

## MORE THAN JUST A PROTEIN BAR

The **Muscle Nation CUSTARD** Beetroot and Raspberry Protein Bar is more than just a protein bar - it is a crafted, clean energy snack that is powered by antioxidant-rich raspberries and performance-boosting beetroot to fuel recovery, endurance, and everyday wellness.

Designed with the **health conscious consumer** in mind - this protein bar is for all active individuals who value both taste and nutritional **transparency** in food products.

The purpose of this product is to **reduce and simplify the lengthy and complex ingredient** - users should be able to identify and pronounce the ingredients they are consuming.

Although the Beetroot and Raspberry Protein Bar is a line extension from the popular supplement brand, **Muscle Nation**, the flavour is **New-to-the-World** - taking inspiration from Chef, Lei Shang. The flavour offers a **unique combination of sweet and tart** from the natural ingredients, whilst delivering **more than 15g of protein** - **without the "protein-y" and artificial taste**. The Beetroot and Raspberry Protein Bar only uses the most essential and natural ingredients, leaving out the unnecessary additives and fillers - solving consumer problems relating to ingredient transparency and the extensive ingredient lists found on the majority of protein bars.



**>15g Protein**  
**>3g Fibre**

**Functional Ingredients**

WARNING: NOT SUITABLE FOR CHILDREN UNDER THE AGE OF 18. THIS PRODUCT IS NOT A MEAL REPLACEMENT. SHOULD ONLY BE CONSUMED IN CONJUNCTION WITH A BALANCED DIET.

## MUSCLE NATION

# CUSTARD

## BEETROOT AND RASPBERRY

### PROTEIN BAR

more than just a Protein Bar

Raspberry Filling  
Vanilla Protein  
CUSTARD  
Beetroot Blondie

High Protein Choc Coating



## ENVIRONMENTAL IMPACT

The Beetroot and Raspberry Protein Bar has been designed with **sustainability as a core constraint** - relating to both the product itself and its packaging. The primary protein source (whey protein) is sourced from the [Robertson Cheese Factory](#) - a local dairy producer. According to Ramos et al. (2021), the world produces around 24,000,000 tonnes of cheese, resulting in approximately 21,600,000 tonnes of whey! To comply with environmental legislations relating to the ethical and environmentally responsible disposal of whey, the cheese industry has been looking to repurpose the cheesemaking byproduct. The Protein Bar repurposes this ingredient by using **whey as the protein source, actively supporting the circular economy**, transforming food waste into a functional and valuable nutrient. Along with this, the Protein Bar packaging is developed from **paper-based materials**. It features a recyclable outer layer and a thin, food safe internal layer that preserves freshness. Together, these choices reflect a conscious effort to minimise environmental impact.

## EXTENSIVE VALUE & QUALITY

The value of the Beetroot and Raspberry Protein Bar extends beyond cost. To set this protein bar apart from the others within the saturated health food market, the bar contains functional ingredients. The two featuring ingredients; raspberries and beetroot are considered functional foods - meaning that these foods provide added health benefits in addition to being a source of nutrition (Ajmera, 2020.)

Raspberries are widely recognised as a functional food due to their rich levels of nutrients (including vitamin A, C and E, potassium, folate and magnesium etc (The Health Benefits of Raspberries, 2022.)), polyphenols (including ellagic acid and anthocyanins) and phytochemicals, which contain antioxidant and anti-inflammatory properties (Golovinskaja & Wang, 2021.) The bioavailable antioxidants found in raspberries target the oxidative stress and inflammation that is produced by the muscles after intensive exercise - therefore reducing fatigue, soreness and increasing rate of recovery and muscle repair. The antioxidant compounds also contribute to fighting obesity and obesity related disease through their ability to reduce the risk of carcinogenesis - the development of cancer cells (Azzini et al., 2024.)

Beetroot is another natural functional food that is associated with many health benefits - particularly valued for its fibre, folate, vitamin B9, magnesium and vitamin C content. The beetroot has been receiving increasing attention relating to its function, especially the present betalains (betanin) and nitrates. Chen et al. (2021) explains how betalains eliminate oxidative and nitrate stress (just like raspberries) by preventing DNA damage and reducing LDL. The antioxidant and anti-inflammatory properties of beetroot are also suggested to enhance physical performance by improving blood flow and oxygen efficiency - releasing to reduced fatigue and improved energy expenditure (Chen et al. 2021.)