

Table 16.1: 2,100 Calorie Food Plan for 17-Year-Old Female, 5'0" 100 lb. Figure Skater

Energy balance

Energy substrate distribution



Total calories: 2127
 Carbohydrate %: 69
 Protein %: 15
 Fat %: 16

Hours anabolic (Calories > 0) = 12; Hours catabolic (Calories < 0) = 12; Anabolic : catabolic ratio = 1.0

Hour	Description	Food	Amount	Calories	Activity
6-7 am	Sleep				
7-8 am	Pre-exercise snack	Bagel, cinnamon-raisin Jam Grapefruit juice	1 3" bagel 1 tablespoon 8 ounces	156 56 102	Important to consume carbohydrate to support liver glycogen and blood sugar before exercise
8-9 am	Intense exercise, 60 minutes	Sports drink	8 ounces	62	Vigorous, high intensity exercise. Consumption of sports beverage during exercise important to sustain blood volume and blood sugar.
9-10 am	Warm-down and breakfast	Cereal, corn flakes Cereal, all bran Blueberries, raw/fresh Flaxseed, ground Milk, 1% fat Water	1 cup ¼ cup 1 cup 1 tablespoon 1 cup (As desired)	101 25 84 53 102 0	Breakfast should be consumed immediately after the post-exercise warm-down as possible.
10-11 am	Relaxed daytime activities				Any relaxed walking, sitting, household or school activities.
11-12 am					
12-1 pm					
1-2 pm	Lunch	Beans, refried, fat-free Cheese, cheddar Salsa sauce Flour tortillas, soft taco, 8 inch Carrots, baby, raw Pear, raw/fresh Water	¼ cup 1 tablespoon ¼ cup 1 serving ½ cup 1 medium pear (As desired)	46 61 17 146 42 103 0	Lunch should provide ample quantities of carbohydrate and fluids.
2-3 pm	Relaxed daytime activities				Any relaxed walking, sitting, household or school activities.
3-4 pm					

4-5 pm	Snack	Pretzels, hard, salted Yogurt, fruit, low fat	¾ ounce 1 cup	79 243	Snack is important to assure energy balance does not drop excessively low.
5-6 pm	Relaxed daytime activities				Any relaxed walking, sitting, household or school activities.
6-7 pm	Hydration	Sports drink	8 ounces	62	Sports drinks that contain carbohydrate and sodium are useful in returning to normal hydration state prior to next day's exercise.
7-8 pm	Dinner	Chicken breast, roasted, no skin	3 ounces	147	Dinner should be nourishing with a wide variety of vegetables and lean protein.
8-9 pm		Potato, baked, no skin	1 medium potato	145	
	Sour cream	2 tablespoons	46		
	Green beans, boiled	1 cup	44		
	Cabbage, raw	1 cup	18		
	Vegetable oil (canola)	1/3 tablespoon	41		
	Vinegar	1 tablespoon	3		
	Water	(As desired)	0		
9-10 pm	Dessert/snack	Pudding, vanilla Water	1 serving (4 oz) (As desired)	143 0	A pre-sleep snack is useful for assuring that the next day begins within the desirable energy balance bounds.
10-11 pm	Sleep				

Meal totals for selected nutrients

Total Kcal:	2,127	Iron (mg):	19.4	Vit C (mg):	176.7	Vitamin B12 (mcg):	7.39
Carbohydrate (gm):	381	Calcium (mg):	1243	Vit B1 (mg):	1.87	Folic Acid (dfe):	621.5
Protein (gm):	82	Zinc (mg):	9.05	Vit B2 (mg):	2.46	Vit A (rae):	1457
Fat (gm):	39	Magnesium (mg):	365.7	Niacin (mg):	28.4	Vit D (IU):	156
Sodium (mg):	3242	Potassium (mg):	3831	Vit B6 (mg):	3.65	Vit E (mg):	4.91

Notes: This type of exercise regimen might be typical of a skater who is involved in intensive training to improve power for better jumps. A review of the energy balance graph indicates that athletes of this weight and height who undergo this level of physical training and eat in the pattern described will sustain a good energy balance state throughout the day. This type of energy balance is associated with the ability to sustain a relatively low body fat percent while sustaining muscle mass.

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