

# Milky Green Pearl Tea



## INGREDIENTS

	Usage Levels (%)
<b>Green Pearls</b>	<b>100.00</b>
Deionized water	88.4
Sucrose	10.0
Matcha green tea	1.0
Gellan gum	0.5
Xanthan gum	0.1
<b>Final Pearl Beverage</b>	<b>100.00</b>
Water	89.48
Sucrose	4.84
<b>Whey protein concentrate, 80% protein (WPC 80)</b>	<b>2.83</b>
Green pearls	2.00
Phosphoric acid	0.36
Natural green tea flavor	0.35
Matcha green tea	0.10
Potassium sorbate	0.04

## NUTRITIONAL CONTENT

Per 100g	
<b>Calories</b>	32kcal
<b>Total Fat</b>	0.2g
Saturated Fat	0g
Trans Fat	0g
Cholesterol	0mg
<b>Total Carbohydrates</b>	5g
Dietary Fiber	0g
Sugars	5g
<b>Protein</b>	2g
Calcium	3mg
Magnesium	1mg
Phosphorus	85mg
Potassium	12mg
Sodium	3mg
Iron	0mg
Vitamin C	0mg

## PREPARATION

Green Pearls

1. **Blend powders thoroughly.**
2. **Add water, stir 1 minute with lightning mixer, lowest setting. Stir at highest speed on stir plate for 30 minutes.**
3. **De-gas solution 30 minutes in vacuum flask.**
4. **Carefully pour solution into large buret. Avoid entraining air.**
5. **Lower buret to ~1 cm above 600 ml of a 5% (w/w) calcium chloride bath.**
6. **Drip solution slowly into bath, with gentle stirring.**
7. **Once all beads are formed, leave them in solution for 30 minutes.**
8. **Remove beads from solution with mesh colander. Rinse beads well with distilled water, store in deionized water.**
9. **Autoclave 25 minutes in 5-6 containers. Store in refrigerator.**

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## PREPARATION

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Final Pearl Beverage

1. **Add WPC 80 to half of the formula water at ambient temperature and hydrate for 30 minutes.**
2. **Add tea to remaining formula water, heat to 60°C (140°F) and hydrate until ready to use.**
3. **Add remaining ingredients and mix. Adjust pH to 3.2-3.4.**
4. **Pasteurize at 195°C (383°F) for 30 seconds and cool to 25°C (77°F).**
5. **Add 2% sterilized beads per bottle and seal.**

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This formula serves as a reference. Product developers are encouraged to modify the formula to meet manufacturing and finished product specification needs. Developed at the Wisconsin Center for Dairy Research, University of Wisconsin-Madison. ©2014 U.S. Dairy Export Council.