Whey Protein Cherry Switchel

When dairy protein is added to a centuries-old beverage like switchel (a vinegar and ginger drink), consumers get a refreshed option with added value. At just 120 calories per 8 oz. serving, inherently clean-label switchel is coming back with a kick, providing benefits that include improved muscle health thanks to 11g of high-quality protein from U.S. whey protein isolate.

MARKET INSIGHTS

- Consuming as little as 10g of whey protein can help speed up the repair process, improve muscle strength, reduce soreness and increase muscle synthesis to help extend the independent lifestyles of seniors.¹
- As manufacturers are placing a greater emphasis on how products are crafted and the sourcing of ingredients, functional and simple ingredients will continue to become more mainstream.²
- Research shows that consumers are looking for safer, healthier and more sustainable food options—37% of U.S. consumers find it necessary to understand ingredients on food labels and 91% believe that products with recognizable ingredients are healthier.³

INGREDIENTS

Usage Levels	
Filtered water	70.24
Tart cherry juice - Country Oven 100% Tart Cherry Juice	10.56
Apple cider vinegar - Heinz Apple Cider Vinegar	7.04
Granulated white cane sugar	5.87
Whey protein isolate	4.87
Malic acid powder - Tate & Lyle Malic Acid FCC Powder	0.76
Ginger flavor – Synergy Flavors WONF #549870	0.47
Cherry flavor powder - Northwestern Extract Co. N&A 400-32K	0.19
Total	100.00

INGREDIENTS: Filtered water, unsweetened cherry juice, apple cider vinegar, cane sugar, whey protein isolate, malic acid, natural flavors Contains: milk

BENEFITS OF USING U.S. DAIRY

Whey protein isolate

- High-quality, complete protein naturally found in milk that can be used to boost the protein content of foods
- Neutral flavor complements the food to which it is added, limiting the need for masking agents

Per 100g

 Provides functional properties that help emulsify, stabilize and improve texture and clarity

NUTRITIONAL CONTENT

U.S. Label

Nutri Serving Size			cts
Servings Per	Contair	ner	
Amount Per Ser	ving		
Calories 120) Ca	alories fro	om Fat 0
		% D	aily Value*
Total Fat 0g			0%
Saturated	Fat 0g		0%
Trans Fat	0g		
Cholesterol	0mg		0%
Sodium 20m	ng		1%
Total Carbo	hydrate	21g	7%
Dietary Fit	ber 0g		0%
Sugars 17	g		
Protein 11g	_		21%
Vitamin A 4%	•	Vitamin	C 0%
Calcium 6%	•	lron 2%	
*Percent Daily Va diet. Your daily va depending on you	alues may b	be higher or	
Total Fat Saturated Fat Cholesterol Sodium Total Carbohydra Dietary Fiber Protein	Less than Less than Less than Less than	65g 20g	80g 25g 300mg

Calories	51kcal
Total Fat	1g
Saturated Fat	Og
Trans Fat	Og
Cholesterol	Og
Total Carbohydrates	9g
Dietary Fiber	0.1g
Sugars	7g
Protein	4g
Calcium	28mg
Magnesium	3mg
Phosphorus	11mg
Potassium	42mg
Sodium	9mg
Iron	0.1mg
Vitamin A	81IU
Vitamin C	0.1mg





PREPARATION

- 1. Combine liquid ingredients.
- 2. Add dry ingredients and blend well with good agitation, avoiding entrapment of air.
- 3. Rest for 30 minutes to allow ingredients to hydrate.
- 4. Heat to 180° F (82.2°C) for 45 seconds.
- 5. Cool to 75°F (24°C).
- 6. Package as desired.

Rely on the dynamic lineup of U.S. Dairy to meet consumer demands in global product development. The U.S. Dairy Export Council[®] (USDEC) offers resources on **ThinkUSAdairy.org**, including a dairy ingredient supplier search, consumer, nutrition and product research, technical insights and prototype assistance to help develop and launch your next successful product. \bigcirc @ThinkUSAdairy in www.linkedin.com/company/ThinkUSAdairy

¹Witard OC, Jackman SR, Breen L, Smith K, Selby A, Tipton KD. Myofibrillar muscle protein synthesis rates subsequent to a meal in response to increasing doses of whey protein at rest and after resistance exercise. *Am J Clin Nutr.* 2014;99(1):86-95.

²Beverage Trends 2017. Food Business News website. http://www.foodbusinessnews.net/articles/news_home/Consumer_Trends/2017/01/Beverage_trends_2017 aspx?ID={91CAC791-716A-440F-8B0C-D4CB4592730E}. Updated Jan. 17, 2017. Accessed May 4, 2017.

³2017 Food Trends: Keep It Lean and Clean. Food Engineering website. http://www.foodengineeringmag.com/articles/96586-food-trends-keep-it-lean-and-clean. Updated March 28, 2017. Accessed May 2, 2017.

This formula serves as a reference. Product developers are encouraged to modify the formula to meet manufacturing and finished product specifications needs. Developed at the Wisconsin Center for Dairy Research, University of Wisconsin-Madison. ©2017 U.S. Dairy Export Council.

