# protein 101 a key nutrient

### why is protein so important in your diet?

Protein is a true multi-tasker when it comes to helping your body.

- Builds bones, muscle, skin, and blood.1
- Helps build enzymes, hormones, and vitamins, all essential for our bodies.1
- Helps cells talk to each other when building molecules in your body.<sup>2</sup>
- Keeps you fuller for longer.

#### what are essential amino acids?

Protein is made up of smaller links called amino acids. Your body makes some of these links but not all. Essential amino acids are the ones your body cannot make and must get from food.



animo acids

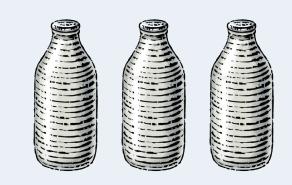
protein

# a special dairy protein you should get to know

Not all sources of protein are created equal. High-quality proteins are usually animal proteins. They contain all the essential amino acids that keep your body running.

Cow's milk is a unique package of nutrients designed for developing minds and bodies. This sets dairy protein apart from any other source of protein. Casein and whey proteins are the 2 main types of protein you'll find in milk-based dairy products.

Whey is a great source of one particular amino acid, leucine. This amino acid may have a role in regulating glucose and may be helpful for those with blood sugar concerns.<sup>4,5</sup>



protein in a glass of milk<sup>®</sup>

80% casein 20% whey

# how much protein is enough?

- For the average healthy adult who is not heavily exercising, studies suggest 0.8-1.2 grams of protein per 1 kilogram bodyweight<sup>3</sup> (hint: 1 kilogram = 2.2 pounds!)\*
- Studies recommend splitting your protein needs and eating equal amounts per meal, so your body is constantly nourished throughout the day.<sup>2,3</sup> For example, include a cup of yogurt in your morning smoothie and top your lunchtime salad with a boiled egg.
- Be sure to include both plant and animal proteins if your lifestyle allows.
- Recommended protein depends on amount of exercise so speak with your dietitian or physician to see how much protein you should be getting!

\*Protein needs will increase if you are very active or recovering from injury or illness.

### guide to common sources of protein and serving sizes

protein source	serving size	grams of protein
animal meat (beef, chicken, fish)	<b>3 oz =</b> palm sized	20-25g
eggs	1 egg	5-7g
nuts and seeds nut butter	<b>1 oz =</b> a handful <b>2 Tbsp =</b> a thumbs up	6-10g
beans and peas	1/2 cup cooked = 2 golf balls	6-10g
hummus	<b>2 Tbsp =</b> 2 thumbs up	2-4g
strained yogurt	<b>6 oz =</b> a fist	12-16g
tofu (firm, soft, or silken)	4 oz = a deck of cards	10-12g

1 <https://www.choosemyplate.gov/eathealthy/protein-foods>

- <sup>2</sup> Protein and healthy aging Paddon-Jones D, Campbell WW, Jacques PF, Kritchevsky SB, Moore LL, Rodriguez NR, van Loon, LJ Am J Clin Nutr 101(6) 2015 Jun 1339S-1345S
- <sup>3</sup> Dietary protein intake and human health Wu G Food Funct 7(3) 2016 Mar 1251-1265
- <sup>4</sup> Emerging Evidence for the Importance of Dietary Protein Source on Glucoregulatory Markers and Type 2 Diabetes: Different Effects of Dairy, Meat, Fish, Egg, and Plant Protein Foods Cornerford, KB and Pasin, G Nutrients 8(8) 2016 Aug 446

<sup>5</sup> Power of Protein: Quality Matters! National Dairy Council 2017 Dec <a href="https://www.nationaldairycouncil.org/content/2017/power-ofprotein-quality-matters">https://www.nationaldairycouncil.org/content/2017/power-ofprotein-quality-matters</a>