



**BC Cancer Agency**

CARE & RESEARCH

An agency of the Provincial Health Services Authority

## ONCOLOGY NUTRITION

### **Healthy Eating Using High Energy, High Protein Foods**

Healthy eating is a combination of a balance and variety of foods. Nutrition plays an important role in your treatment and overall well-being. Often during treatment you may not feel like eating, as a result, find it difficult to maintain or gain weight. In this situation, you can benefit from high energy, high protein foods during your treatment or recovery.

This booklet provides you with high energy, high protein ideas which follow the guidelines for healthy eating. By using the tips provided, you can make every bite count by choosing nutrient-rich foods.

## **FREQUENTLY ASKED QUESTIONS**

### 1. Does high protein, high energy mean high fat?

High energy, high protein foods can be achieved without using excessive amounts of fat. Fat is still an important part of balanced meals so it should never be completely eliminated. Choosing the foods suggested in this booklet can help you to achieve a high energy, high protein diet with healthy food choices.

### 2. Does eating healthy mean becoming vegetarian?

Healthy eating does not mean that you should become vegetarian. Well balanced and interesting meals can include a variety of foods from both plants and animals. Animal foods (meats, fish, poultry, eggs and dairy) provide complete protein. Some plant foods (beans, peas, lentils, tofu, nuts and seeds) are good sources of protein, but may not provide the same quality protein as animal sources. If you are vegetarian, ask your dietitian to help you maximize the energy and protein in your meals.

### 3. What about snacking?

If you find eating large meals difficult, smaller meals and snacks will help you to maintain and gain weight. Snacking is an easy way to get additional protein and energy to meet your needs throughout the day. Keep your favourite snack foods on hand to make it easier.

### 4. What about fibre?

A well balanced diet includes a variety of foods rich in fibre. Whether or not you should follow a high fibre or low fibre diet will depend on your symptoms and type of treatment you are receiving. Ask your dietitian for advice on the appropriate amount of fibre for you.

5. Do I need to take vitamin supplements?

A multivitamin and mineral supplement may be necessary if you are unable to eat a variety of foods, or if you are eating less than usual. Check with your dietitian to see if you require a supplement. Any “one-a-day” brand sold in drug stores is acceptable.

Example: \_\_\_\_\_

Large doses of individual vitamins and minerals can be harmful and are not recommended.

6. Would I need to use nutritional supplements?

Nutritional supplements are high energy, high protein drinks that may be useful if you are having difficulty maintaining your weight with regular foods. There are many products on the market such as Ensure®, Boost®, or Carnation Instant Breakfast®. Home-made shakes (such as those found on page 8) can be just as nutritious and less expensive.

**WHAT TO DO WHEN YOU DON'T FEEL LIKE EATING...**

- Make every bite count by choosing high energy, high protein foods.
- Eat often. Try snacking every 2 hours.
- Eat larger meals when you have an appetite.
- Enjoy more of your favourite foods.
- Take a walk before your meal times to stimulate your appetite.
- Limit tea, coffee and broth soups as they are low energy foods.
- Limit light or diet products.
- Cook and freeze meals when you have energy.

**ENERGY BOOSTERS**

| <b>Food Product</b>   | <b>Where to Use</b>  |
|---|--|
| Nut and Seed Butters (e.g. peanut, almond, cashew)                        | <ul style="list-style-type: none"> <li>▪ On crackers or sandwiches</li> <li>▪ In sauces</li> <li>▪ In shakes</li> <li>▪ In baking</li> </ul>   |
| Plain Yogurt  | <ul style="list-style-type: none"> <li>▪ Use in sauces, dips or salad dressings</li> <li>▪ On potatoes or mix with mashed potatoes</li> </ul>  |
| Flavoured Yogurt  | <ul style="list-style-type: none"> <li>▪ As toppings for fruit salad or dessert</li> </ul>   |
| Hummus  | <ul style="list-style-type: none"> <li>▪ As a dip for vegetables and bread</li> <li>▪ As a filling for a sandwich</li> </ul>   |
| Pesto Sauce   | <ul style="list-style-type: none"> <li>▪ On pasta or pizza</li> <li>▪ On fish or chicken</li> <li>▪ On potatoes</li> </ul>   |
| Fruit Drinks/Fluids   | <ul style="list-style-type: none"> <li>▪ Fruit and vegetable juices</li> <li>▪ Seltzers and spritzers</li> <li>▪ Nectars</li> </ul>  |
| Mayonnaise or Tofu Mayonnaise (look for Tofunaise® in your grocery store) | <ul style="list-style-type: none"> <li>▪ In sandwiches and fillings</li> <li>▪ In cold salads (e.g. pasta salad)</li> <li>▪ In dips</li> <li>▪ As a topping for baked fish</li> </ul>                    |
| Jams/Jellies/Honey and Syrup  | <ul style="list-style-type: none"> <li>▪ In plain yogurt or tapioca pudding</li> <li>▪ On breads, bagels, muffins</li> <li>▪ On pancakes, waffles, cereals</li> <li>▪ In custards, milkshakes</li> </ul> |
| Olive or Canola Oil   | <ul style="list-style-type: none"> <li>▪ In stir fries</li> <li>▪ Dip bread in olive oil and balsamic vinegar</li> <li>▪ In pasta and sauces</li> <li>▪ In salad dressings and marinades</li> </ul>      |
| Flaxseed Oil  | <ul style="list-style-type: none"> <li>▪ Up to 1 tbsp/day</li> <li>▪ Mix with nut butter for sandwiches</li> <li>▪ Use in salad dressing</li> </ul>  |

**Eat what you can when you can!**

## PROTEIN BOOSTERS

| Food Product     | Where to Use:   | Food Product  | Where to Use:   |
|------------------|---|---|---|
| Dairy/Soy Cheese | <ul style="list-style-type: none"> <li>As topping on potatoes, perogies and pizza</li> <li>Add to pasta or bean dishes</li> <li>Add to omelettes, hamburgers or veggie burgers</li> <li>In sandwiches or with crackers</li> <li>Sprinkle on salads</li> </ul>         | Nuts and Seeds  | <ul style="list-style-type: none"> <li>Mix with granola, raisins, breakfast cereals, carob chips or enjoy as snacks</li> </ul>  |
| Cottage Cheese   | <ul style="list-style-type: none"> <li>With fruit</li> <li>In dips</li> <li>In pasta and casserole dishes (e.g. lasagna, manicotti)</li> <li>On crackers or toast with cucumber and tomato</li> </ul>   | Eggs  | <ul style="list-style-type: none"> <li>Make French toast</li> <li>Add to salads</li> <li>Use extra egg whites in baking and cooking</li> <li>Make meringues as a dessert</li> <li>Swirl beaten eggs in soups</li> </ul> |
| Skim Milk Powder | <ul style="list-style-type: none"> <li>Add to 2% milk to make high protein milk (¼ cup to 1 cup)</li> <li>Add to milk based soups, sauces, hot chocolate, hot cereals or pancake batter</li> <li>Add to mashed potatoes</li> </ul>                                    | Meat, Fish and Poultry  | <ul style="list-style-type: none"> <li>Add to casseroles, soups, salads, omelettes, quiche, pasta and sandwich fillings</li> </ul>  |
| 2% Milk/Soy Milk | <ul style="list-style-type: none"> <li>Use in place of liquids in recipes</li> <li>Quench your thirst with milk rather than water</li> <li>Use in hot and cold cereals, hot chocolate or Ovaltine®</li> </ul>   | Wheat Germ  | <ul style="list-style-type: none"> <li>Sprinkle on yogurt, cereals, salads, frozen yogurt or fruit desserts</li> <li>Use in baking</li> </ul>   |
| Tofu             | <ul style="list-style-type: none"> <li>Crumble/cube and add to sauces, lasagna, chili, soups and stir frys</li> <li>Blend soft tofu into milkshakes or vegetable dips</li> <li>Try prepared tofu products, such as: wieners, patties, hot dogs or desserts</li> </ul> | Quinoa<br>(a high protein grain, available in your grocery store) | <ul style="list-style-type: none"> <li>Use in soups</li> <li>Mix with fruits and vegetables to make tasty salad</li> <li>Use in place of rice</li> </ul>  |
|                  |   | Legumes<br>(dried beans, peas and lentils)                        | <ul style="list-style-type: none"> <li>Include in main entrees, such as: chilies, sauces, salads or soups</li> <li>Make a bean dip or spread</li> </ul>   |

## QUICK AND EASY FOODS

### Super Snacks

- Granola
- Fig Newtons®
- Baked nachos and salsa or refried bean dip
- Apple or celery with cheese or peanut butter
- Whole wheat bagels or English Muffins with cream cheese
- Muffins
- Frozen Yogurt or Ice Milk
- Minigo (smooth yogurt cheese)
- Trailmix (mixed nuts, seed, dried fruit)
- Thick sliced bread dipped in balsamic vinegar & olive oil

### Boostin' Beverages

- Yops® (yogurt drink)
- ☞ Carnation Instant Breakfast® made with high protein milk
- Steamed high protein milk with honey
- Vegetable and fruit juices
- Soy milk
- Olvaltine®, Horlicks® or hot chocolate made with high protein milk
- ☞ Milkshake and fruit shakes

☞ = *recipe provided*

## QUICK AND EASY FOODS

### Delicious Prepared Products

- Instant soups which contain higher protein, such as:  
Couscous and lentil curry, red beans and rice, primavera pasta or chicken noodle, beef barley
- Canned soups made with 2% milk
- Baked beans (use on top of potatoes or toast)
- Canned tuna or salmon
- Hot cereals (Red River®, Flaxseed)
- Jarred pasta sauces and dried pasta

### Ethnic International Dishes

- Perogies (add yogurt or cheese)
- Samosa, Potstickers
- Veggie burgers (add some cheese for extra protein)
- Baked fish fillets
- Pizza, burritos
- Pasta dishes

## MARVELOUS MENU IDEAS

### Breakfast Ideas

- French toast
- Cottage cheese and fruit
- Omelette with cheese and veggies
- Toasted bagel/bread and nut butters
- Hot cereal made with high protein milk
- Muffin with jam
- Cheese or fruit scone with jam
- 🍷 Tofu fruitshake

#### Sample Breakfast Menu

½ cup cereal with high protein milk  
1 cheese scone and jam  
Tofu Fruitshake

### Lunch and Supper Ideas

- Soup made with fortified milk
- Potato, pasta, bean or grain salad
- Sandwiches with your favourite fillings
- Vegetarian pizza
- Grilled sandwich with cheese or tuna filling
- Soft taco with refried beans and veggies
- Tuna or meat casserole

#### Sample Lunch Menu

1 vegetarian pizza  
1 cup high protein 2% milk  
1 piece fruit

🍷 = recipe provided

## MARVELOUS MENU IDEAS

### Lunch and Supper Ideas Con't

- Garlic honey chicken
- Chicken and brown rice casserole
- Marinated salmon fillet
- Macaroni and cheese
- Shepherd's pie
- Vegetarian chili
- Vegetable and beef stir fry

#### Sample Supper Menu

1 piece garlic honey chicken  
1 cup mixed vegetables and couscous  
½ cup frozen yogurt  
1 cup fruit juice spritzer

- Pavlova
- Angel food cake
- Yogurt and fruit
- Frozen yogurt or sherbet and fruit sauce
- Fig Newtons®
- 🍷 Quinoa vanilla pudding

🍷 = recipe provided

## RECIPES

### Beef and Lentil Soup

|              |   |       |
|--------------|---|-------|
| ½ lb         | Lean ground beef or chicken                           | 250g  |
| 1            | Large onion, chopped                                  | 1     |
| 1 tbsp       | Butter or margarine                                   | 15mL  |
| 1 ½ cups     | Lentils, uncooked                                     | 375mL |
| 10 cups      | Beef or vegetable broth<br>(boullion cubes work well) | 2.5L  |
| 5 oz (½ pkg) | Spinach, chopped                                      | 142g  |

1. Sauté beef/chicken, onion and margarine in a large pan.
2. When meat is browned, add lentils, broth, spinach, salt and pepper. Cover and cook until lentils are tender (approx. 20 minutes).
3. Serve with a squeeze of lemon juice.

Makes 10 cups (2.5L)

Serving size: 1 ½ cups (375mL)

194 Calories, 17 grams protein

### Tofu Fruitshake

|         |                                   |       |
|---------|-----------------------------------|-------|
| 1/3 cup | Soft or firm tofu                 | 100g  |
| 2 tbsp  | Sugar or pasteurized honey        | 30mL  |
| ½ cup   | Soy milk or yogurt                | 125mL |
| 1 cup   | Fruit juice                       | 250mL |
| ¼ cup   | Skim milk powder                  | 60mL  |
| 1       | Ripe banana (or other ripe fruit) | 1     |

1. In a blender combine all ingredients and blend thoroughly, until you get a smooth consistency.

Makes 2 cups (500mL)

Serving size: 1 cup (250mL)

195 Calories, 12 grams protein

### Chicken and Brown Rice Casserole

|          |                                    |          |
|----------|------------------------------------|----------|
| 4 cups   | Canned tomatoes with Juice         | 1L       |
| 1 cup    | Brown rice, raw                    | 250mL    |
| 4        | Chicken breast halves,<br>skinned  | 4        |
| 4        | Scallions, finely chopped          | 4        |
| 1 stalk  | Celery, finely chopped             | 1 stalk  |
| 2 tbsp   | Olive oil                          | 30mL     |
| 2 tbsp   | Fresh parsley, coarsely<br>chopped | 30mL     |
| 2 tsp    | Dried basil                        | 10mL     |
| 1 tsp    | Dried oregano                      | 5mL      |
| ½ tsp    | Chili powder                       | 2mL      |
| ½ tsp    | Paprika                            | 2mL      |
| 2 cloves | Garlic, minced                     | 2 cloves |

1. Place the tomatoes and rice in a saucepan. Cover and heat to a boil, then reduce the heat and simmer for 15 minutes.
2. Cut the chicken into bite-size pieces.
3. In a casserole dish, heat the oil, then quickly sauté the chicken until golden. Add the celery and scallions, and stir together until slightly softened.
4. Add parsley, oregano, chili, paprika, and garlic.
5. Add the tomato/rice mixture to the casserole dish and stir.
6. Bake at 375°F for 40 minutes.

Makes 6 cups (1.5L)

Serving size: 1 cup (250mL)

267 Calories, 27 grams protein

### Marinated Salmon Fillets

|         |                                      |         |
|---------|--------------------------------------|---------|
| 2       | Salmon fillets                       | 2       |
| 1 large | Garlic clove, crushed                | 1 large |
| 2 tbsp  | Olive oil                            | 30mL    |
| 2 tbsp  | Water                                | 30mL    |
| 1 tsp   | Dried basil                          | 5mL     |
| 2 tbsp  | Lemon juice                          | 30mL    |
|         | Freshly ground black pepper to taste |         |

1. Mix garlic, olive oil, water, lemon juice, basil and pepper and pour over fish. Refrigerate for an hour.
2. Bake at 425°F for about 10 minutes.

Makes 2 fillets

Serving size: 1 fillet

338 Calories, 23 grams protein

### High Protein Milk

|        |                  |       |
|--------|------------------|-------|
| 1 cup  | Skim milk powder | 250mL |
| 4 cups | 2% Milk          | 1 L   |

1. Combine skim milk powder and 2% milk.
2. Mix well. Use instead of regular milk in cream soups, puddings, on cereals, in hot chocolate, and for drinking.

Makes 4 cups (1L)

Serving size: 1 cup (250mL)

193 Calories, 15 grams protein

### Tofu Spinach Dip

|              |   |       |
|--------------|---|-------|
| 1 pkg (454g) | Sunrise medium firm tofu, well drained                | 1 pkg |
| 1 pkg (62g)  | Knorr's swiss vegetable soup or potage-puree soup mix | 1 pkg |
| 1 cup        | Tofunaise or mayonnaise                               | 250mL |
| 1 can        | Water chestnuts, drained and chopped (optional)       | 227mL |
| 1 pkg (300g) | Frozen chopped spinach, thawed                        | 1 pkg |

1. Combine all ingredients and blend until well mixed. Refrigerate the dip overnight to enhance flavour.

Makes 2 cups

Serving Size: 1/3 cup

225 calories, 13g protein

### Flax Oil Dressing

|        |                                  |      |
|--------|----------------------------------|------|
| ¼ cup  | Flax oil                         | 60mL |
| ¼ cup  | Water                            | 60mL |
| 3 tbsp | Lemon Juice                      | 45mL |
| 2 tbsp | Fresh basil or 2 tsp Dried Basil | 30mL |
| 1 tsp  | Finely chopped garlic            | 5mL  |
|        | Freshly ground pepper to taste   |      |

1. Combine all ingredients in a blender or food processor and blend thoroughly.

Makes ¾ cups

## Quinoa Vanilla Pudding

|       |                         |       |
|-------|-------------------------|-------|
| 1 pkg | Instant vanilla pudding | 1 pkg |
| 1 cup | High protein 2% milk    | 250mL |
| 1 cup | Quinoa, cooked          | 250mL |
| ¼ cup | Raisins                 | 60mL  |
|       | Cinnamon (optional)     |       |

1. Make vanilla instant pudding as per box instructions, using the high protein milk.
2. Add quinoa, raisins and cinnamon. Mix well and chill.

Makes 2 cups (500mL)

Serving size: ½ cup (125mL)

312 Calories, 10 grams protein

### Cooking Quinoa

| Dry Quinoa    | Water          | Yield          |
|---------------|----------------|----------------|
| ¼ cup (60mL)  | ½ cup (125mL)  | 1 cup (250mL)  |
| ½ cup (125mL) | 1 cup (250mL)  | 2 cups (500mL) |
| 1 cup (250mL) | 2 cups (500mL) | 4 cups (1L)    |

1. Bring water to boil.
2. Add quinoa (rinsed well), bring back to boil, cover and cook on medium heat for 12 minutes or until water is absorbed.
3. Remove from heat, fluff with a fork, and let stand for 15 minutes.

1 cup (250mL) cooked quinoa provides 636 Calories and 22 grams protein

### Recipe Sources:

- The 20 minute Natural Foods Cookbook by Sharon Claessens
- Assorted recipes from the Diet and Breast Cancer Prevention Trial
- Cooking with Merna Rosen by Merna Rosen
- Healthy Eating makes a difference by Sheila Murphy
- High Energy High Protein Ideas by Oncology Nutrition BC Cancer Agency

### Other Suggestions:

If you have other concerns with eating, such as a sore mouth or throat, difficulty chewing or taste changes, please, ask your dietitian for more information.

This information is not meant to replace the medical counsel of your doctor or individual consultation with a registered dietitian. This information may only be used in its entirety.

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