# Case Study: Osteoporosis

## Assessment

Anthropometrics:

- GS is a 73 year old white woman
- BMI 18.9

#### Clinical

- Spinal curvatures (Kyphosis & Lordosis)
- Right hip fracture and hip replacement surgery
- Dx Osteoporosis (T-score -3.5)

#### Dietary

- Drinks coffee
- Low physical activity
- Stopped drinking milk as a teenager
- Eats little dairy-thinks it is fattening

History

• Sister has osteopenia

# Medical Treatment Plan

- Total hip replacement
- Forteo (PTH analog)
- Calcium and vitamin D supplement
- Daily rehab therapy for 4-6 weeks

# Diagnosis

Increased protein-energy needs related to hypermetabolism as evidenced by hip fracture and total hip replacement surgery.

Inadequate calcium intake (NI-55.1) related to inadequate nutrition knowledge as evidenced by reported food intake and osteoporotic fracture.

### Intervention

- Educate about importance of consuming dairy on bone health
- Educate about dairy and fat content
- Educate about good sources of Calcium and vitamin D

	Equations	Estimated Needs
Calories	25-30 kcal/kg	1285-1542 kcal
Protein	1.2-1.5 g/kg	62-77 g
Fluid	1 mL/kcal	1285-1542 kcal

# Monitoring

Follow up in two weeks with a food frequency questionnaire relating to dairy foods intake.

# Sample Diet

Breakfast	1 cup milk
	1 cup oatmeal
	1 sliced banana
	1 TBSP brown sugar
Lunch	1 cup cooked pasta
	3 oz chicken breast
	1.5 oz cheese
	<sup>1</sup> ⁄ <sub>2</sub> cup tomato sauce
	<sup>1</sup> ⁄ <sub>4</sub> cup diced onions
	1 slice garlic bread (with 2 tsp margarine)
Snack	1 cup yogurt
	1 cup raspberries
Dinner	1 cup mashed potatoes
	4 oz meatloaf
	½ cup gravy
	½ cup green peas
HS Snack	Chocolate Chip Cookie
	½ cup milk