



# How to Calculate Canada's Food Guide

## Servings for Mixed Dishes

Meals sometimes contain mixed dishes (such as casseroles, lasagna, pizza and other items) which have ingredients from more than one food group on [Canada's Food Guide](#).

To find how many servings from each food group are in a mixed dish, begin with the recipe ingredients used to make the dish.

Canada's Food Guide food group servings can be calculated in two ways:

A) Go to [Dietitians of Canada Recipe Analyzer](#).

The recipe analyzer provides the nutrients and the number of food guide servings in one serving of the recipe.

1. Enter the number of servings the recipe makes.
2. Add the ingredients and specify the quantity used.

B) Compare the recipe to Canada's Food Guide.

Step 1: What ingredients are used to make the recipe? Which food groups does the ingredient belong to?

Step 2: Calculate the number of food guide servings from each food group.

- How many food guide servings of each food group are in the total recipe?

Step 3: Divide food guide servings into the number of servings the recipe makes.

- How many servings does the recipe make?
- What is the number of food guide servings in one serving of the recipe?

## Example: Calculation of Servings for Mixed Dishes

The following is an example using Shepherd's Pie to determine what and how many [Canada's Food Guide](#) servings are found in one serving of the recipe.

### Shepherd's Pie

Makes 10 - 1 cup (250 mL) servings

#### Ingredients:

8 medium	Potatoes, peeled and halved	8 medium
1 Tbsp	Margarine	15 mL
½ cup	1% milk, warmed	125 mL
½ tsp	Salt	2 mL
½ tsp	Pepper	2 mL
2 tsp	Vegetable oil	10 mL
1 cup	Onion, minced	250 mL
1 cup	Celery, diced	250 mL
½ cup	Fresh parsley	125 mL
1 lb	Lean ground beef	454 g
4 Tbsp	All purpose flour	60 mL
2 Tbsp	Tomato paste	30 mL
½ tsp	Thyme	2 mL
1 tsp	Garlic powder	5 mL
1 tsp	Worcestershire sauce	5 mL
2 cups	Mixed frozen vegetables	500mL
1 tsp	Paprika	5 mL

#### Directions:

1. Preheat oven to 375° F (190° C).
2. In a large pot bring 2 L of water to a boil, add potatoes and cook until soft (20 to 25 minutes); drain potatoes
3. Add margarine, salt, pepper and milk to potatoes. Mash until smooth; set aside.
4. In a heavy pan, heat oil. Add onion and celery and cook on medium heat until soft. Add ground beef and cook until browned.
5. Add flour, stir for 1 minute, and add tomato paste, thyme, garlic powder, Worcestershire sauce and mixed vegetables. Stir well.
6. Add enough water to cover the vegetables (about 2 cups). Cook on medium heat until vegetables are soft and sauce is thickened.
7. Pour vegetable and meat mixture into a medium casserole pan.
8. Spoon mashed potatoes evenly over the meat and vegetable mixture; top with paprika.
9. Bake at 375° F (190° C) oven for 30 minutes or until potato topping is golden. Remove from oven.
10. Allow to sit for at least 15 minutes before cutting into 10 equal squares.

*Recipe source: Alberta Health Services*

**Step 1: What ingredients are used to make the recipe? Which food groups does the ingredient belong to?**

Canada's Food Guide Food Group	Main Ingredients
Vegetables and Fruit	Mashed potatoes, onion, celery, tomato paste, mixed frozen vegetables
Grain Products	None
Milk and Alternatives	Milk
Meat and Alternatives	Lean ground beef

**Step 2: Calculate the number of food guide servings from each food group.**

How many food guide servings of each food group are in the total recipe?

Main ingredients	Vegetables and Fruit	Grain Products	Milk and Alternatives	Meat and Alternatives
Potatoes <i>6 cups (1250 mL) mashed</i>	12			
Onion <i>1 medium, minced</i>	~1			
Celery <i>1 cup (250 mL), diced</i>	2			
Tomato paste <i>2 Tbsp (30 mL)</i>	~¼			
Frozen mixed vegetables <i>2 cups (250mL)</i>	4			
Milk, 1% <i>½ cup (125 mL)</i>			½	
Lean ground beef <i>1 lb (454g)</i>				6
<b>Totals</b>	<b>19 ¼</b>		<b>½</b>	<b>6</b>

### Step 3: Calculate the number of food guide servings in one serving of the recipe.

#### How many servings does the recipe make?

In this example, the recipe makes 10 servings of shepherd's pie. One serving of this recipe is equal to 1 cup (250 mL).

#### What is the number of food guide servings in 1 serving of the recipe?

To calculate the number of food guide servings in 1 serving of the recipe, take the total number of servings from each food group and divide by 10 portions.

- Vegetables and Fruit:  $19 \frac{1}{4}$  divided by 10 = 1.9 servings (2 servings)
- Grain Products: 0 servings
- Milk and Alternatives:  $\frac{1}{2}$  serving divided by 10 = 0.05 servings (0 serving)
- Meat and Alternatives: 6 servings divided by 10 = 0.6 servings ( $\frac{1}{2}$  serving)

One serving (1 cup/250 mL) of the Shepherd's pie recipe contains:

Canada's Food Guide Food Groups	Food Guide Servings per recipe serving (1 cup/250 mL)
Vegetables and Fruit	2
Grain Products	0
Milk and Alternatives	0
Meat and Alternatives	$\frac{1}{2}$

#### References:

British Columbia. Ministry of Health. [Meals and More Manual: A Food and Nutrition Manual for Homes of Adults and Children with 24 Persons or Fewer in Care](http://www.health.gov.bc.ca/library/publications/year/2008/Meals_and_More_Manual.pdf). [Online]. 2008 [cited 2012 March 01]; Available from: URL: [http://www.health.gov.bc.ca/library/publications/year/2008/Meals\\_and\\_More\\_Manual.pdf](http://www.health.gov.bc.ca/library/publications/year/2008/Meals_and_More_Manual.pdf)

Health Canada. [Eating Well with Canada's Food Guide: A Resource for Educators and Communicators](http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/pubs/res-educat-eng.pdf). [Online]. 2011; Available from URL: [http://www.hc-sc.gc.ca/fn-an/alt\\_formats/hpfb-dgpsa/pdf/pubs/res-educat-eng.pdf](http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/pubs/res-educat-eng.pdf)