CARBERY

# WHEY PROTEIN INGREDIENTS

## for Performance Nutrition



carbery.com/nutrition

**CONSUMER MOTIVATIONS**

# Built for a more demanding category



Performance nutrition is a well-established and demanding category, shaped by consumers who buy with purpose and rely on products to play a clear role within training and performance routines.

For the industry, that raises the standard. Protein has to do more than contribute to nutrition. It needs to strengthen product credibility and perform effectively across specialist formats and help build a portfolio that feels relevant across different usage moments and performance needs.

Beyond nutrition, protein should enhance product credibility, perform across specialist formats, and enable a portfolio that meets diverse usage occasions and performance requirements.

SCIENCE OF PROTEIN FOR PERFORMANCE

# Why protein choice matters more in performance nutrition

The science of performance nutrition begins with the demand for more protein. As training intensity and exercise frequency increases, so too does the need for protein that can meet more specific nutritional and practical requirements. For performance-focused consumers, quantity is only part of the picture. Protein quality, digestibility, digestive comfort and format suitability also matter when developing products for this space.

## HIGHER PHYSIOLOGICAL DEMAND

Protein needs can rise significantly with activity level. While general adult requirements are around 0.8g/kg body weight per day, physically active individuals may require 1.2–1.6g/kg, with athletes in intense training often needing 1.6–2.2g/kg.

## DIGESTIVE COMFORT AND SPEED

How protein is digested can matter as much as how much protein is delivered. Whey protein isolate offers a low-lactose option, while hydrolysed whey protein is broken down into smaller peptides, supporting formats designed for digestive comfort and a more targeted nutritional benefits.

## HIGH-QUALITY PROTEIN RELEVANCE

Whey protein is a complete protein, providing all 9 essential amino acids, and is recognised for its high digestibility. With a PDCAAS of 1.0, it is considered a high-quality protein that supports muscle protein growth through muscle protein synthesis and reduced breakdown.

## FORMAT FLEXIBILITY

Performance nutrition brands increasingly compete across multiple formats. Whey protein supports that broader opportunity through high solubility, favourable sensory performance and functional benefits including emulsification, foaming and gelation, helping brands work across powders, beverages, bars and other convenient formats.

**PRODUCTS**

# Isolac®

## High-purity whey protein isolate for performance nutrition

Isolac is Carbery's whey protein isolate solution for performance nutrition applications where protein quality, purity and formulation flexibility are key. With high protein content and very low levels of fat and lactose, it offers a clean, efficient protein option for brands developing products for active, performance-focused consumers.

Its clean taste profile and broad application suitability makes Isolac a strong fit across performance formats where both nutritional credibility and functional performance matter. Whether the goal is to develop ready-to-mix beverages or other ready-to-consume convenient formats, Isolac provides a versatile foundation for performance nutrition innovation.



**KEY HIGHLIGHTS**

- 90% protein
- Low fat and lactose
- Clean taste profile
- Suited to a range of performance nutrition formats

**PRODUCTS**

# Optipep®

## Hydrolysed whey protein for specialist performance applications

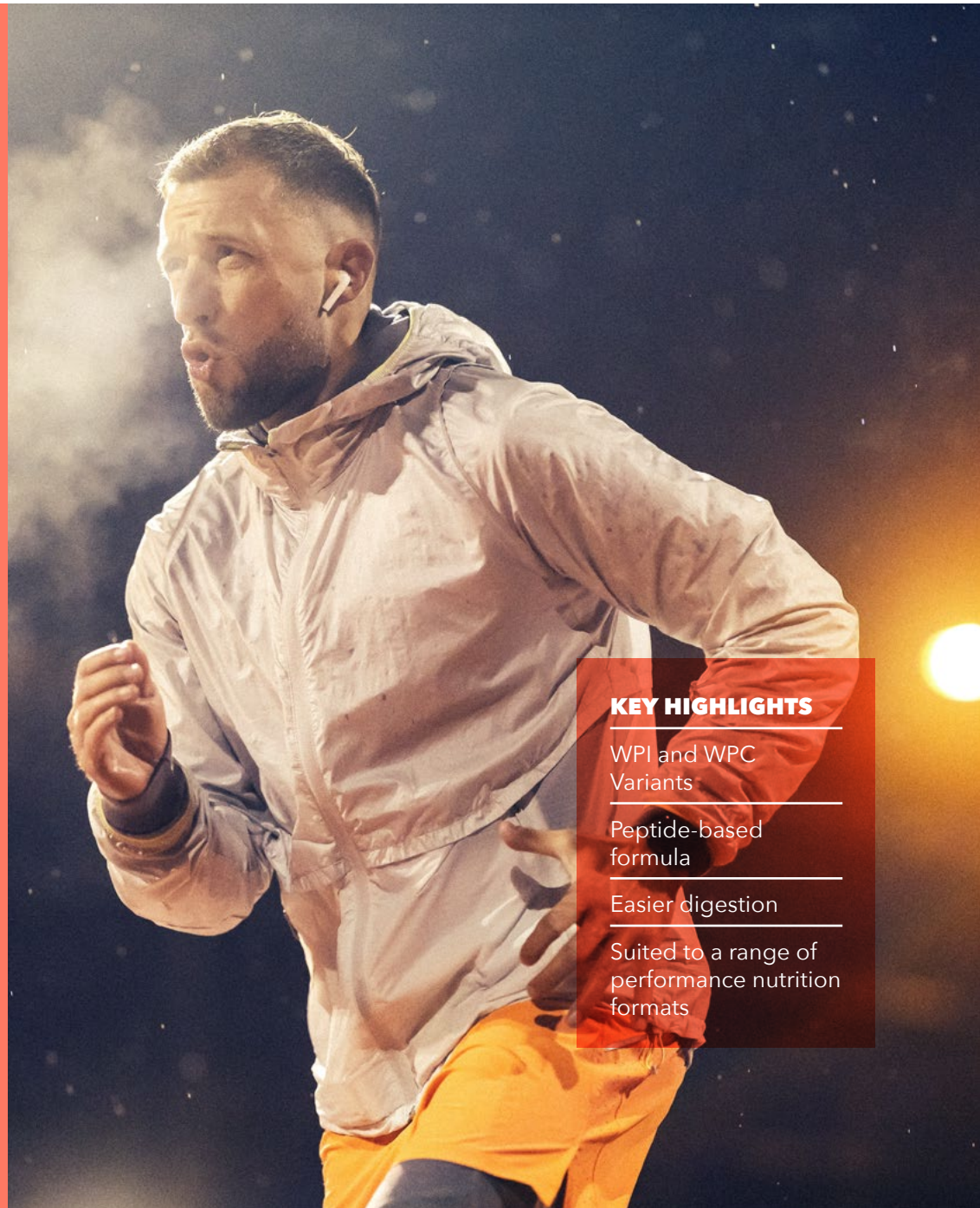
Optipep is Carbery's hydrolysed whey protein solution for performance nutrition products that call for a more specialised protein format.

Produced through enzymatic hydrolysis, the protein is broken down into smaller peptides, creating a targeted ingredient option for advanced sports nutrition products and other specialised performance applications. It offers brands a more versatile whey protein solution within the Carbery performance portfolio.

**Optipep®**
4 Bars

**Optipep®**
Heat Stable

**Optipep®**
90 PRO



**KEY HIGHLIGHTS**

- WPI and WPC Variants
- Peptide-based formula
- Easier digestion
- Suited to a range of performance nutrition formats

FORMAT SPOTLIGHT

# Ready to mix

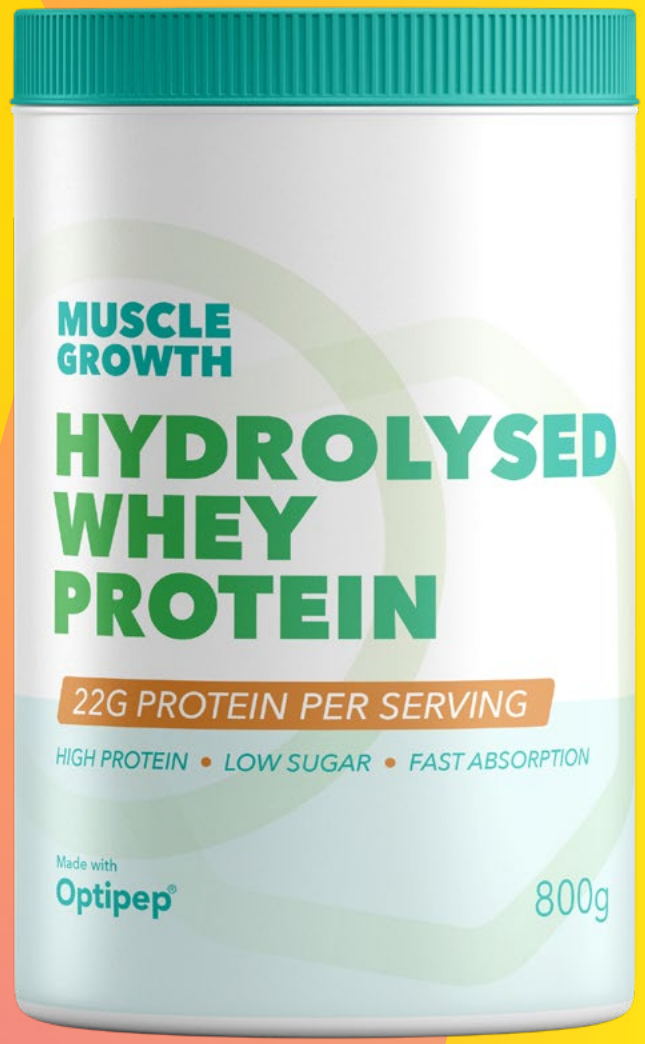
## Where protein quality meets everyday performance use

Ready-to-mix powders continue to play a central role in performance nutrition. Their strength lies in their flexibility: they can fit easily into structured routines, support a wide range of performance propositions and serve as a practical foundation for brands building out a broader product portfolio.

For consumers, RTM offers familiarity and control. For brands, it creates an opportunity to deliver high-quality protein in a format that needs to work hard on both nutritional credibility and user experience.

### WHAT THIS FORMAT DEMANDS

- Strong protein credibility
- Good solubility and mixability
- Clean taste and palatability
- Flexibility across performance propositions
- Clear fit within a broader brand portfolio



**FORMAT SPOTLIGHT**

# Ready to drink

Protein shakes have become a key format in performance nutrition, offering brands a convenient, accessible way to deliver protein.

The ready-to-drink format appeals to consumers due to its ease of use and practicality. No mixing, no preparation, and an easy fit within busy routines before or after training, or as part of everyday protein intake. Shakes offer an opportunity to combine performance positioning with greater convenience, but they also raise expectations for taste, texture, and mouthfeel. To succeed, the protein solution needs to support nutritional credibility while helping deliver a smooth, enjoyable user experience.




**WHAT THIS FORMAT DEMANDS**

- High protein quality and credibility
- Smooth texture and good palatability
- Clean taste and flavour balance
- Stability across liquid formulations

**FORMAT SPOTLIGHT**

# Protein Bars

Bars play an important role in performance nutrition by combining protein delivery in a convenient snackable format for on the go.

They can support a range of propositions, from recovery and muscle support to sustained energy and everyday performance nutrition. For consumers, bars offer a practical option that fits easily into the lifestyle of a performance athlete. Bars provide a valuable way to extend a performance portfolio beyond powders and drinks. This format brings its own challenges. Protein has to work within a more complex sensory environment, supporting texture, flavour and shelf life as well as nutritional intent. Carbery has the capability and expertise to deliver this solution.




**WHAT THIS FORMAT DEMANDS**

- Strong protein positioning
- Good texture and bite
- Balanced flavour performance
- Formulation flexibility
- Relevance within a broader performance portfolio
- Consistent performance over shelf life

CARBERY

# PARTNERS IN PROGRESS

### Performance Application Expertise

Deep knowledge of performance nutrition formats, helping brands select whey protein solutions that align with the intended proposition, user need and product brief.

### Formulation Confidence

Guidance in choosing whey protein solutions that balance nutritional intent, sensory performance and format demands within performance nutrition applications.

### Portfolio Building Support

Support in developing whey protein solutions across multiple performance formats, from RTM powders to RTDs, bars and more specialised concepts.

### Taste & Flavour Expertise

Deep expertise in taste, flavour modulation and sensory optimisation, helping brands develop performance nutrition products that combine whey protein performance and a satisfying taste experience.

### Commercial Reliability

Consistent quality, supply and technical support to help brands build performance nutrition products with greater confidence.

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