Wise Food & Lifestyle Choices For Better Overall Health

## THE IMPORTANCE OF PROTEIN IN YOUR DIET

# FOOD FOR THOUGHT

#### YOUR BODY DEPENDS ON PROTEIN

Have you ever wondered... why protein matters? How much you need? What the best food sources are? These are all good questions, since protein is vital to every cell in your body!

- Proteins are an important part of your:
- > muscles and bones
- > skin, hair and nails
- > organs
- > immune system



## Every cell in your body depends on protein!

#### WHAT ARE PROTEINS?

Proteins are macronutrients - an essential source of energy to fuel your body. Proteins also provide building blocks (called amino acids) to support cell and tissue growth and repair. A variety of different foods can help you meet your protein needs. Eggs, poultry, meat, fish, milk products and soy can provide you with a complete source of protein. Proteins from plant sources such as whole grains, beans, peas, nuts and seeds can also help you meet your protein needs, even though they are considered incomplete proteins.

#### **PROTEIN BENEFITS**

- > growth and development
- > tissue formation and repair
- > brain and nervous system function
- > immune system function
- > vitamin and mineral performance
- transporting nutrients and oxygen
- > enzyme function
- hormone function
- source of energy

#### HOW MUCH PROTEIN DO YOU NEED?

The amount of protein your body needs depends on your age and gender. Other factors such as your level of physical activity and your health status may also affect your protein needs.

Current recommendations suggest there's a range of healthy protein intakes.<sup>1</sup> Healthy adults are encouraged to get 10-35% of their total calories from protein.<sup>1</sup> This translates to a range of about 50 to 175 grams of protein for an adult that eats 2,000 calories a day.

Table 1 shows the Recommended Dietary Allowance (RDA), which represents the **minimum** daily protein requirements to prevent deficiency. The daily RDA for adults, is 0.8 grams of **good quality protein** per kilogram of body weight.<sup>1</sup>

Current evidence suggests most people can benefit from protein intakes above the RDA.<sup>2-6</sup>

#### TABLE 1

## RECOMMENDED DIETARY ALLOWANCES (RDA) FOR PROTEIN

LIFE STAGE & GENDER	AGE	RDA g/kg/day	GRAMS PER DAY*
Infants	7 to 12 mths	1.2	11
Children	1 to 3 yrs	1.05	13
Children	4 to 8 yrs	0.95	19
Children	9 to 13 yrs	0.95	34
Teenage boys	14 to 18 yrs	0.85	52
Teenage girls	14 to 18 yrs	0.85	46
Men	19 yrs & over	0.80	56
Women	19 yrs & over	0.80	46
Pregnant	All ages	1.1	71
Breastfeeding	All ages	1.3	71

\*The grams per day amounts are based on a reference body weight and your needs may differ based on your weight. Keep in mind the RDA is a minimum amount for healthy individuals.

#### **OPTIMAL HEALTH**

Our bodies need a regular supply of protein to build and repair tissues like our muscle and bone. Recent research indicates that eating more protein than the RDA can help support optimal long-term health.<sup>2-6</sup>

#### **HEALTHY AGING**

Experts suggest at least 1.2 grams of high quality protein per kilogram of body weight is a more ideal amount to help prevent muscle loss in older adults.<sup>3</sup> It's important to spread our protein intake throughout the day. Our bodies break down muscle protein in between meals and can't store surplus protein in the form of protein to use later.

Eating enough protein at each meal can help to prevent sarcopenia. As excess protein is not stored, it is important to spread its intake throughout the day to slow muscle loss; especially as we age.

For healthy adults, experts suggest about 25-30 g of high quality protein at each meal, breakfast, lunch and dinner.<sup>3-5</sup> This may help to prevent or slow muscle loss as we age.<sup>5</sup>

Tip: Be sure to include a source of high-quality protein in your breakfast which is typically the meal that has the least protein.



#### **ATHLETIC PERFORMANCE**

You may also want to leverage the power of protein for peak performance if you are an athlete. A higher daily protein intake of 1.2 to 2.0 grams of protein per kilogram of body weight is also recommended for athletes.<sup>7</sup> Current guidelines suggest athletes aim to consume protein after exercise and over 3 to 4 meals a day to maximize the benefits.<sup>7</sup>

#### **HEALTHY WEIGHTS**

If you are watching your weight, it's good to know protein can help keep you feeling fuller for longer than carbohydrate or fat.<sup>8</sup> Higher protein diets with 1.2 to 1.6 grams of protein per kilogram of body weight may promote appetite control and weight management. <sup>3,8</sup> Some studies have found higher protein weight loss diets may also help improve risk factors for heart disease and diabetes such as triglyceride, LDL cholesterol, and insulin levels.<sup>8</sup>

#### **PROTEIN QUALITY**

Not all protein is created equal. The quality of protein varies in different foods. Protein quality is based on two key factors:

- 1. The balance of amino acids in the protein.
- 2. The ease with which the protein is digested.

High quality complete proteins provide all 9 of the essential amino acids our bodies need.

#### **Complete Proteins:**

- Are found in foods such as eggs, poultry, meat, fish, milk, and soy.
- These high quality proteins have a well-balanced amino acid pattern that closely matches our body's needs.

#### **TYPES OF AMINO ACIDS**

The amino acids in the protein we eat are classified in three groups based on whether they are essential:

**1. Indispensable amino acids** — there are 9 essential amino acids that we must get from our diet because our body cannot make them.

**2. Dispensable amino acids** – are considered nonessential because our body can make them.

**3. Conditionally indispensable** – can normally be made by our body; however not in some cases such as in premature infants.

Complete Proteins provide all 9 of the ESSENTIAL AMINO ACIDS our body needs. Methionine, Phenylalanine, Tryptophan, Histidine, Lysine, Valine, Isoleucine, Threonine, Leucine

#### HEALTHY BALANCE

Protein is one of the three macronutrients (protein, fat and carbohydrate) our bodies need.

If you eat too little protein, some of the protein in your muscles can be broken down to provide essential amino acids for critical body functions. Over time, that can lead to muscle loss. Too much protein may also be a problem, since our bodies need a healthy balance of macronutrients.

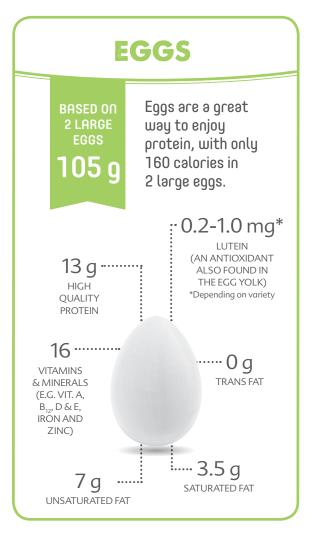
# Aim for a healthy variety and balance of nutritious foods.

Learn more about how to eat well with Canada's Food Guide at food-guide.canada.ca

#### EGGS - A NATURALLY NUTRITIOUS CHOICE

Eggs have long been recognized as a natural source of high quality protein. In fact, traditionally egg protein was used as a standard reference for measuring the protein quality of other foods. Egg protein provides an excellent balance of amino acids that closely matches our body's needs.

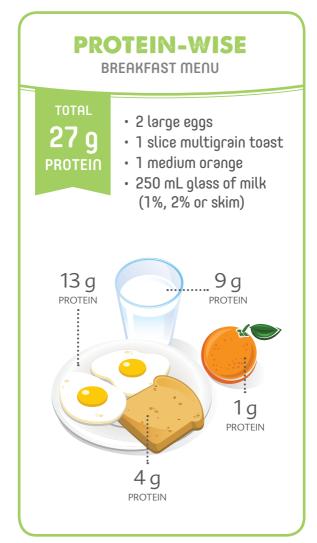
Canada's Food Guide recommends eggs as a protein food. Health Canada considers 2 eggs a serving.



#### START YOUR DAY OFF RIGHT

When it comes to getting enough protein, it makes sense to focus on breakfast.<sup>3</sup> That's because the morning meal often falls short on protein. Table 2 shows an example of a balanced breakfast menu.

TABLE 2



### EARMS-FERMES EGGG Creations. REALEGGS. REALEGSS. REALEASY.

**BURNBRAE** 





- Made with real eggs
- · Good source of protein
- Source of 12 important vitamins and minerals\*
- · Fat free

\*per 1/3 cup (100g) serving.





#### CHOOSE THE BURNBRAE FARMS NATUREGG™ THAT'S RIGHT FOR YOU.



100% Pure egg whites Cholesterol free and fat free

Simply Egg Whites™ Free Run



Naturegg™ Omega Plus™ Liquid Each serving (100 g) provides:

- $\cdot$  200 mg of DHA + 200 mg of EPA omega-3
- $\cdot$  0.8 mg of lutein
- Source of Vitamin D

Naturegg™ Omega Plus™ Eggs Each 2 large egg serving (105 g) provides: · 245 mg of DHA

- + EPA omega-3
- · 1 mg of lutein
- Source of Vitamin D

# SAVE 75¢

FR ON PURCHASE OF SPECIFIED HANDLING FEE WE, IN OUR SOLE DISCRETION, ITEMS SP CIFIED **FRA** a use REI MA CT FRAUDULENT REDEMPTION HAS OCCURRED. REI TO THE RETAIL DISTRIBUTORS WHO REDEEMED COUPONS. 4FI A REDUCT IV AP LICABLE TAXES PAYABLE IS INCLUDED IN THE COUPON FACE VALUE. FOR REDE A MAIL COLIPON TO: BURNBRAF FARMS, P.O. BOX 31000, SCARBOROUGH, ON, M1R 0F7. STORE COUPON: LIMIT ONE COUPON PER CUSTOMER. EXPIRY DATE: MARCH 31, 2022. TM TRADEMARKS OF BURNBRAE FARMS LIMITED



#### **REFERENCES:**

- Institute of Medicine. Dietary Reference Intakes for Energy, Carbohydrate, Fibre, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids. Washington DC National Academy Press, 2005.
- Pencharz PB, Elango R, and Wolfe R. Recent developments in understanding protein needs – How much and what kind should we eat? Appl Phisiol Nutr Metab, 2016; 41:577-580.
- Phillips S, Chevalier S, and Leidy HJ. Protein "requirements" beyond the RDA: implications for optimizing health Appl Physiol Nutr Metab, 2016; 41:565-572.
- Layman DK et al. Defining meal requirements for protein to optimize metabolic roles of amino acids. Am J Clin Nutr, 2015; 101(6):13305-13385.
- Paddon-Jones D and Rasmussen BB. Dietary protein recommendations and the prevention of sarcopenia: protein, amino acid metabolism and therapy. Curr Opin Clin Nutr Metab Care, 2009; 12(1):86-90.
- Layman DK. Dietary guidelines should reflect new understandings about adult protein needs. Nutr Metab, 2009; 6:12.
- Position of the Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and Athletic Performance. Can J Diet Pract Res. 2016 Mar; 77(1):54.
- Leidy HJ et al. The role of protein in weight loss and maintenance. Am J Clin Nutr, 2015; 101(6): 13205-13295.

This information is for educational purposes and is not intended to replace advice provided by your doctor or dietitian.



#### www.burnbraefarms.com ™Trademarks of Burnbrae Farms Limited. © 2020