A world of health benefits
The history, value and versatility of porcine collagen - and its exciting potential, for today’s health & nutrition market.

rousselot.com  peptan.com
Porcine collagen has a rich legacy: it has been used throughout human history, from helping our distant ancestors to survive in a harsh environment until the present day, in which pork accounts for almost 40% of all global meat consumption and plays a significant role in our diets.

Despite this long history, many people across the world are only just beginning to discover the power of porcine collagen: they are finding that porcine collagen is as strong as collagen from any other source, and an ingredient with a huge wealth of health benefits and application options.

This document explores this claim. By examining the role of porcine collagen in human development, its nutritional significance, and its current global resurgence, it affirms the vital importance of porcine collagen to human diets - and how it deserves to be valued accordingly. In Section II, the importance of safety, traceability, and standards in porcine collagen sourcing will be considered. By describing the distinct position of EU-sourced pigs and the strict regulations surrounding them, it will be shown that Rousselot’s porcine collagen brand, Peptan® P, is fully safe and of the highest quality available on today’s market. At the close of this document, you will find recipes that use Peptan P, underlining its versatility and health benefits, helping you to get started with this unique and highly marketable health and nutritional ingredient.

Now is the time to rediscover porcine collagen and integrate it into our lives as part of a healthy lifestyle, following in the footsteps of our ancient forefathers. When harnessed in a premium product like Peptan P, porcine collagen represents the very highest in quality, safety, and versatility – a truly exceptional ingredient.
This section explains what porcine collagen is, looks at its history, and explores how it is currently making an exciting comeback throughout the world. While overlooked in recent times as a health and nutrition source, pork has been a solid and respected part of our diets for many thousands of years.

WHAT IS COLLAGEN?

Collagen is a key structural protein that’s found in all animals, humans included. Here are some key facts about the body’s most important building block:

- It makes up around 30% of the proteins in our bodies.
- Collagen plays a pivotal role in our bodies, ensuring the cohesion, elasticity, and regeneration of our connective tissues.
- The highest concentrations of collagen are found in connective tissues, bones, and skin: in essence, it’s the glue that binds everything together.
- This form of unprocessed collagen is known as ‘native collagen’.

Native collagen, however, is hard to digest. In order for consumers to take advantage of its natural benefits, it needs to be processed into collagen peptides for bioavailability. This process, known as ‘hydrolyzation’, involves breaking down the molecular bonds between individual collagen strands, turning them into small peptides, which can then be digested and absorbed by the human body. These peptides can then be used in a wide range of highly beneficial supplements, which can support our health from bone and joint health and anti-aging to fitness recovery and skin beauty.
PORCINE COLLAGEN: A STAPLE THROUGHOUT HUMAN HISTORY

Pork is one of the most popular meats in the world, accounting for 36% of global meat intake. Many consumers and even manufacturers are unaware of its relationship to collagen and gelatin. While you may not have heard of porcine collagen, you’ll have probably heard of pork gelatin, a common gelling agent derived from pigs. If you’ve ever slowly boiled a ham hock or pork shoulder, you may have noticed that the liquid becomes a jelly when it cools: that is a basic form of gelatin. This gelatin is rich in porcine collagen peptides and is more bio-available than native pork collagen. However, pure collagen peptides offer an even higher digestibility.

How porcine collagen has evolved

In the struggle for survival, our early human ancestors could not afford to be wasteful. They will have used every part of the pig, including trotters, bones, and connective tissues (such as cartilages), all of which contain high levels of collagen. These parts would have been boiled up to form thick broths and stews, full of all the nutrients needed to live. As civilization progressed, humans discovered that you can extract collagen from thick broths and use it as an ingredient. Eventually, this evolved into aspic, a savory jelly that has become a vital part of all kinds of dishes all over the world.

One such dish was brawn, or ‘head cheese’, which originated in Europe and quickly spread. Brawn is simply meat, typically pork head-flesh, that’s set in aspic. It’s then sliced and eaten, hence the name ‘head cheese’. To this day, variations of brawn can be found around the world:

- The Vietnamese have thịt nấu đông
- Russians have kholodets, which is popular at Christmas
- In France and Britain, aspic is the jelly in pâté en croute and pork pie respectively

Aspic isn’t the only way to keep this tradition alive. In eastern Asia, pork products are extremely popular, with porcine collagen a key part of Asian diets:

- Okinawans stew their pork slowly, helping to release a healthy dose of collagen
- In Japan, Tonkotsu Ramen, created from pork bones, contains a lot of collagen
- In China, pig trotters, which contain a large amount of collagen, are very popular

If you consider that humans have been cooking pork for tens of thousands of years, and that porcine collagen is extracted and made more digestible by the cooking process, it’s safe to say that porcine collagen has been a key part of our diets throughout our history.

A favorite for tens of thousands of years

Porcine collagen has played a key role in human nutrition throughout history: archaeological evidence suggests that pigs were among the first animals to be domesticated by early humans.

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1 'Meat in your diet', NHS (https://www.nhs.uk/live-well/food-and-nutrition/)
11 ‘Ukrainian Aspic Recipe (Kholodets)’, Natasha’s Kitchen
13 ‘Okinawan Pork Stew’, Allrecipes (https://www.allrecipes.com/recipe/okinawan-pork-stew/)
AND THE RESURGENCE CONTINUES...

In Japan, collagen peptides are in huge demand as they offer many health and beauty benefits. Many of these supplements are derived from porcine collagen, owing to the prominence of pork in Japanese cuisine.

The worldwide popularity of the Keto diet highlights the resurgence of pork. Fatty meats such as pork belly and rind are a staple of the diet, with consumers – perhaps most notably in the US – turning to crispy pork rinds instead of chips - a great source of porcine collagen.17, 18

Pork belly or rinds are essentially pork skin, the raw material for porcine collagen peptides.

The recent craze for ‘bone broth’ is another example: like our ancestors, people are using collagen-rich broths as a way of improving their diets. This trend is helping to fuel the comeback of porcine collagen: people are turning towards affordable staples such as pig trotters, bones, and cheeks, and in doing so, are rediscovering just how tasty and nutritious these collagen-rich meals can be.19

A central part of our diets throughout human history, porcine collagen still plays an essential role in our lives, due to its excellent health benefits, nutritional function, and adaptability as an ingredient. Its current global resurgence highlights both its value and versatility, whether it’s being cooked as part of delicious meals, taken as a health supplement, or even used as a skin cream. Put simply, there are good reasons why our ancestors relied on porcine collagen, and why it is currently making a resurgence around the world.

Across the world, porcine collagen continues to take a central place in our lifestyles.

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In the next section: how clean and safe is porcine collagen?

One factor that for a time held back the potential growth of porcine collagen was the notion that it is inferior in comparison to other sources. The next section unravels this notion, looking at the high standards of health, safety, and traceability in porcine collagen peptide production, how EU-sourced pork is the best of them all – and why it makes sense that this vital source of nutrition is reclaiming its rightful position in today’s diets and lifestyles.

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22 Lauren Stussy, ‘New keto menu proves that the diet’s taking over NYC’ New York Post (https://nypost.com/2019/03/14/new-keto-menu-proves-that-the-diets-taking-over-nyc/).
When it comes to nutraceutical ingredients like porcine collagen, the importance of quality, safety, and traceability cannot be emphasized enough. In order to get the cleanest, most effective, and most ethical products, the source must be put through a rigorous quality control process.

SAFETY, TRACEABILITY, AND STANDARDS IN THE PORCINE INDUSTRY

SIMPLY THE BEST AND THE SAFEST: THE HIGH QUALITY OF EU PORK SOURCES

Europe is the leading source of porcine collagen that Rousselot manufactures. With strict rules that safeguard the welfare of pigs and rigorous regulations that lead to the highest safety and traceability standards across the board, the EU produces among the safest, cleanest, and most ethical porcine products. Let’s take a closer look at the underpinning regulations that make EU porcine the best source.

Feed

Feeding is an integral part of animal rearing: safe animal food is important for the health of the animal, the environment, and for the safety of products from an animal origin. The EU’s strict regulations help keep feed clean and natural. For example:

- The basis of feeds for pigs are predominantly plant materials like roughage, wheat, maize, corn, and soy
- Nutritional quality is improved by including minerals and supplementary fat and protein sources, usually of plant origin
- In processed animal products, potential hazards are eliminated through production processes like heat treatment
- There is a strict ban on feeding processed animal proteins and by-products and raw meat to pigs
Welfare

The EU Council Directive 2008/120/EC sets standards for pig welfare. Key pork producing countries, such as the Netherlands, France, Germany, the UK, Denmark, Spain, and Poland, maintain strict regulations to meet the highest ethical and safety standards. Examples include managing the use of sow stalls and farrowing crates, the banning of antibiotics for growth promotion, and regulations regarding castration, as well as many more.

Overall Safety Measures

To uphold strong safety standards in the EU, large regulating bodies have been set up to manage the overall safety of the industry, such as the European Food Safety Authority (EFSA). Alongside this, numerous directives, statements, and regulations have been written, aimed at preserving the highest safety standards throughout the entire industry.

REGULATION (EC) No 183/2005 Feed Hygiene

- This regulation ensures that approval can only be given after an on-site visit confirming that the site meets all the infrastructure and equipment requirements.
- It states that the water used in feed manufacture shall be of suitable quality for animals.
- It also dictates that feed processing and storage facilities, equipment, containers, crates, vehicles, and their surroundings shall be kept clean, alongside effective pest control programs.

DIRECTIVE 2002/32/EC Animal Feed

- This directive states that products intended for animal feed must be sound, genuine and of a quality fit to sell; therefore, they must not represent any danger to human or animal health, as well as to the environment and livestock production.
- The directive states that through the increasing sophistication of industry methods, it is possible to detect the residue of undesirable substances that have a negligible impact on animal and human health.
- It also states that the presence of undesirable substances must be limited by setting appropriate maximum levels.

Adhering to these detailed standards, alongside many others, ensures that EU pork products are the cleanest and safest around, and are fully fit for human consumption.
SAFETY IN MIND:
ROUSSELOT AND PEPTAN P

With more than 125 years history, Rousselot is dedicated to producing high-quality ingredients that are 100% safe and traceable. For the production of Peptan collagen peptides, we only source porcine material from the European Union. This means we can offer our assurance of receiving products sourced from the highest quality material and produced under the most stringent safety and traceability measures that exist on today’s market. In this section, we highlight the key safety measures that make our porcine collagen peptides, Peptan P, a 100% safe, clean label, and traceable ingredient.

Production and quality

As a trusted partner of major food and pharmaceutical manufacturers around the world, we appreciate the importance of high quality and excellent safety like no other. Peptan P is produced in Rousselot’s state-of-the-art factories in Europe, which are certified by international bodies of accreditation: International Featured Standard (IFS), Federal Agency for the Safety of the Food Chain (FASFC), International Organization for Standardization (ISO), Hazard Analysis and Critical Control Point (HACCP), and many more.

We are a member of Gelatine Manufacturers of Europe (GME), meaning that, alongside other gelatin and collagen peptide suppliers, we are dedicated at improving and standardizing our products, services, and health and safety. We comply with the highest industry standards set forth by GME, including those on ecologically-correct production, sustainability, animal welfare, and more. None of the material used to create Peptan P comes from Genetically Modified Organisms, as defined by European Directive 2001/18/EC.

Furthermore, Rousselot has made numerous statements certifying the safety behind its products. For example:

- ‘All porcine raw materials come from establishments registered by the European Union’
- ‘Rousselot exclusively sources its raw materials from authorized establishments providing animals fit for human consumption, inspected by veterinarians as well as compliant with all the relevant best practices, methods and regulations that pertain to the welfare of animals. Furthermore, all suppliers are audited by Rousselot and are required to comply with our stringent quality and regulatory specifications.’
- ‘We certify that Collagen is produced with pig skins deemed fit for human consumption.’

100% of the pigs used to produce Peptan P were raised domestically in Europe. By exclusively sourcing our porcine material from the European Union, we offer our customers the certainty that we are working with safe, clean and high quality raw materials available on today’s market produced under rigorous safety and traceability measures.
ACCRREDITATION AND REGULATION

Peptan P has been recognized and confirmed as safe by major regulating bodies: 29, 30, 31

- Generally Recognized as Safe (GRAS) in the US
- The World Health Organization (WHO)
- The European Food Safety Authority (EFSA)

In addition, Peptan collagen peptides are regulated in the EU by the regulation (EC) No. 853/2004, which covers all aspects of production from the raw materials to the final product.

Traceability

When dealing with animal materials, traceability is exceptionally important. Traceability is the ability to track any individual product or substance through each stage of its production, processing, and distribution line. A high degree of traceability helps ensure that products containing animal material are fit for human consumption. Plus, it helps to manage potential risks and keep each production segment accountable for its safety procedures.

Rousselot takes the utmost care with its choice of raw materials and its suppliers, submitting them to strict quality control and audit programs. For us, demonstrable traceability is a vital part of our field; for all Peptan P batches, we are able to trace back within four hours of where the material was sourced. Through this, we can ensure that our products are of the highest quality and safe to consume.

Strict quality control sensory testing panels

Our experts implement specific R&D innovation and strict quality procedures to ensure that Peptan P is neutral to the senses, resulting in consumer products that taste great. This is achieved through two levels:

- With our manufacturing expertise, we avoid the formation of undesirable substances that may affect taste and odor
- Our Quality Control Laboratory has set up a full sensory panel, similar to those used in the flavorings industry. Through this expert panel, we can maintain the Peptan properties, ensuring that our commercial products meet our customer expectations. With this recognized evaluation method for organoleptic properties, we can produce a versatile, neutral, and easy-to-use ingredient
Peptan P is a premium bioactive collagen peptide ingredient, sourced from the best EU-raised pigs. 100% safe, natural, and traceable, Peptan P is a clean label ingredient that offers a broad range of scientifically-backed health benefits, from healthy aging and joint & bone health to skin beauty and sports nutrition. Here are four fundamental elements behind Peptan P:

**WHAT DOES PEPTAN® P OFFER?**

**Trust**
- A premium bioactive collagen peptide ingredient, produced with a carefully controlled enzymatic hydrolysis with high bioavailability
- Only produced from the highest quality of raw materials
- Backed up by substantial scientific evidence
- Produced by the world’s leading collagen peptide manufacturer
- Recognized globally for high quality and health benefits

**Quality and safety**
- Produced in the state-of-the-art ISO 9001, IFS and HACCP certified plants.
- Sourced from the best EU animals
- Certified by major regulating bodies: Generally Recognized as Safe (GRAS) in the US; European Food Safety Authority (EFSA) in Europe; and the global World Health Organization (WHO)
- 100% traceable to within four hours from source
- A clean label ingredient, free from any preservatives or additives
- Subject to strict quality control and audit programs
- Do not come from and are not produced from Genetically Modified Organisms (GMO)

**Versatility**
- Easy to integrate, without affecting taste, texture, or mouthfeel
- No limit to potential applications, cold water soluble: from food and sports drinks to powder and gummies
- Can be added to home-cooked dishes for a powerful health boost – for some ideas, take a look at our list of recipes in the next section

**Expert support**
- Our expert R&D and application teams based in Ghent will support you, helping you to tailor your product to the market
- Our world-class expertise center in Ghent can help you perfect your formulation, finding healthier solutions through innovation
- Creative product and application solutions
- Science and nutritional advice
- Formulation optimization, keeping the consumers in mind
- Regulatory support
CONCLUSION: REDISCOVERING PORCINE COLLAGEN PEPTIDES WITH PEPTAN P

Did you know that Peptan IIIm, Hydrolyzed Collagen Type II Matrix also exists in porcine version that comes from the EU?

Extracted from natural sources, Peptan IIIm is a unique hydrolyzed cartilage matrix that contains hydrolyzed collagen Type II in the form of bioactive peptides and glycosaminoglycans - chondroitin sulfate and hyaluronic acid. Peptan IIIm can simultaneously support multiple joint health benefits at a low daily dosage.

Visit peptaniim.com to find out more!

Pork has played a key role in human nutrition throughout history. For our ancient ancestors, porcine collagen was essential: it helped them survive, thrive, and eventually spread throughout the world.

Today, porcine collagen is quickly regaining its status as a powerful ingredient offering outstanding health benefits: whether cooked as part of a hearty meal or used for its effect on beauty or mobility, porcine collagen is an exceptional source. Similarly, porcine collagen is as safe as any other collagen source, especially when subject to the highest health and safety standards. The current resurgence of porcine collagen, then, does not come as a surprise. Now is the time to rediscover porcine collagen and its quality, safety, versatility and to integrate it into our diets and lifestyles. Peptan P brings together the very best of this remarkable product's properties, offering manufacturers and consumers a truly premium porcine collagen ingredient.

At Rousselot, we are dedicated to producing only the best and safest ingredients. For this reason, Peptan P are made with EU-sourced pigs - the safest and highest in quality worldwide. Rousselot’s state-of-the-art factories, compliance with strict regulations, devotion to full traceability, make Peptan P 100% safe, clean-label, and traceable - vital in today’s world. With scientifically-backed health benefits, you can be assured of its value. With neutral taste and odor, and its excellent solubility, Peptan P is in powder form and you can integrate it into any application without disturbing the taste, texture, or mouthfeel – giving your product a solid health boost with no drawbacks. For home cooking, too, Peptan P offers a versatility that other products can’t match. With its quality, safety, and versatility, Peptan P is the premium porcine collagen – and the perfect product with which you can start your journey with porcine collagen.
FAQS

What is the difference between collagen, gelatin and collagen peptides?
Native collagen is composed of large triple helix chains of amino acids and strengthens the structure of our body. It is not soluble. Gelatin is obtained by partial hydrolysis of collagen. This process occurs when collagen triple helices are broken down to the point where they are pulled apart into individual strands. Gelatin will only dissolve in hot water, and will jellify when it is cooled (this is the same gelatin you would get in the bone broth you prepare at home). When gelatin is hydrolyzed even further, those individual strands of protein are broken down into small peptides of amino acids. Collagen peptides are soluble in cold water, highly digestible and ready to be absorbed by our bodies.

Are the health benefits offered by porcine collagen peptides different from those of collagen peptides from other sources?
The benefits offered by porcine collagen are the same as those from other sources. When collagen is hydrolyzed, whether it’s from porcine, fish, or bovine sources, the triple helix is rendered into short- and medium-sized peptides as well as amino acids that are highly digestible, absorbable and bioavailable. The absorbed collagen peptides and amino acids appear one hour after ingestion in the blood reaching targeted tissues such as bone, cartilage, and skin. Furthermore, multiple scientific studies using porcine collagen peptides have highlighted significant health benefits, such as skin beauty and bone health.32,33,36,37,38,39

Do porcine collagen peptides have a strong taste or odor?
Absolutely not, all Peptan collagen peptides are neutral in taste and odor regardless of the source. Peptan P undergoes several purification steps, which are monitored under several purification steps, which are monitored under strict quality procedures to ensure that it’s neutral to the senses, resulting in consumer products that taste great.

How do I know which porcine collagen product I should choose?
It is important to ensure that you choose the products containing collagen ingredients that come with a quality and safety guarantee. The easiest way is to look for collagen peptides from a renowned collagen supplier.

Rousselot is the world’s leading gelatin and collagen peptides producer. Founded in 1891, Rousselot has perfected their ingredients over time, gaining invaluable market experience along the way. With Rousselot’s Peptan, you can be sure that your product is of the highest quality and 100% safe, thanks to our quality and performance indicators.

33 Rousselot data, 2013.
Cereal Bar with Peptan P Collagen Peptides

A delicious and healthy snack, this cereal bar can help you maintain youthful, healthy-looking skin. The Peptan Collagen Peptides can rejuvenate your skin from the inside by improving collagen network and skin hydration levels, which is supported by natural antioxidants from goji berries (beta-carotene), raisins, pistachios and hazelnuts (vitamin E). All-in-all, a tasty treat with added health benefits!

Ingredients (for 12 bars, or 500g)

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honey</td>
<td>50g</td>
</tr>
<tr>
<td>Sugar</td>
<td>23g</td>
</tr>
<tr>
<td>Water</td>
<td>24g</td>
</tr>
<tr>
<td>Peptan P Collagen Peptides</td>
<td>29g</td>
</tr>
<tr>
<td>Icing sugar</td>
<td>46g</td>
</tr>
<tr>
<td>Coconut oil</td>
<td>7g</td>
</tr>
<tr>
<td>Muesli with 41% fruit, nuts, and seeds</td>
<td>140g</td>
</tr>
<tr>
<td>Hazelnuts</td>
<td>48g</td>
</tr>
<tr>
<td>Dried goji berries</td>
<td>48g</td>
</tr>
<tr>
<td>Pistachios</td>
<td>48g</td>
</tr>
<tr>
<td>Dry golden raisins</td>
<td>33g</td>
</tr>
</tbody>
</table>

Nutritional Facts Per Bar (40g)

- Energy: 158 kcal / 663 kJ
- Fat: 5.6g
- of which – saturates: 1.0g
- Carbohydrates: 21g
- of which – sugar: 15g
- Fibre: 2.1g
- Protein: 4.8g
- Salt: 0.03g
- Vitamin E: 0.77mg

Contains allergens:
- wheat, oats, barley, hazelnuts, almonds, pistachio nuts, soybeans

Step-by-step

1. Heat the honey and sugar in a pan with water, stirring until everything has dissolved
2. Remove from the heat, add icing sugar, then Peptan. Mix and stir well
3. Heat the coconut oil in the microwave until it becomes a liquid. Add it to the mix and continue to stir
4. Add the muesli, nuts and dried fruits and mix in a bowl
5. Spread the mix onto a greased plate and roll it flat with a rolling pin. Let it rest overnight at room temperature
6. Cut into bars and store in a box
Collagen Jelly with Peptan P Collagen Peptides and gelatin leaves

Discover Peptan’s health benefits through this marvelous jelly! This high-protein dessert contains 5% Peptan collagen peptides, which provide healthy-aging benefits and promote skin beauty, while being a delicious treat – what more could you want?

Ingredients (for 250g)
- Gelatin leaves: 2 ½ leaves
- Cold water (for swelling gelatin leaves): 1 bowl
- Peptan P Collagen Peptides: 13g
- Water: 170g
- Lime juice: 7.5g
- Strawberry syrup: 60g

Step-by-step
1. Soak the gelatin leaves in cold water in a separate bowl until they swell (this water is only used for swelling; it is not an ingredient)
2. Dissolve the Peptan in water in a pan and whisk
3. Add lime juice and strawberry syrup, then mix
4. Heat the mixture in a pan on medium heat, then squeeze the water out of the gelatin leaves and add them into the solution while stirring. Mix until the gelatin leaves are dissolved. Be careful not to cook the gelatin leaves
5. Pour in cups and let it set in the fridge for 24 hours

Nutritional Facts Per 3 cookies (42g)
- Energy: 191 kcal / 800 kJ
- Fat: 8.4g
- of which – saturates: 2.9g
- Carbohydrates: 18g
- of which – sugar: 6.3g
- Starch: 11g
- Fibre: 2.2g
- Protein: 9.7g
- Salt: 0.2g

Contains allergens: gluten, eggs, milk, almonds

Collagen Jelly with Peptan P Collagen Peptides and gelatin leaves

Almond Cookie with Peptan P Collagen Peptides

A delicious cookie with skin-beauty and mobility benefits. This guilt-free treat contains 15% Peptan collagen peptides, which are proven to promote skin beauty and provide support to your flexibility.

Ingredients (for 35 cookies, or 500g)
- Whole-wheat flour: 135g
- Peptan P Collagen Peptides: 85g
- Corn starch (Maizena): 60g
- Golden caster sugar: 38g
- Table sugar (sucrose): 33g
- Baking powder: 8g
- Butter: 55g
- Almonds (chopped): 85g
- Almond flavoring: A few drops
- Eggs: 2

Step-by-step
1. Mix the Peptan, whole-wheat flour, starch, golden caster sugar, table sugar, and baking powder in a bowl
2. Add the eggs and stir well
3. Melt the butter in a pan or microwave and add it to the bowl and mix
4. Add the almond extract and chopped almonds
5. Mold into dumplings and place onto a baking sheet covered with baking paper
6. Press the dumplings flat and bake them for 9 minutes in a preheated oven at 180°C
7. Store in a closed box after cooling down

Nutritional Facts Per portion (125g)
- Energy: 148 kcal / 620 kJ
- Fat: 8.4g
- of which – saturates: 2.9g
- Carbohydrates: 18g
- of which – sugar: 6.3g
- Starch: 11g
- Fibre: 2.2g
- Protein: 9.7g
- Salt: 0.2g

Contains allergens: wheat, oats, barley, hazelnuts, almonds, pistachio nuts, soybeans
**Dairy Drink with Peptan P Collagen Peptides**

A delightful drink to enjoy everyday, with the added benefits of Peptan P. The dairy drink is a popular recipe for creating healthy, low-fat, high-protein beverages. By formulating dairy products with Peptan, you get the added benefits of two protein sources: collagen peptides as a bioactive protein and milk proteins. Peptan has been proven, through scientific studies, to support both joints and bones. Natural calcium complements the protein action to maintain muscle mass.

**Ingredients (for 5 glasses, or 1 liter)**
- Peptan P Collagen Peptides: 100g
- Sugar: 60g
- Skimmed milk: 835g
- Flavoring of your choice (strawberry, chocolate etc): A few drops

**Step-by-step**
1. Pre-mix the Peptan and sugar in a bowel
2. Mix the blend into a bowl of milk, while whisking
3. Add flavoring to the drink and stir
4. Store in the fridge and serve with your favorite fruits

**Nutritional Facts Per portion (20cl)**
- Energy: 176 kcal / 737 kJ
- Fat: 0g
- of which – saturates: 0g
- Carbohydrates: 20g
- of which – sugar: 20g
- Protein: 24g
- Salt: 0.5g
- Calcium: 214mg

**Contains allergens:** milk

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**Dairy Shot with Peptan P Collagen Peptides**

A sweet probiotic drink to help digestion and maintain bone health. This fresh, high-protein, treat packs in all that is good for your bones! Peptan helps to build the bone matrix, while kefir offers digestive and gut-health benefits.

**Ingredients (for 5 glasses, or 1 liter)**
- Peptan P Collagen Peptides: 50g
- Sugar (sucrose): 20g
- Semi-skimmed milk: 925g
- Kefir-ferment (lactic acid bacteria & yeasts): 5g

**Step-by-step**
1. Mix Peptan and sugar into a pan with cold milk, before whisking
2. Heat the mixture for a few minutes (not boiling) in a pan, before cooling down to room temperature
3. Add the kefir-ferment while stirring with a plastic or wooden spoon
4. Put the liquid in an airtight pot and place in the dark at room temperature for 24 hours
5. Place in the fridge and leave for 1 day after maturation
6. After maturation, stir the fermented milk well with a plastic or wooden spoon - soon, it will become a drinkable yoghurt! Be sure to store in the fridge

**Nutritional Facts Per portion (20cl)**
- Energy: 140 kcal / 586 kJ
- Fat: 3.0g
- of which – saturates: 1.8g
- Carbohydrates: 12.8g
- of which – sugar: 12.8g
- Protein: 15.4g
- Salt: 0.3g
- Calcium: 226mg

**Contains allergens:** milk
Panna Cotta with Peptan P Collagen Peptides and gelatin leaves

Enjoy the benefits of Peptan with this smooth, sweet dessert. The Rousselot gelatin leaves are a stabilizer which gives the Panna Cotta a luscious, smooth texture with a pleasing mouthfeel. If you want a heavenly dessert with the health benefits to match, this one’s for you!

Ingredients (for 2 servings, or 250g)
- Gelatin leaves: 1 ½ leaves
- Cold water (for swelling gelatin leaves): 1 bowl
- Peptan P Collagen Peptides: 13g
- Sugar (sucrose): 17g
- Whole cream (full fat): 170g
- Skimmed milk: 44g
- Flavoring – vanilla: A few drops

Step-by-step
1. Soak the gelatin leaves in cold water until they swell (this water is only used for swelling; it is not an ingredient)
2. Mix the Peptan and sugar into a pan with the cold cream and milk, while whisking
3. Heat the pan for 10 minutes, being careful not to boil, whilst stirring. Squeeze out the gelatin leaves and add them to the solution and stir until the gelatin has dissolved.
4. Add flavoring
5. Place the solution in cups before storing in the fridge for setting. Wait at least 24 hours before serving

Nutritional Facts
Per portion (20cl)
- Energy: 371 kcal / 1553 kJ
- Fat: 31g
- of which – saturates: 20g
- Carbohydrates: 13g
- of which – sugar: 10g
- Protein: 10g
- Salt: 0.08g
- Calcium: 14mg

Contains allergens: milk

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Rousselot Health & Nutrition

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