Dear Sir/Madam,

Cantareus is an association, whose major activity is manufacture of snails, row materials of them under form of concentrate and the output of their final products.

Extracts derived from our company are products of species of snails, called Helix Aspersa Maxima. Snails are raised in farms built in french technology, observing special nutrative regime.

Company has the following production capacity:

1. Base of saving and producing of snails.

We save here big hibernated snails, there is a place for incubation of small ones, who are transferred later in Feeding fields. We produce eggs of snails used later in Cosmetics and food industry.

2. Technological enterprise, manufacturing row materials of snails.

We produce here concentrates, derived from snails-blood, slime and meat. Prepared row materials are carried away to manufacturies in a specialized transport where the Freeze drying process have to be done.

Offering row materials in dry condition, has many advantages: longer expiry date (2 years), easy transport, no need of using preservatives.

This doesn't exclude the option of producing stuff in a natural state.

We are going to start producing of preserved food and nutrative supplements too.

Production capacity passed through all European audits.
SNAIL CONCENTRATE – BLOOD, CAVIAR, MEAT AND SLIME

Analysis of free amino acids, polyamines and biogenic amines in lyophilized snail samples

LC/MS analysis

Analyses were carried out on LTQ Orbitrap® Discovery equipped with Surveyor® HPLC system and IonMax® electrospray ionization module (ThermoScientific Co, USA). Data acquisition and processing were carried out with XCalibur® software package.


AMINO ACIDS

Amino acids are critical to life, and have many functions in metabolism. One particularly important function is to serve as the building blocks of proteins. Amino acids can be linked together in varying sequences to form a vast variety of proteins.

Twenty-two amino acids are naturally incorporated into polypeptides and are called proteinogenic or standard amino acids. Nine standard amino acids are called "essential" for humans because they cannot be created from other compounds by the human body, and so must be taken in as food.

RESULTS

Essential amino acids

<table>
<thead>
<tr>
<th>Amino Acid</th>
<th>Slime (mg/100g)</th>
<th>Meat (mg/100g)</th>
<th>Blood (mg/100g)</th>
<th>Eggs (mg/100g)</th>
<th>Control (mg/100g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lysine</td>
<td>6.396</td>
<td>210.173</td>
<td>7.746</td>
<td>1.237</td>
<td>40.345</td>
</tr>
<tr>
<td>Methionine</td>
<td>0.026</td>
<td>11.697</td>
<td>0.005</td>
<td>0.005</td>
<td>0.080</td>
</tr>
<tr>
<td>Threonine</td>
<td>2.026</td>
<td>73.646</td>
<td>1.563</td>
<td>1.459</td>
<td>3.199</td>
</tr>
<tr>
<td>Leucine + Isoleucine</td>
<td>127.072</td>
<td>77.515</td>
<td>19.927</td>
<td>1.078</td>
<td>3.538</td>
</tr>
<tr>
<td>Phenylalanine</td>
<td>6.085</td>
<td>26.270</td>
<td>2.516</td>
<td>0.315</td>
<td>12.972</td>
</tr>
<tr>
<td>Valine</td>
<td>43.179</td>
<td>48.228</td>
<td>5.420</td>
<td>1.055</td>
<td>3.119</td>
</tr>
<tr>
<td>Histidine</td>
<td>7.501</td>
<td>31.560</td>
<td>19.037</td>
<td>0.326</td>
<td>11.193</td>
</tr>
<tr>
<td>Tryptophane</td>
<td>1.436</td>
<td>5.158</td>
<td>0.196</td>
<td>0.060</td>
<td>0.047</td>
</tr>
<tr>
<td><strong>Total essential amino acids</strong></td>
<td><strong>193.721</strong></td>
<td><strong>485.248</strong></td>
<td><strong>56.410</strong></td>
<td><strong>5.536</strong></td>
<td><strong>74.493</strong></td>
</tr>
</tbody>
</table>

Nonessential proteinogenic amino acids
<table>
<thead>
<tr>
<th>Slime</th>
<th>Meat</th>
<th>Blood</th>
<th>eggs</th>
<th>control</th>
</tr>
</thead>
<tbody>
<tr>
<td>mg/100g</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serine</td>
<td>6.660</td>
<td>116.202</td>
<td>5.514</td>
<td>5.882</td>
</tr>
<tr>
<td>Arginine</td>
<td>1.000</td>
<td>4.588</td>
<td>1.128</td>
<td>1.055</td>
</tr>
<tr>
<td>Tyrosine</td>
<td>0.940</td>
<td>14.915</td>
<td>2.645</td>
<td>0.365</td>
</tr>
<tr>
<td>Alanine</td>
<td>20.610</td>
<td>274.446</td>
<td>31.207</td>
<td>3.556</td>
</tr>
<tr>
<td>Aspartic acid</td>
<td>12.583</td>
<td>442.138</td>
<td>6.803</td>
<td>9.537</td>
</tr>
<tr>
<td>Glutamic acid</td>
<td>19.310</td>
<td>1241.000</td>
<td>15.833</td>
<td>5.376</td>
</tr>
<tr>
<td>Glycine</td>
<td>176.964</td>
<td>83.623</td>
<td>27.331</td>
<td>8.770</td>
</tr>
<tr>
<td>Proline</td>
<td>2.260</td>
<td>43.039</td>
<td>2.799</td>
<td>1.442</td>
</tr>
<tr>
<td>Tryptophane</td>
<td>1.436</td>
<td>5.158</td>
<td>0.196</td>
<td>0.060</td>
</tr>
<tr>
<td>Asparagine</td>
<td>0.519</td>
<td>33.734</td>
<td>0.139</td>
<td>0.100</td>
</tr>
<tr>
<td>Glutamine</td>
<td>3.323</td>
<td>155.356</td>
<td>0.692</td>
<td>0.475</td>
</tr>
<tr>
<td>Ornithine</td>
<td>8.863</td>
<td>623.192</td>
<td>4.787</td>
<td>4.470</td>
</tr>
</tbody>
</table>

**Unusual amino acids**

<table>
<thead>
<tr>
<th>Slime</th>
<th>Meat</th>
<th>Blood</th>
<th>eggs</th>
<th>control</th>
</tr>
</thead>
<tbody>
<tr>
<td>mg/100g</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydroxyproline</td>
<td>2.058</td>
<td>5.476</td>
<td>1.139</td>
<td>0.019</td>
</tr>
<tr>
<td>γ-Aminobutiric acid</td>
<td>0.495</td>
<td>2.529</td>
<td>0.517</td>
<td>0.189</td>
</tr>
</tbody>
</table>

**Sulphur containing amino acids and glutathione**

The biological thiols, such as cysteine, homocysteine, glutathione and their disulphides, are critical cellular components that play important roles in metabolism and homeostasis.

Glutathione is widely distributed in living cells and is involved in many biological reactions. It is an antioxidant which protects cells against oxidative stress. Cysteine is a critical substrate for protein synthesis and rate-limiting precursor of glutathione and taurine synthesis. Homocysteine is a nonproteinogenic amino acid formed during the metabolism of methionine to cysteine that takes a key place between the folate and activated methyl cycles.

<table>
<thead>
<tr>
<th>Slime</th>
<th>Meat</th>
<th>Blood</th>
<th>eggs</th>
<th>control</th>
</tr>
</thead>
<tbody>
<tr>
<td>mg/100g</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cysteine</td>
<td>2.092</td>
<td>12.060</td>
<td>1.072</td>
<td>0.112</td>
</tr>
<tr>
<td>Homocysteine</td>
<td>1.357</td>
<td>1.052</td>
<td>1.491</td>
<td>n.d</td>
</tr>
<tr>
<td>Glutathione</td>
<td>0.045</td>
<td>7.592</td>
<td>0.234</td>
<td>n.d</td>
</tr>
</tbody>
</table>

n.d. – not detected

**Total amino acids**

452.755 3537.596 159.507 46.772 355.585
POLYAMINES AND BIOGENIC AMINES

As polyamine is a generally termed linear aliphatic hydrocarbon containing two or more amino groups. The term natural or biogenic polyamine is concern to putrescine, spermidine and spermine. The polyamines belong to a broader group of biologically active amines. This group includes compounds as histamine, tyramine, tryptamine, serotonin and ec., which have important physiological functions. These compounds have a very simple chemical structure of aliphatic polycations that are fully protonated under physiological conditions.

Polyamines are present in all living cells, prokaryotes, eukaryotes, plants and animals. Although the full repertoire of biological effects of polyamines are not fully known; today it’s evident, that they influence cellular processes at all stages from gene transcription to protein synthesis. The polyamines should be considered critical regulators of cell growth, differentiation and cell death. Polyamines are reputed to be essential for life as inhibitors of polyamine biosynthesis block cell growth. Polyamine-depleted cells are stimulated to grow in the presence of exogenous polyamines. Polyamines have specific roles in cell cycle, embryonic development, cancer, neurochemistry, pulmonary and immune system functions.

<table>
<thead>
<tr>
<th></th>
<th>Slime</th>
<th>Meat</th>
<th>Blood</th>
<th>eggs</th>
<th>control</th>
</tr>
</thead>
<tbody>
<tr>
<td>mg/100g</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>putrescine</td>
<td>7.698</td>
<td>96.438</td>
<td>13.181</td>
<td>0.724</td>
<td>30.956</td>
</tr>
<tr>
<td>cadaverine</td>
<td>2.462</td>
<td>5.700</td>
<td>4.867</td>
<td>0.129</td>
<td>2.289</td>
</tr>
<tr>
<td>spermine</td>
<td>2.150</td>
<td>124.651</td>
<td>0.945</td>
<td>0.640</td>
<td>2.259</td>
</tr>
<tr>
<td>spermidine</td>
<td>5.292</td>
<td>9.926</td>
<td>0.991</td>
<td>4.999</td>
<td>2.305</td>
</tr>
<tr>
<td><strong>Total polyamines</strong></td>
<td><strong>17.601</strong></td>
<td><strong>236.716</strong></td>
<td><strong>19.984</strong></td>
<td><strong>6.492</strong></td>
<td><strong>37.809</strong></td>
</tr>
<tr>
<td>histamine</td>
<td>0.071</td>
<td>0.032</td>
<td>0.093</td>
<td>0.012</td>
<td>0.081</td>
</tr>
<tr>
<td>agmatine</td>
<td>0.072</td>
<td>0.033</td>
<td>0.056</td>
<td>0.018</td>
<td>0.083</td>
</tr>
<tr>
<td>tryptamine</td>
<td>0.091</td>
<td>0.025</td>
<td>0.035</td>
<td>0.003</td>
<td>n.d.</td>
</tr>
<tr>
<td><strong>Total biogenic amines</strong></td>
<td><strong>0.234</strong></td>
<td><strong>0.090</strong></td>
<td><strong>0.184</strong></td>
<td><strong>0.033</strong></td>
<td><strong>0.164</strong></td>
</tr>
</tbody>
</table>

n.d. – not detected

**Determination of soluble protein in lyophilized snail samples**

The analyses were carried out using BRADFORD method. The levels of soluble protein were determined in acidic (pH=3), neutral (physiological, pH=7.6) and basic (pH=8.1) conditions. The protein concentration in solution was determined using standard curve of BSA (bovine serum albumin) The BSA was dissolved in the tested buffer. The results are presented as percent of total amount of the dry sample. The data are from triplicate analysis.
Slime Meat Blood eggs control
% ± std. dev.

<table>
<thead>
<tr>
<th>Acidic (ammonium formate buffer)</th>
<th>42.2±1.3</th>
<th>20.6±0.3</th>
<th>58.2±2.1</th>
<th>15.3±0.8</th>
<th>30.1±1.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral (Phosphate buffer saline)</td>
<td>33.2±2.3</td>
<td>38.1±1.6</td>
<td>49.3±3.5</td>
<td>29.0±2.1</td>
<td>29.6±3.2</td>
</tr>
<tr>
<td>Basic (ammonium hydrogen carbonate buffer)</td>
<td>49.1±0.4</td>
<td>54.5±2.2</td>
<td>65.1±0.6</td>
<td>31.8±1.8</td>
<td>18.2±2.1</td>
</tr>
</tbody>
</table>

NOTE

Human beings have eaten snails for thousands of years and nowadays snails are a common food consumed by millions of people worldwide. The market for snails and their products is of great interest in many countries of Europe and America because of their palatability. This mainly herbivorous species has high economic value and is considered to be luxury food. Snail meat is a delicacy in Asian cuisines, Japanese and Chinese. The most preferred and consumed species of snails is *Helix aspersa* (garden snail).

Generally, snail meat is considered to be highly nutritious, owing to its content of essential amino acids, proteins, rich vitamins and minerals. Studies on the nutritional value of snail have reported that snail is high in protein quality but low in fat. Although the nutritional composition of a variety of foods has been known for many years, relatively little information has been collected on the nutritional composition of edible snail.

Snails are low in fat and high in mineral nutrients, essential amino acids and beneficial fatty acids. Analysis of lipid composition shows a relatively high percentage of poly-unsaturated fatty acids. The fat of snails is beneficial because it provides our bodies with Omega-3 fatty acids that humans can not synthesize alone and therefore have to take it through their diet. It is very beneficial for health, because they balk atherosclerosis and thrombosis and have anti-inflammatory effects, prevent allergies, depression, and other diseases of the nervous system. The meat of the snails is a good source of calcium and phosphorous, two components very important for bone growth, and also of magnesium, potassium and sodium.

Regarding trace elements, their meat is a good source of selenium. Selenium is a powerful antioxidant protecting against heart disease and cancer (especially prostate), also contributing to the functioning of the thyroid gland and the immune system.

Besides all the above mentioned, the snails are also an important dietary source of vitamins especially niacin.

Below are presented some data about nutritional and biochemical composition of snail derived products. The presented products have been produced from high quality *Helix aspersa maxima* snails breaded in ecological farm under stringy controlled conditions. All products are in form of lyophilized powder.

**Lyophilized slime (mucus)**

The product is fine white powder, which contains 45.0 % of protein; 6.2 % carbohydrates and only 0.07 % of fatty acids. The level of water soluble protein have been determined to be approximately 43 %, as percent of total amount of the dry sample. The analysis of free amino acids composition shows high amount of essential amino acids (193.7 mg of total of 452.7 mg...
per 100g of sample or ~ 43%). Leucine, isoleucine and valine are the main constituents with app. 90% of total essential amino acids. The product also contains relatively high amount of glycine, alanine, aspartic acid, glutamic acid and hydroxyproline. (for details see table below). The product is also reach of polyamines (17.6 mg/100g). Polyamines are reputed to be essential for life. Polyamines have specific roles in cell cycle, embryonic development, cancer, neurochemistry, pulmonary and immune system functions.

The levels of biogenic amines, that usually are associated with freshness of the products, was found to be fairly low ( > 80 µg/100g).

The nutritional capacity of product was estimated to be 861 kJ (210 kcal) per 100 g.

**Lyophilized meat**

The brown powder prepared from fresh snail meat, is consist of 69.3 % protein, 3.3 % fatty acids and 13.6 % carbohydrates. The nutritional value of this product was calculated to be 1521 kJ (371 kcal) per 100 g. It was found that app. 90% of the protein is water soluble.

The product is very abundant of free amino acids (3.54 g/100g) and polyamines (236.7 mg/100g). Among essential amino acids, lysine has dominated with amount of app. 45% of total essential amino acids. It’s also contains great amount of threonine, histamine and valine. The product is also rich of the proteinogenic amino acids such aspartic acid, ornitine, glutamine, proline, hydroxyproline and especially glutamic acid (1.21 g/100 g). It was found that material contains relatively high amount of sulfur amino acids (methionine and cysteine) and glutathione. Glutathione is a natural antioxidant which protects cells against oxidative stress. Among the polyamines, the spermine contains was found to be very high -124.6 mg/100 g.

**Lyophilized blood (haemocyanin)**

The lyophilized blood is grey colored powder, which contains 70% of proteins. The product is free of fatty acids and contains relatively low amount of carbohydrates (5.7%). Most part of the carbohydrates are protein bound, so the product could be considered as rich of glycoproteins. The profile of free amino acids shows that in blood most abundant are leucine, valine, histamine, lysine, ornitine, aspartic and glutamic acids. In general, the blood contains relatively low amount of free amino acids (159.5 mg/100 g) with comparisons of other snail products. In other words the lyophilized blood could be considered as protein concentrate.

The nutritional value of product was estimated to be 1271 kJ (310 kcal) per 100 g.

**Lyophilized eggs**

The product is slightly colored in red powder with relatively low contents of protein (25%). The eggs are free of fatty acids and contain small amount of carbohydrates (6.9%). The quantity of free amino acids and polyamines are also relatively low with comparison of the other snail products. The most abundant among the amino acids are glycine, lysine, leucine, aspartic acid, threonine and glutamic acid. The product contains insignificant amount of polyamines. The levels of biogenic amines was found to be fairly low ( > 20 µg/100g).

The nutritional capacity of product was calculated to be 533 kJ (130 kcal) per 100 g.

Additional studies are necessary to be estimated the composition of this product.

NOTE: In time of preparation of this manuscript, studies for determination of the minerals, vitamins and trace elements compositions of the described products are carried out.
COSMETIC

We introduce to your attention a high-quality collection of cosmetic products developed on the base of snail mucus and caviar. Each of these wonderful products owes its exceptional regenerating and whitening properties of the lyophilisates present in the mucus and eggs of snails of the genus Helix Aspersa Maxima. They are the best natural alternative for treating the following skin imperfections:

- Wrinkles and expression lines, including "crow's feet"
- Acne and traces of acne
- Rosacea
- Age spots and freckles
- Stretch marks and scars

How can one natural substance be so unusual?

The lyophilisates of mucus and eggs of snails of the genus Helix Aspersa Maxima contain an exclusive combination of natural ingredients that have proven their beneficial effects on human skin. Performed physical and chemical analyzes on lyophilisates prove that they contain in a natural state the following elements:

- **Collagen and elastin** – the most important skin proteins. They enrich it with the main components of connective tissue. Collagen supports the skin integrity.
- **Superoxide dismutase** – an antioxidant that protects cells from oxygen radicals and hydrogen peroxide.
- **Allantoin** – accelerates the formation of collagen and rejuvenates, heals and softens skin.
- **Free amino acids** – stimulate regenerative processes in the skin and rejuvenate it.
- **Hyaluronic acid** – instantly hydrates and retains moisture in the cells. Soothes and heals small wounds. Rejuvenates and visibly removes fine lines on the face.
- **Folic acid** – unclogs pores and kills bacteria that cause acne.
- **Glycolic acid, lactic acid and sodium lactate** have excellent exfoliating and moisturizing effect thanks to the good compatibility between them and the skin.
- **Vitamins** – along with proteins, snail lyophilisates are rich in vitamin A, C and E. They protect, enrich and soften the skin.
- **Sugars** – Sorbitol is the most suitable moisturizer. By mechanism of action it resembles amino acids. It forms a soft layer on the skin that retains moisture in the stratum corneum (horned layer).
- **Urea** – acts as a bacteriostatic, helping epithelialize the skin, hydrates and softens.

**THE EXTRACT IS DERIVED FROM LIVE SNAILS WITHOUT HARMING THEM.**

The cosmetic series consists of four absolutely original products containing lyophilized mucus and caviar from snails, as well as the following active ingredients:

- **D-Panthenol** – has moisturizing properties and helps heal wounds and restore the smoothness of the skin.
- Coenzyme Q 10 – powerful energy activator and a powerful antioxidant that stimulates the biological functions, extends skin cell longevity, restores its vitality, conserves its youth and beauty.
- Alpha Bisabolol – an active ingredient in the essential oil of chamomile, acts as an anti-inflammatory and antiallergic agent.
- Argan oil is the natural wonder of Morroco. It gives vitality to the skin and helps to preserve the beauty while regenerating and rejuvenating skin cells, accelerating the growth of new healthy cells.
- Dermaxyl – accelerating the rhythm of cell renewal, restores the skin barrier and regenerates it. In clinical trials has been proven to reduce wrinkles and prevents aging.
- Regu Age – improves microcirculation, reduces dark circles and bags under the eyes, reduces the presence of free radicals, regenerates and eliminates wrinkles.

MULTI – ACTIVE SUPER – REGENERATING SERUM

ABSOLUTE PURE REVIVAL

- With snail mucus and caviar concentrate
- Matrixyl 3000, Coenzyme Q 10,
- Hyaluronic acid, Hydroviton 24, D-Panthenol
- Vitamin A, E, Alpha –bisabolol and Argan oil

For each skin type

The specially developed innovative formula of MULTI – ACTIVE SUPER – REGENERATING SERUM combines:

- A 100% pure lyophilised concentrate of snail mucus and caviar of the Helix Aspersa Maxima snail species containing an exclusive combination of purely natural components with a strong regenerating, hydrating and exfoliating effect on human skin.

- Matrixyl 3000 – the most effective modern lifting component which decreases wrinkles depth and stimulates skin renovation.

- Hyaluronic acid, Hydroviton 24 and D-Panthenol instantly hydrate and help for keeping the cell hydrated for 24 hours. They rejuvenate and visibly decrease fine face wrinkles.

- Coenzyme Q 10, and Vitamin A and E are powerful energy activators with a strong antioxidant effect, and extend cell life, by restoring cell life, its vitality and youth.

- Alpha bisabolol – an active ingredient of the essential oil of the camomille. It has an anti-inflammatory and anti-allergic effect.

- Argan oil is the natural wonder of Morroco. It gives vitality of the skin and helps for preserving beauty by regenerating and rejuvenates skin cells, accelerates the growth of new healthy cells.

The result from the use of this incredible Serum is silky skin feeling! It is so smooth and ethereal and is very easily and quickly absorbed. You are going to notice how will your skin change and be more and more regenerated each day.
ABSOLUTE PURE REVIVAL

REVITALIZING NIGHT CREAM

with a snail mucus and caviar concentrate, Matrixyl 3000, Coenzyme Q 10, Vitamin A, E and D-Panthenol and Argan oil.

This tender and rich cream is created to regenerate, hydrate and nourish your skin while you sleep. Its efficiency is due to carefully selected active ingredients acting in three aspects: smoothing fine wrinkles, regenerating the elasticity and shine of skin, making skin tan even. The 100 % pure lyophilised snail mucus and caviar concentrate of the *Helix Aspersa Maxima* species contains high content of proteins, amino-acids, vitamins, trace elements, phospholipids, polysaccharides, and other humidifiers by forming a delicate film and preserving the skin hydration. Collagene and elastin maintain skin cells in good condition and delay the aging processes. The presence of Matrixyl 3000 – the most effective lifting component leads to decrease of the wrinkles and stimulates skin regeneration. The powerful energy activator and strong antioxidant Coenzyme Q 10 extends skin cell life, restores its vitality and youth, argan oil, as well as vitamins maintain the water – lipid balance and accelerate the growth of new healthy skin cells.

This splendid Night cream will charge your skin with new energy and will change its shine, vitality and radiance! Enjoy it!

ABSOLUTE PURE REVIVAL

INTENSIVE HYDRATING DAY CREAM

- Snail mucus and caviar concentrate
- Matrixyl 3000
- Hydroviton 24, Hyaluronic acid, Urea
- Shea Butter, argan oil, olive oil
- Vitamins A, E, D-Panthenol

The ethereal texture of this unique day cream allows its fast absorbing by the skin and eliminating the feeling of straining and dryness. The 100 % pure lyophilised snail mucus and caviar concentrate of the *Helix Aspersa Maxima* species has a high content of proteins, amino-acids, vitamins, trace elements, phospholipids, polysaccharides and other active ingredients which provide the skin precious substances and nourish it in depth. The presence of Hyaluronic acid, Hydroviton 24, urea and D-Panthenol instantly hydrate and help keeping skins hydrated for 24 hours. The most efficient lifting component Matrixyl 3000 leads to decrease the depth of wrinkles and stimulates skin regeneration. The argan oil, shea butter, olive oil, as well as vitamins maintain the water – lipid balance and accelerate the growth of new healthy skin cells and improve skin elasticity.
Your skin is restored, firm, enriched and radiating. Fine wrinkles visibly decrease and this restores its youthful look!

**ABSOLUTE PURE REVIVAL**

maximum regenerating eye cream

- Snail mucus and caviar concentrate
- Regu-Age
- Hyaluronic acid, *Caffeine*
- Vitamins A, E, D-Panthenol
- Argan oil, Shea Butter, Olive oil

Having an exclusive smoothness, this elixir for the most delicate skin around the eyes reduces wrinkles, dark circles and puffiness. It combines a 100 % pure lyophilised snail mucus and caviar concentrate of the *Helix Aspersa Maxima* snail species which is a unique combination of proteins, amino-acids, trace elements, phospholipids, polysaccharides and other active ingredients with incredibly strong regenerating, hydrating and exfoliating effect on human skin. The special active ingredient *Regu Age* prevents the aging signs, by smoothing fine wrinkles, improving micro-circulation, lightening dark circles and sacks under eyes. *The argan oil* gives vitality to skin and helps for preserving beauty by improving skin metabolism and accelerating the growth of new healthy skin cells.

Thanks to its exceptionally strong effect, the **REGENERATING EYE CREAM JUVENIS** the skin gets a velvety and shiny look.

**FUNCTIONAL FOOD FROM SNAILS AND SNAIL CAVIAR**

1. **Pregnant and nursing women**

100 grams of snail meat contain:

- **a.** 2.5 g Zinc, an element necessary in the nutrition menu of pregnant and nursing women in period of lactation;
- **b.** 10 times more Calcium than in traditional meat, which is easily absorbed and is necessary for prevention of diseases of the skeletal system, including osteoporosis;
- **c.** 210 mg Lysine, an amino-acid which is supplied only with food. Lysine balances the amino-acid composition in organism, improves the digestion of the proteins in food, improves the digestion of calcium and its transportation in the skeletal system. It is an irreplaceable part in the programs for prevention and treatment of osteoporosis;

2. **Sportsmen**

100 grams of snail meat contain amino-acids essential for metabolism regulation:
a. 4.6 mg Arginine – nitrogen – containing amino-acid with a key position in human metabolism. Arginine improves human immunity, by stimulating the synthesis of growth hormones. It supports accumulation of muscle mass by suppressing the synthesis of fats. Arginine is a precursor upon reception of nitrogen oxide and supports the decrease of blood pressure and the risk of cardiovascular diseases; It accelerates the processes of cell division and helps for the fast healing of tissues and bones;

b. 210 mg Lysine, amino-acid which is only supplied through food. Lysine balance the amino-acid composition in the organism, improves the digestion of the proteins from the food, improves the digestion of calcium and its transport in the skeletal system. It is an irreplaceable part in the programs for prevention and treatment of osteoporosis;

3. Prevention and treatment of atherosclerosis and hypertension:

a. 155 mg glutamine, the amino-acid appearing the main depot for organic nitrogen in the human organism. Glutamine supplies organic nitrogen upon maintenance of the balance of amino-acids in our organism. It is precursor for the synthesis of glutation; Glutathione plays the role of a coenzyme (electrons transporter) upon the functioning of the enzymes important for the detoxication of oxygen radicals, glutathione peroxidase and glutathione reductase. It prevents the peroxidation of the lipids in the cell membranes by helping for the preservation of cell functions.

b. 12 mg cysteine, precursor for obtaining of taurine. Taurine has a stimulating effect on neural impulses and has antioxidant properties;

c. 1241 mg glutamine acid, which plays an important role for the right cell functioning. Glutamine acid is a precursor for the synthesis of various amino-acids, including of proline.

d. 43 mg proline, an essential amino-acid. Proline, together with the glycine are the basic amino-acids participating in the collagene synthesis. Glutamate performs a function of neuromediator together with the gamma-aminobutyric acid and is responsible for transmission of neural impulses in brain cells;

4. Prevention and treatment of gastro-intestinal diseases and maintenance of the cholesterol level and the blood pressure:

- Main part of the fat acids in snail meat is of the essential, non-saturated fat acids – lynoleic (Omega 6) and linolenic (Omega 3). Both latter are not synthesised in the human organism. Non-saturated fat acids are 75%, of which 57-60% are poly-unsaturated and 15% are mono-unsaturated. They favour the synthesis of cholesterol and its metabolism.

- The low level of cholesterol in snail meat (70 mg/100 g), the low contents of sodium and the high contents of potassium are a favourable combination upon prevention and treatment of atherosclerosis and hypertension.
The deficit of proteins of animal origin is a problem which affects a number of developing countries, a problem which aggravates by the way from the demographic growth, the restriction of arable lands and low yields of many cultures; these factors, added to the inflation, provoke scarcity, speculation with food and their price rise. The production of animal proteins with low cost is always an actual topic upon searching of new nutrition resources both in land and water environment. The zoo-technical production of garden snails (Helix aspersa) is an alternative which can be used for this purpose.

In countries like Italy, Spain and France the consumption of snails is a part of the usual nutrition. France has imported frozen snails mainly from Turkey, Greece and Germany and exports tin canned snails for the EEC, USA and Germany.

The products CANTAREUS AMINO, CANTAREUS MED, CANTAREUS IMUNO and CANTAREUS MASS contain enzyme hydrolyzed protein of Helix aspersa Maxima snail meat, and some of them contain lyophilised meat, starting raw material, rich in amino-acids glutamine and Branched Chain ones* (Valine, Leucine and Isoleucine), which have their strongest effect on the anabolism.

Enzymatic hydrolysis allows both retention of sulfur-containing amino acid cysteine, destroyable during alkaline hydrolysis, and of the amino acid tryptophan – destroyable during acid hydrolysis. The degree of hydrolysis is high ** - DH> 40%, because two types of enzymes are used. In recent years in the scientific literature there have been some evidence of appropriate use of protein hydrolysates instead of taking combinations of all the different amino acids. This is mainly due to the fact that hydrolysis preserves and generates a number of oligopeptides, affecting many organs and systems in the human body. On the other hand the use only of low molecular weight products (as free amino acids) can result in digestive problems caused by osmotic pressure in their absorption in the intestines.

* Branched Chain Amino Acids (BCAAS)
** Degree of hydrolysis
### Amino-acid contents (g./100 g. protein)*

#### in the garden snail (Helix aspersa)

<table>
<thead>
<tr>
<th>Amino acid</th>
<th>g./100 g. protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glutamic acid</td>
<td>7,43</td>
</tr>
<tr>
<td>Aspartame acid</td>
<td>6,11</td>
</tr>
<tr>
<td>glycine</td>
<td>3,33</td>
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<tr>
<td>lysine</td>
<td>3,06</td>
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<tr>
<td>Arginine</td>
<td>3,04</td>
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<tr>
<td>Valine</td>
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<tr>
<td>Alanine</td>
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<td>Tyrosine</td>
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<td>Cysteine</td>
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<td>Histidine</td>
<td>0,92</td>
</tr>
<tr>
<td>Methionine</td>
<td>0,41</td>
</tr>
</tbody>
</table>
The balanced composition, the production technology and the exact dosage and method of use contribute to the good effect of the products of the CANTAREUS company.

**XXXXXXX GASTRO**

**food supplement**

**Product amount in one package:** 150ml

**Recommended daily dosage:** 15 ml

**Composition:** Mucus extract from *Helix aspersa* – 0.2%

Excipients: water, fructose, preservative: potassium sorbate Е202, sodium benzoate Е211;

**Purpose:** Has a favourable effect upon problems with the gastrointestinal tract.

**Usage:** Three times a day 5 ml before meal.

“Do not exceed the recommended daily dosage!”

“Do not use as a substituent of the varied nutrition!”

**Storage:** In original packages, in a dry and light-proof place at a temperature of up to 25°C.

To keep away from children access!

**Batch №:** for the respective batch

**Best before:** for the respective batch

Produced by “PIMENTA“ LTD

Sofia, 5 Balcho Neykov St.

for “Kantareus” PLC

Varna, 2 Petar Enchev St., entr. B, apt. 6, tel. 0884 144 009

**TД 01-2012**

**XXXXXXX AMINO**

**food supplement**
**Product amount in one package:** 90 capsules

**Recommended daily dosage:** 3 capsules

**Composition:** Hydrolyzate of *Helix aspersa* snail meat – 1g.

**Excipients:** Gelatine capsule, colloidal silica, magnesium stearate;

**Purpose:** Helps to strengthen and restore the body after physical load, disease and overwork. Has a favorable influence on diets and malnutrition.

**Usage:** Three times a day, 1 capsule before meals.

“Do not exceed the recommended daily dosage!”

“Do not use as a substituent of the varied nutrition!”

**Storage:** In original packages, in a dry and light-proof place at a temperature of up to 25ºC.

To keep away from children access!

**Batch No:** for the respective batch

**Best before:** for the respective batch

Produced by “PIMENTA” LTD

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ТА 06-2012

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**XXXXXXXXX FLEX**

**food supplement**

**Product amount in one package:** 90 capsules

**Recommended daily dosage:** 3 capsules

**Composition:** Lyophilized caviar from *Helix aspersa* snail – 600mg, glucosamine – 250 mg, Extract from *Helix aspersa* snail mucus – 20 mg.

**Excipients:** Gelatine capsule, colloidal silica, magnesium stearate;
Purpose: Favorably influences the musculoskeletal system, accelerates recovery in soft tissue injuries and connective tissue in joints. Has an anti-inflammatory effect.

Usage: Three times a day, 1 capsule before meal.

“Do not exceed the recommended daily dosage!“

“Do not use as a substituent of the varied nutrition!”

Storage: In original packages, in a dry and light-protected place at a temperature of up to 25°C.

To keep away from children access!

Batch №: for the respective batch

Best before: for the respective batch

Produced by “PIMENTA“ LTD

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for “Kantareus” PLC

Varna, 2 Petar Enchev St., entr. B, apt. 6, tel. 0884 144 009

TД 05-2012

XXXXXXXXX MASS

FOOD FOR USE IN INTENSE MUSCULAR EFFORT ESPECIALLY FOR SPORTSMEN

Product amount in one package: 500g

Recommended daily dosage: 100g

Composition: Whey protein, freeze-dried meat of Helix aspersa snail, meat hydrolyzate of Helix aspersa snail, dextrose, maltodextrin, modified starch, creatine monohydrate, natural flavor.

Purpose: during physical efforts for recovery, upon sparse and inadequate nutrition, in athletes undergoing special diets.

Usage: Twice a day 50g, dissolved in lukewarm water. In days of active training – before and after it.

“Do not exceed the recommended daily dosage!“

“Do not use as a substituent of the varied nutrition!”
**Storage:** In original packages, in a dry and light-proof place at a temperature of up to 25ºC.

**To keep away from children access!**

**Batch №:** for the respective batch

**Best before:** for the respective batch

Produced by “PIMENTA“ LTD

Sofia, 5 Balcho Neykov St.

for “Kantareus“ PLC

Varna, 2 Petar Enchev St., entr. B, apt. 6, tel. 0884 144 009

TD 03-2012

**XXXXXXXXX MED**

**food supplement**

**Product amount in one package:** 500g €

**Recommended daily dosage:** 100g

**Composition:**

Soy protein, lyophilized *Helix aspersas* nail meat, hydrolyzate of *Helix aspersa* snail meat, dextrose, maltodextrin, modified starch, sodium citrate 200 mg.

**Purpose:** Favorably influences the recovery after surgery or illness. In all cases of malnutrition. Has an immuno-restorative and antioxidant effect. Improves the organism immune defence. Contains no preservatives, artificial sweeteners, colorings and flavors.

**Usage:** Twice daily 50 g, dissolved in lukewarm water.

**“Do not exceed the recommended daily dosage!”**

**“Do not use as a substituent of the varied nutrition!”**

**Storage:** In original packages, in a dry and light-proof place at a temperature of up to 25ºC.

**To keep away from children access!**

**Batch №:** for the respective batch
**Best before:** for the respective batch

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**TD 04-2012**

** food supplement **

**Product amount in one package:** 150ml

**Recommended daily dosage:** 15 ml

**Composition:**
- Hydrolyzate of *Helix aspersa* snail meat – 5%
- Extract from *Helix aspersa* snail mucus – 0.1%
- Standardized extract of ginseng (Panax Ginseng) – 10 mg.
- Water-alcohol extract of aloe vera (Aloe vera) 6:1 – 10 mg.
- Royal jelly – 5 mg.

Excipients: water, fructose, maltodextrin, acidity regulator – phosphoric acid, preservative: potassium sorbate E202, sodium benzoate E211;

**Purpose:** Helps strengthen the immune system and restore the body from illness and fatigue. Refreshes and invigorates. Antioxidant.

**Usage:** Three times a day 5 ml before meals.

“**Do not exceed the recommended daily dosage!**“

“**Do not use as a substituent of the varied nutrition!”**

**Storage:** In original packages, in a dry and light-proof place at a temperature of up to 25ºC.

**To keep away from children access!**
Batch No: for the respective batch

Best before: for the respective batch

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for “Kantareus” PLC

Varna, 2 Petar Enchev St., entr. B, apt. 6, tel. 0884 144 009

TD 02-2012

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