# **Product information**





# Bones, joints, ligaments

### for more joy of movement

ChondroVital Collagen Calcium D3-Toffees FlexVital OsteoVital

# **V** Burgerstein Vitamine

### **Burgerstein Vitamine**



General information

#### Who is Burgerstein?

Burgerstein is a family business that was founded in 1972 by Ulli Burgerstein in Switzerland. Burgerstein offers balanced micronutrient preparations that optimally support your body and thus your health. The human body needs vitamins and minerals to live. Without vitamins and minerals, certain metabolic processes are not possible. Every person is unique and therefore it is not possible to define a generally valid guideline for nutrient supply. It is a matter of habits or different stages of life as well as nutritional habits that result in a changed nutrient requirements.

#### **Orthomolecular medicine**

Orthomolecular medicine focuses on substances that are naturally present in the body: Vitamins, minerals, trace elements, amino acids, essential fatty acids and enzymes. Absorbable excipients that are foreign to the body, such as preservatives, colourings and flavourings, are avoided.

#### Interesting facts about micronutrients

Micronutrients often offer a well-tolerated option for the treatment or accompaniment of various clinical pictures and are not only necessary to cover the daily nutritional requirements. The Burgerstein Foundation, founded in 1982, promotes knowledge about the properties and effects of micronutrients. Its aim is also to make this knowledge known to a broad public. The Burgerstein Foundation trains professionals (pharmacists, doctors, etc.) and informs consumers with publications and an online information platform (www.mikronährstoff-wissen.ch), which are based on scientific data. It is important to us to also inform about secondary plant substances, probiotics and other high-quality active substances, which can be wonderfully combined with micronutrients, and some of them even should.



# Quality is no coincidence!



Burgerstein products

The active ingredient formulations of Burgerstein products are developed in Switzerland by experienced, in-house scientists. The focus is always on the scientifically proven benefits of the product for the customer.

Burgerstein stands for honest products. The composition is shaped by scientific evidence, not by marketing considerations. Burgerstein preparations are produced in cooperation with highly specialised contract manufacturers in Germany and abroad. They manufacture the products in various dosage forms (tablets, capsules, powders, liquids, toffees) according to orthomolecular quality criteria that are precisely specified by Burgerstein.

The manufacturing conditions are adapted to the properties of the ingredients: Sensitivity to oxygen, moisture, light, etc.

Almost all Burgerstein products are filled into cans, labelled and, if necessary, provided with a folding box directly in the company's own GMP-certified premises. GMP stands for "Good Manufacturing Practice", which means quality assurance of the production processes for medicinal products. Exceptions are made for products that have to be filled in blister packs for stability reasons – and for liquid dosage forms. Before release, the product is subjected to another thorough quality control. The galenics and dosage form used ensure optimal stability of the product.

#### Burgerstein products are natural:

- Without artificial flavours
- Without artificial colouring
- Without artificial preservatives
- Without genetic engineering



## Chondroitin sulfate and glucosamine

General information



Both chondroitin sulfate and glucosamine are important physiological components of cartilage and are very often used together to support cartilage health (hip, knee).

The cartilage matrix is subject to continuous formation and degradation. Cartilage-degrading enzymes (MMP = matrix metalloproteases) are at the forefront as a disruptive factor in this balance. It has long been known that glucosamine and chondroitin sulfate have a positive influence on this process. In a study it

could be shown that a combination of these two active substances with further trace elements (e.g., manganese and copper) and vitamins brings additional benefits.<sup>1</sup>

Often, changes develop insidiously and remain unnoticed for several years. Therefore, special attention should be paid to the protection of the cartilage matrix at an early stage.

#### **Chondroitin sulfate**

It is an important structural component of cartilage tissue and contributes, among other things, to its resistance to compression. Chondroitin sulfate is also found in tendons and ligaments, bones, blood vessels and in the skin and is jointly responsible for various biological functions:

- stimulation of proteoglycan<sup>2</sup> and collagen type II synthesis
- reduction of catabolic activity of chondrocytes (inhibition of metalloproteinases, MMP)
- anti-inflammatory properties
- immunomodulatory properties
- antioxidant properties
- increase of synovial fluid viscosity

# Chondroitin sulfate and glucosamine

General information

#### Glucosamine

Glucosamine is an amino sugar that is naturally formed in the human metabolism. In the organism, glucosamine serves as a building block for the biosynthesis of various macromolecules in the articular cartilage and synovial fluid. These include glycosaminoglycans, proteoglycans and hyaluronic acid. Among other things, glucosamine has anti-inflammatory and pain-reducing properties.

#### Chondroitin sulfate and glucosamine for osteoarthritis

Summary by Hugo Schurgast



For the treatment of arthrosis with the SYSA-DOAs (symptomatic-slow-actin drugs in osteoarthritis) chondroitin sulfate and glucosamine (individually or in combination) there is good scientific evidence now: Less pain and inflammation, reduction of joint space narrowing, improvement of functionality and quality of life with a good benefit-risk balance make chondroitin sulfate, but also glucosamine, a practicable first-line treatment, especially in the case of knee arthrosis.

However, a number of conditions must be met in order to achieve these positive effects:

- quality of the active ingredients
- correct dosage
- depending on the objective, a sufficiently long intervention period (compliance of the patient!)

### Important information:

- Attention in case of allergy to shellfish, as glucosamine is obtained from shellfish!
- Chondroitin sulfate is not suitable for pregnant and lactating women, children, adolescents and people taking anticoagulant medication.
- Patients taking anticoagulants should consult their physician before taking vitamin K supplements.

90 tablets | PZN 5687125

180 tablets | PZN 5687131

ChondroVital supports:

- all people, especially the older, athletes and for those who do physical work.
- **Cartilage and bones:** Vitamin C contributes to normal collagen formation for normal cartilage function and for normal bone function. Vitamins D and K and zinc contribute to the maintenance of normal bones.
- **Connective tissue:** Manganese contributes to normal connective tissue formation; copper contributes to the maintenance of normal connective tissue.
- **the cells:** Zinc, selenium, copper and manganese, as well as vitamins C and E, help protect cells from oxidative stress.
- for joint & cartilage problems
- in case of arthrosis and joint overload

Nutritional values	Per daily portion (3 tablets)	NRV*
Vitamin B3 (niacin)	32,00 mg	200%
Vitamin C	160,00 mg	200%
Vitamin D3	15,00 µg	300%
Vitamin E	24,00 mg	200%
Vitamin K1	75,00 μg	100%
Zinc	5,00 mg	50%
Manganese	2,00 mg	100%
Copper	1,00 mg	100%
Selenium	55,00 µg	100%
Glucosamine	750,00 mg	-
Chondroitin sulfate	500,00 mg	-

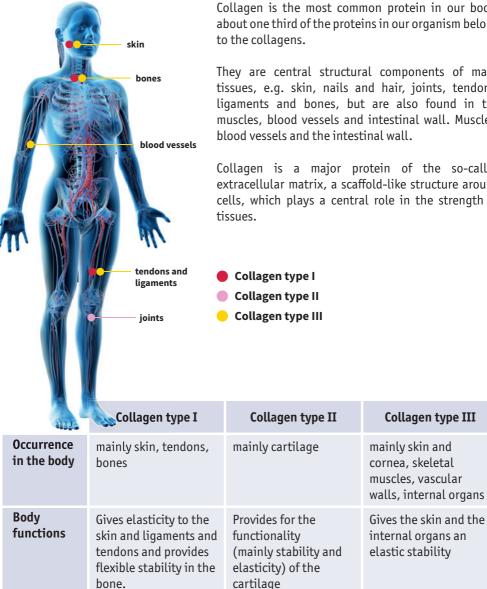


Recommended intake: Take 3 capsules daily with some liquid

**Free from:** granulated sugar, peanut oil, fructose, gelatine, gluten, yeast, lactose, soya protein/ lecithin, sorbitol

### Collagen - an all-rounder

Ingredients - general information



Collagen is the most common protein in our body; about one third of the proteins in our organism belong

They are central structural components of many tissues, e.q. skin, nails and hair, joints, tendons, ligaments and bones, but are also found in the muscles, blood vessels and intestinal wall. Muscles, blood vessels and the intestinal wall.

Collagen is a major protein of the so-called extracellular matrix, a scaffold-like structure around cells, which plays a central role in the strength of General information

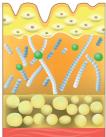
#### Occurrence in the skin, cartilage, ligaments, tendons and bones.

Collagen plays an essential role in the structure of the skin. It forms a kind of scaffolding in the subcutis (dermis). Together with hyaluronic acid, collagen binds water, which is important for the plumpness and moisture of the skin. Various factors reduce the stability of this scaffold, for example age or too much sun exposure.

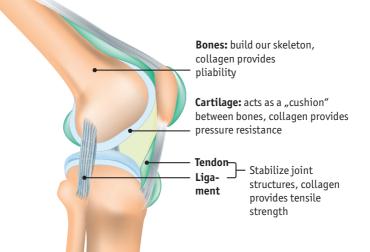
#### → The connective tissue becomes flabbier, the skin thinner and wrinkles form more frequently.

Strong collagen framework





Fragile collagen framework



General information

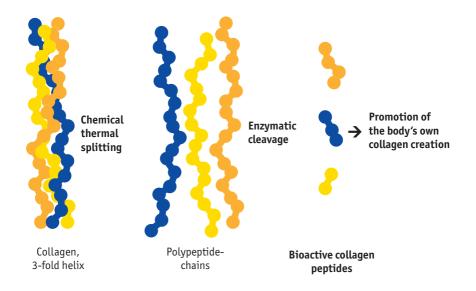
#### What are bioactive collagen peptides?

Bioactive collagen peptides are very short fragments of natural collagen, which can be better absorbed and utilized by the body due to their special manufacturing technology. Products with bioactive collagen peptides are therefore dosed significantly lower than conventional collagen hydroxylates or gelatine.

All collagens are characterized by a triple helix structure consisting of 3 peptide chains. Typical for collagens is the high content of the amino acid's glycine (approx. 33%), proline (10%), hydroxyproline (13.5%). For a long time, collagen proteins were considered inferior because of their low cysteine content and the absence of the essential amino acid tryptophan.

Daily, 0.5 to 2% of the collagen body stock is converted. In the endoplasmic reticulum of the cells, procollagen is formed, which is subsequently converted into mature collagen fibrils by various processes. In the foreground here is the linking of the collagen peptide chains. The matrix metalloproteases are primarily responsible for collagen degradation.

(Holwerda & van Loon, 2022)



## **Collagen Powder**

110 g | PZN 5814279

Burgerstein Collagen contains 100% pure bioactive collagen peptides. The product is versatile and allows a low daily dosage due to its high quality. Burgerstein Collagen can be ideally mixed into any beverage thanks to the tastelessness and dissolves quickly when stirred.

#### **Burgerstein Collagen overview**

Dosage	2.5 g collagen hydrolysate (Verisol-B) / day	
Package contents	110 g / 44 daily portions	
Taste	Neutral taste	
Intake	dissolve in liquid and drink	

#### Collagen powder supports ...

- ... people from about 40 years for the skin
- ... general skin care due to the bioactive collagen peptides
- ... strengthening of the connective tissue
- ... tendons, ligaments and overall joint health
- ... after various injuries in the area of joints and tendons

Nutritional values	per daily portion (2,5 g)	NRV*
Protein	2,3 g	_

**Recommended intake:** Take 1 level tablespoon daily. Burgerstein Collagen is neutral in taste and can be dissolved in liquid.

**Free from:** peanut oil, fructose, gluten, yeast, granulated sugar, lactose, soy protein/lecithin, sorbitol



## **Calcium D3-Toffees**

23 Toffees | PZN 4881983

Burgerstein Calcium D3 Toffees are tasty toffees with calcium and vitamin D3 for adults and children. The toffees can be chewed or sucked and taste pleasantly of vanilla. Burgerstein Calcium D3 Toffees contain organic calcium compounds and can be used flexibly throughout the day. The vitamin D3 contained contributes to a normal absorption and utilisation of calcium.

#### Calcium D3:

- Optimises the development and maintenance of strong bone mass, especially for growing children and adolescents.
- Supports people with gastrointestinal problems or those who have had gastric bypass surgery
- Suitable for people who have difficulties in optimally utilising calcium (due to the formulation).
- Contains organic calcium citrate

per daily portion (2 toffees)		NRV*
Carbohydrates	5,4 g	_
thereof sugar	5,4 g	—
Calcium	500 mg	62 %
from carbonate	400 mg	_
from citrate	100 mg	_
Vitamin D3	7,5 µg	150 %
Bread unit***	0,49	_

#### Suitable for:

- As a supplement in special situations (pregnancy & breastfeeding, postmenopause, etc.).
- Growing children and adolescents
- People who do not want to or cannot swallow tablets
- Adults as a daily food supplement



**Recommended intake:** Chew 2 toffees per day (Adultes and Kids from 12 years, under 12 years 1 toffee/day)

Free from: sorbitol, lactose, gluten, yeast, peanut oil, soy protein/lecithin

\*NRV = Reference quantity for daily intake according to EU Food Information Regulation (LMIV)

<sup>\*\*\* 1</sup> BU (bread unit) corresponds to 12 g of carbohydrates.

## Eggshell membrane

General information

As support for pain in the knees, hips, shoulders, wrists or ankles. More and more people suffer from a diagnosed joint disease. But far more people suffer from constantly recurring pain in their joints due to a wide variety of causes. Joint pain means a severely restricted enjoyment of life for the person affected, because often even the slightest movement hurts!

For mobility and enjoyment of movement, it is important, among other things, to supply the joints, cartilage, ligaments and tendons with an optimal combination of nutrients and active substances.

#### Pain-free with eggshell membrane? How does it work?

We are all familiar with the robust egg membrane of hard-boiled or freshly cracked eggs, which sticks to the inside of the limeshell. This fine membrane, the so-called eggshell membrane, consists of two thin layers of connective tissue. They enclose the chicken embryo and serve to cushion it against shocks and protect it from microorganisms and dehydration.

But how does that benefit humans? Scientists found out that the composition of the eggshell membrane corresponds almost 100% to the ingredients of human cartilage. This makes it ideal for supplying nutrients to our cartilage.

Eggshell membrane contains a purely natural combination of exactly the nutrients that are important for keeping cartilage and joints healthy:

- Collagen (type I, V and X)
- Chondroitin sulphate
- Glucosamine
- Hyaluronic acid
- Dermatan sulphate
- Keratan sulphate

- Lysozymes
- Desmosine and isodesmosine (amino acids for elastin)
- Methionine and cysteine (sulphur-containing amino acids)
- Beta growth factors

While the body's own collagen improves the general structure of the cartilage, glucosamine protects the cartilage like an airbag against pressure loads. In addition, glucosamine stimulates the production of the gel-like synovial fluid that ensures smooth movement.

Chondroitin promotes the elasticity of cartilage. The substance produced by the chondroblasts is an important component of cartilage tissue and contributes to its resistance to compression.



30 capsules | PZN 5411274

Food supplement with eggshell membrane, vitamin E, manganese, selenium and boron. Burgerstein FlexVital contains patented, partially hydrolysed eggshell membrane, which is particularly well utilised by the body. The joint formula is supplemented with a vitamin E complex and the trace elements boron, selenium and manganese, which contribute to the maintenance of normal connective tissue formation and bones.

#### **Advantages**

#### • Joint formula with patented, partially hydrolysed eggshell membrane

- Is particularly well absorbed by the body
- Scientifically tested
- Eggshell membrane consists of 100% natural collagen, hyaluronic acid, chondroitin, glucosamine and up to 70 other proteins
- Useful supplement to the joint complex
  - With comprehensive vitamin E complex
  - With tocopherol AND tocotrienols (obtained from rice instead of palm oil)
  - With the trace elements boron, selenium and manganese, which contribute to the maintenance of normal connective tissue formation and bones
  - Vitamin E, selenium and manganese help to protect cells from oxidative stress.
- No artificial colours, flavours or preservatives
- For use when needed for a short time or as a cure

Nutritional values	<b>per daily portion</b> (1 capsule)	NRV*
Vitamin E-Komplex (Tocotrienol-Tocopherol)	7,5 mg	-
thereof vitamin E	3,0 mg	25%
Manganese	2,0 mg	100%
Selenium	55,0 µg	100%
Boron	0,9 mg	-
Partially hydrolysed Eggshell membrane	500,0 mg	-



#### Recommended intake: Take 1 capsule with some liquid

**Free from:** granulated sugar, sorbitol, fructose, lactose, gluten, yeast, peanut oil, gelatine, soy protein/lecithin

## **OsteoVital forte**



120 tabl. | PZN 5680815

Calcium and magnesium are needed to maintain normal bones and teeth and are therefore important building blocks. Other vitamins and trace elements contained in Burgerstein OsteoVital forte also support bone metabolism - vitamin K, zinc and manganese contribute to the maintenance of bones, vitamin C is used for normal collagen formation and vitamin D3 contributes to the absorption and utilisation of calcium. Burgerstein OsteoVital forte also contains calcium from a plant source as well as vitamin K2, which is particularly well bioavailable.

Burgerstein OsteoVital forte contains natural calcium from red algae supplemented with magnesium as well as vitamins (C, B6, K2, D3, folic acid) and trace elements (zinc, manganese, copper, silicon).



#### For whom is Burgerstein OsteoVital forte particularly suitable?

#### • At any age for the support of the bone metabolism

Calcium and magnesium are needed as important building blocks for the maintenance of normal bones and teeth. Vitamin K, zinc and manganese contribute to the maintenance of bones, vitamin C is used for a normal collagen formation and vitamin D3 supports the absorption and utilisation of calcium.

Burgerstein OsteoVital forte is composed according to the latest scientific findings and optimally supports you and your bones!

120 tabl. | PZN 5680815

### Did you know that...

- Calcium and vitamin D are essential for the bone metabolism but cannot cover all the needs for the formation of healthy bones?
- Magnesium plays also an important role in maintaining bone mass but is hardly ever taken into account in practice?
- Bone consists not only of minerals but also, like skin, of elastic collagen fibres? Vitamin C contributes significantly to the formation of collagen.
- Vitamin K also supports the maintenance of a normal bone & that the vitamin K used in Burgerstein OsteoVital forte is more expensive than gold?
- Trace elements such as zinc and manganese are also important for the maintenance of normal bone mass and bone structure?

micronutrient	Per daily portion (4 tablets**)	NRV*
Vitamin B6 (Pyridoxine)	2,00 mg	143%
Vitamin B12 (Cobalamin)	4,00 µg	160%
Folic acid (B9)	300,00 mg	150%
Vitamin C	200,00 mg	250%
Vitamin D3	25,00 µg	500%
Vitamin K2	75,00 µg	100%
Boron	0,90 mg	-
Calcium	250,00 mg	31%
Copper	1,00 mg	100%
Magnesium	200,00 mg	53%
Manganese	2,00 mg	100%
Silicon	8,00 mg	_
Zinc	5,00 mg	50%



Recommended intake: Take 2x2 tablets daily with some liquid with a meal

**Free from:** granulated sugar, sorbitol, fructose, lactose, gluten, yeast, peanut oil, soy protein/ lecithin, gelatine



<sup>\*</sup>NRV = Reference Quantity for Daily Intake according to EU Food Information Regulation (LMIV)

<sup>\*\*</sup> from batch 2206004 / best before: 31.01.2025

Further information at: www.burgerstein.at

### **Curcuma-Komplex**

60 capsules | PZN 5378772

The complex contains a high-quality turmeric extract, which is produced with a special technology, as well as a rosemary extract and all natural forms of vitamin E. Thanks to the liposomal PUS technology, the active ingredients (including curcuminoids) are particularly well absorbed particularly well by the body.

### Vitamin C 1000 mg time-release

60 tablets | PZN 3988443

Features significantly higher bioavailability and tolerability compared to common forms of vitamin C, due to gradual release of vitamin C over several hours. In addition to the high-dose, pure vitamin C, high-quality botanicals, such as acerola fruit powder and rosehip, round out the formulation.



### Vitamin K2

60 capsules | PZN 5090982

K2 capsules contain high-quality, pure vitamin K2, which is particularly well absorbed by the body (all-trans menaquinone-7). Vitamin K contributes to the maintenance of normal bones. Vitamin K2 is important for the activation of osteocalcin and MGP (matrix GLA protein), which transport calcium to the bones and deposit it where it belongs.

#### Burgerstein products are available without prescription at your pharmacy.

#### Burgerstein GmbH Österreich

Währinger Straße 20/12, A-1090 Vienna, Austria Mail: service@burgerstein.at | Tel.: +43 / 1 / 309 33 25 – 0 | Fax: +43 / 1 / 310 31 28

# **O** Burgerstein Vitamine











**Burgerstein** 

Curcuma-Komplex