

## 2,000-Calorie Food Plan for a 5'1" (155 cm), 110 lb (50 kg) 25-Year-Old Female Figure Skater (Gluten-Free Intake)

Energy-balance graph



Energy substrate distribution

Total calories: 2,018  
 Carbohydrate %: 61  
 Protein %: 18  
 Fat %: 21

Hours anabolic (calories > 0) = 24; hours catabolic (calories < 0) = 0; anabolic : catabolic ratio = >1 (no hr catabolic)

Hour	Description	Food	Amount	Calories	Activity
6-7 a.m.	Breakfast early in hour, followed by cycling	"Food for Life" brown rice gluten-free bread Cytomax	2 slices 2.25 scoops	219 226	30 min of stretching followed by a 30 min bike ride; important to start the day with enough calories to satisfy activity
7-8 a.m.	Skating early in hour, followed by whey protein drink	Whey protein isolate (gluten free)	1 scoop	78	An additional 30 min bike ride, followed by stretching exercises; a small amount of high-quality protein with resistance activity encourages enlargement of muscle mass
8-9 a.m.	Breakfast	Egg, boiled Baked potato, with skin Peppers, sweet, red, raw Spinach, raw Yogurt, plain, skim milk	1 large 1 small 1 cup sliced (96 g) 1/2 oz (15 g) 6 oz	70 116 30 3 95	A hearty breakfast; note the nontraditional foods consumed to sustain gluten-free intake
9-10 a.m.	Snack at 9:50 a.m.	Strawberries, fresh, raw Blueberries, fresh, raw Mango, fresh, raw Coconut, shredded	1/3 cup (50 g) 1/4 cup (40 g) 1/4 cup (40 g) 1 tbsp (7 g)	18 20 26 47	Workplace activity
10-11 a.m.	Relaxed activities	Water	As desired	0	Workplace activity
11 a.m.-12 p.m.	Relaxed activities	Water	As desired	0	Workplace activity
12-1 p.m.	Lunch	Water chestnuts, Chinese Broccoli, raw Carrots, baby, raw Chicken, light meat, roasted, no skin Almonds "Food for Life" brown rice gluten-free bread Water	4 nuts (45 g) 3/4 cup (70 g) 1.5 oz (45 g) 1 oz (30 g) 2 tsp (10 g) 1 slice As desired	44 24 16 49 58 110 0	It is unlikely that a gluten-free lunch would be available at the workplace, so this must be planned in advance and brought to work in a cooler to avoid spoilage
1-3 p.m.	Relaxed activities	Water	As desired	0	Workplace activity

3-4 p.m.	Midafternoon snack	Amy's black bean vegetable soup	1 can	279	This is an important snack while at work to sustain energy balance and blood sugar
4-5 p.m.	Light skating activity	Water	As desired	0	Drive home, stretch, and strength activities
5-6 p.m.	Predinner snack	Spinach, raw Carrots, raw	1 oz (50 g) 8 large (100 g)	12 41	This predinner snack is important to obtain needed nutrients and to sustain the desired anabolic state to help build muscle.
6-8 p.m.	Dinner	Tomatoes, red cherry Salmon, pink, canned Gluten-free Caesar dressing Food for Life brown rice gluten-free bread Peppers, sweet, red, raw Amy's lentil soup	½ cup (80 g) 2 oz (60 g) 1 tbsp ¾ slice ½ cup (75 g) ¼ can	14 79 75 82 23 89	This traditional dinner is composed entirely of gluten-free foods—there can be <i>no</i> exceptions in sustaining a gluten-free intake
8-9 p.m.	Relaxed activities	Water	As desired		Relax
9-10 p.m.	Evening snack	Peppers, sweet, red, raw Cashew nuts, dry roast, with salt	1/3 cup (60 g) 1/3 oz (10 g)	19 57	The evening snack is important to sustain blood sugar throughout the night

Note: 8 fluid ounces = 240 ml

#### Meal totals for selected nutrients

Total kcal:	2,018	Iron (mg):	15.78	Vit C (mg):	659	Vit B <sub>12</sub> (mcg):	4.11
Carbohydrate (g):	313	Calcium (mg):	935	Vit B <sub>1</sub> (mg):	.70	Folic acid (DFE):	461
Protein (g):	92	Zinc (mg):	6.15	Vit B <sub>2</sub> (mg):	1.54	Vit A (RAE):	2,777
Fat (g):	47	Magnesium (mg):	324	Niacin (mg):	16.08	Vit D (IU):	355
Sodium (mg):	1,019	Potassium (mg):	3,662	Vit B <sub>6</sub> (mg):	2.32	Vit E (mg):	14.9

*Note:* This athlete has celiac disease that was undiagnosed and resulted in a significant loss of muscle mass. After the diagnosis of celiac disease, the athlete has been maintaining a gluten-free diet and has adjusted her exercise and eating schedule to enable an enlargement of the muscle mass. The greater amount of time spent in an anabolic state (zero hours spent catabolic) is the energy balance profile for someone wishing to increase lean mass. This athlete has a very early workout for 1 hr followed by typical daily activities the rest of the day, with multiple eating opportunities to maintain an anabolic profile throughout the day.

**Source:** Energy balance and nutrient intake values were derived using NutriTiming.com