</td>
<td>332 kg</td>
</tr>
<tr>
<td>Water</td>
<td>35.00%</td>
<td>1,196 kg</td>
</tr>
<tr>
<td>Salt</td>
<td>7.50%</td>
<td>250 kg</td>
</tr>
<tr>
<td>Instant Yeast</td>
<td>0.75%</td>
<td>23.0 kg</td>
</tr>
<tr>
<td>Whole Eggs</td>
<td>25.00%</td>
<td>878 kg</td>
</tr>
<tr>
<td>Canola Oil</td>
<td>7.00%</td>
<td>234 kg</td>
</tr>
<tr>
<td>Cinnamon</td>
<td>1.00%</td>
<td>32 kg</td>
</tr>
<tr>
<td>Maturation Liquid</td>
<td>16.00%</td>
<td>514 kg</td>
</tr>
<tr>
<td>Natural Raisins</td>
<td>40.00%</td>
<td>1,241 kg</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>240.75%</td>
<td>8,000 kg</td>
</tr>
</tbody>
</table>

**Procedure**

- 12 hours before final mixing, mix the sponge ingredients until a cohesive dough is formed. Move to a covered container and let rise for 12 hours at 75°F.
- Also, 12 hrs in advance, macerate raisins in water, just until covered. Drain well prior to mixing (ideal macerated weight is reflected in the formula).

**Final Dough**

- Mix flour, yeast, salt, water, eggs and applesauce in a spiral mixer on low for 3 minutes.
- Add biga and mix on speed 2 for 3 minutes more.
- Over the last minute slowly drizzle in oil and mix until fully absorbed.
- Add drained raisins and mix to disperse evenly.

**Final dough pieces into rectangles, dust heavily with cinnamon and premold tight 5” cylinders.**

- Let rest for 20 minutes, roll into even strands roughly 24” long. Using two strands, weave into a braid.
- At the ends, tuck the longest piece over the others and give the braid a quick roll to make the thickness more uniform.
- Move to a well-sprayed loaf pan, lightly egg wash and proof for 90 minutes.
- Just before baking, brush again with egg wash and sprinkle with sugar crystals and cinnamon.

**Baking**

- Bake at 350°F on low convection for 25 minutes.
- De-pan and cool on rack.
- To add character, consider accenting with a dash of Grand Marnier, Marsala or vin santo.

**Preferments**

**Biga**

**Mixing**

Type of Mixer: Spiral

**First Fermentation**

Length of Time: 12 hours
Temperature: 75°F

**Final Dough**

**Mixing**

Type of Mixer: Spiral

**First Fermentation**

Length of Time: 2 hours
Number of Folds: 1
Timing for Folds: 1 hour

**Shaping**

Divide: 200 g
Preshape: 5” log with cinnamon
Resting Time: 20 minutes
Shape: Braid, 400 g in a 7”x5” loaf pan

**Proof and Bake**

Final proof time: 1 hour
Oven Type: Deck
Total Bake: 25 minutes
Temperature: 350°F
From their consistent color and flavor, to extending product shelf life, there are many advantages to using California Raisins in your products.

**Benefits of California Raisins**

**Characteristics**

- **Flavor Stability**
- **Flavor Enhancement**
- **Flavor Compatibility**
- **Texture/Fat Replacement**
- **Texture/Skin Integrity**
- **Texture/Binding**
- **Water Activity**
- **Chemical Properties**
- **Consistency**
- **Quality Control**

**Value**

The sweet and fruity flavor develops during 2-3 weeks of sun-drying. It is stable for up to 15 months when stored in recommended conditions.

California Raisins contain 2.2% tartaric acid, a flavor enhancer. They also contain precursors of the Maillard reaction, which occurs during the browning of sugars.

California Raisins blend well with sweet flavors - vanilla, cinnamon and citrus. They also blend well with savory flavors - both mild and spicy.

California Raisins are plump, fresh-tasting and have a soft “chew” that mimics fat and richness. Raisins act as a fat-replacer in baked goods without the addition of significant amounts of water.

Their skin is not damaged by processing aids or by other processes. California Raisins retain their shape and integrity during manufacturing processes.

California Raisin sugars create a firm texture that can help bind dry ingredients.

At the same moisture content, California Raisins generally have a lower water activity than other dried vine fruits due to their intact skin and fructose and glucose content.

Naturally occurring organic acids including tartaric, propionic and glutamic acids provide valuable benefits to manufacturers.

Careful harvesting and state-of-the-art processing ensure a consistent product, crop year to crop year.

Quality backed by strict inspection procedures makes California Raisins best in the world.

**Benefits**

- A natural flavor that consumers recognize and value in food products
- Does not change during storage
- Not affected by manufacturing processes
- Function as flavor enhancers
- Flavor potentiators in roasted, baked and microwaveable products
- Excellent flavor background for savory dishes and ethnic foods
- Compatible with all sweet foods
- Offer pleasant chewiness in a wide range of products
- Not gritty, typically free from large sugar crystals
- Function well in fat-free baked goods, cookies and cakes
- Are not easily damaged during mixing
- Fruit plumps and keeps its integrity during microwaving and baking
- Will not collapse, builds volume
- A base ingredient in bars, snacks, cookies and other products
- Low water activity (Aw) allows use in low moisture snacks, confections and cereals
- Easily conditioned for bakery products
- Easy to formulate
- Enhance flavors
- Inhibit mold growth
- Natural preservative
- Consistent color and flavor
- Consistent chewiness
- Meaty and firm
- Afototoxin negative
- Low microorganism count