



Cucurbita pepo – semen

Kürbissamen
Pumpkin seeds



ANKLAMEXTRAKT



General information

Cucurbita pepo L. is classified as a fruit of the Cucurbitaceae family, of which the seeds are used (Semen Cucurbitae).

Pumpkin originates from Mexico and Texas. From there, pumpkin was introduced to Europe, and today pumpkin is grown **worldwide**, in particular in Austria (Styria), followed by Hungary and China as main suppliers. Pumpkin is an **annual plant** with procumbent or climbing stalks. The **seeds** are dried and used as a whole. The individual seed measures 7 to 15 mm in length, depending on the variety of the crop. It has an oval shape, rounded on the one end and pointed on the other. The top and bottom side has a characteristic rim around the margin. Depending on the variety, the seed has a bright grey to greenish-grey colour. The surface often has a grey-green thin skin layer. In central Europe, the flowering period lasts from June until August.

The raw material for Anklam Extrakt originates mainly from Austria and is produced **under controlled cultivation** by experienced contract partners.

Pharmacopoeia and other monographs

DAB, HMPC, ESCOP, WHO Commission E



Functional properties

Since the Middle Ages, pumpkin seeds have been used to treat kidney and bladder problems, irritable bladder syndrome, and as anti-worm drug.

According to the Community herbal monograph *Cucurbita pepo* L., semen is traditionally used for the relief of lower urinary tract symptoms related to **benign prostatic hyperplasia** or related to an **overactive bladder**, after serious conditions have been excluded by a medical doctor.

Several studies provide evidence for these areas of application.

Dosage

For the relief of lower urinary tract symptoms related to benign prostatic hyperplasia or related to an overactive bladder the Committee on Herbal Medicinal Products recommends:

comminuted herbal substance 2.5 – 7.5 g, 2 times daily
or 105 mg of dry extract 3 times daily



Extract qualities

The powdered extract of pumpkin seeds is produced from the herbal drug (*Cucurbita pepo* L., semen) using water as the extraction solvent.

Pumpkin Seed Powdered Extract

Cucurbitae e sem extr spir sicc - 00-115-0365-01

DER 24–33:1, 70% native extract, 30% maltodextrin

Regulatory status: food supplement

Additional extract qualities are available upon request.

Documentation to support your regulatory process (up to an ASMF including stability report) is available upon request.



Constituents

Depending on the variety, pumpkin seeds contain different types and quantities of substances, such as approximately 1% sterols and sterol glycosides, 30 to 50% **fatty oil**, 6 to 10% carbohydrates, 25 to 55% proteins, 4 to 6% crude fibres, fatty acids, **tocopherols**, phosphatides, trypsin-inhibiting proteins, diterpenes, squalenes, carboxylic acids, cucurbitol, **rare amino acids**, carotinoids, lutein, cryptoxanthin, and trace elements such as e.g. manganese, zinc, copper and especially selenium.



Use as a food

Due to their **nutty flavour**, pumpkin seeds are popular for use in food and for cooking. In particular, pumpkin seed oils are very much liked in certain regions. In different parts of the world different varieties are used for the **oil production**, e.g. in southern Europe the seedy varieties of *Cucurbita pepo* L., in particular the so-called oil squash *Cucurbita pepo* L. var *oleifera* PIETSCH, a soft-skinned variety. Oil is extracted from ground roasted pumpkin seeds through cold pressing. The oil has a dark colour with a slight reddish fluorescence and also has a nutty flavour. The high gamma tocopherol content stabilises the oil and protects against lipid peroxidation, making pumpkin seed oil relatively durable.



Literature

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Disclaimer

The content of this brochure is based on our findings and experience. Our goal is to inform our customers to the best of our current knowledge. The information is, however, non-binding. Rights of third parties must be observed. The recommended dosages are only guidelines and cannot replace preliminary trials with individual products. Furthermore, before sale, it is essential that all products satisfy local legal requirements.



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A. Pilot plant allows sample production on a small scale

B. Vacuum belt dryer in use

C. Analytical service included

D. Tailor-made plant extracts

E. The inside of a vacuum belt dryer



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