According to the Chinese pharmacopoeia, the Schisandra Extract contained in the Drop stimulates the production of active juices, inhibits perspiration and has a calming effect of Schisandraceae fructus also contains all other lignanes comprised in the drug (identified as complete Schisandrin A content).

Identification of raw material
Because of the great similarity between Schisandra chinensis and Schisandra sphenanthera, the two are frequently confused. In order to avoid the processing of Schisandra sphenanthera, Emil Flachsmann AG has developed a HPLC method for the identification of the raw material.

Taste profile
Given its hydrophilic character, Emil Flachsmann AG’s extract is particularly well suited for foodstuff applications, especially for the production of beverages.

The astringent-sour taste profile of the Schisandra extract lends foodstuffs an individual, refreshing, special and absolutely unique quality. All these characteristics make this extract the ideal product for the combination of a healthy and tasty foodstuff.

REFERENCES

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enables the reflexes and promotes a clear head. Its sedative effect seems at first sight contradictory but can be explained as a reconstitution of body functions and therefore calming them (Ref. 3).

According to corresponding literature, the fruit of *Schisandra chinensis* contains essential oil, vitamins C and E. The ripe seeds produce the lignanes, of which approximately 40 have been identified and have structures that have been examined. Among others *Schisandrin A* and *Schisandrin B* are of great interest. The lignane content of the seeds is between 7 and 20% (Ref. 1). The blossoms and young fruits are free of lignanes.

Among other things, scientific studies involving isolated ingredients have shown that *Schisandrin A* has a positive influence on the central nervous system. In tests with mice fed *Schisandrin A*, it was noted that sleeping hours increased. This supported the medicinal characteristics described in the Chinese monograph which stated that *Schisandrae fructus* has calming and slightly anti-depressive effects, as well as being suitable for the treatment of sleeping disorders (Ref. 9).

**DOSAGE AND SAFETY PROFILE**

The dosage used in traditional Chinese medicine ranges from 1.5 to 9g per day (by infusion in water or wine). The lower dosage up to 3g is used for chronic cough. When prescribed as a tonic a dosage of 6 to 9g is sufficient (Ref. 9).

If used in the recommended dosage *Schisandra* fruits and preparations thereof can be safely consumed. Rare side effects of heartburn, acid indigestion, stomach pain and allergic skin reactions have been reported. Based on the limited information available, *Schisandra* should be avoided in pregnancy. The influence on driving has not been examined specifically, but according to the available literature and the experience of practitioners, no negative effects are to be expected (Ref. 4).

**FLACHSMANN SCHISANDRA CHINENSIS EXTRACT 0085949**

Extract 0085949 of Emil Flachsmann AG is standardised and has a Schisandrin quantity that is interesting for the food industry (complete Schisandrins identified according to *Schisandrin A*).

By means of a technically perfected and gentle extraction procedure, Emil Flachsmann AG attempts to reproduce the ingredients of the drug in extract form (the extract as a multi-component system). This means that – besides *Schisandrin A* as mentioned above – the extract...
Schisandra chinensis

Medicinal plant and fruit of the five flavours

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Schisandra chinensis belongs to the family of the Schisandraceae and to the Schisandra Michaux genus which comprises 25 species (Ref. 1).

However, only Schisandra chinensis (Turcz.) Baill. is of interest to the food industry and science. The lesser known Schisandra sphenanthera Rehd & Wils. doesn’t have the same significance although it is official in the Chinese pharmacopoeia (Ref. 2).

As most of the plants of its genus, Schisandra chinensis is to be found in East Asia, that is to say in Northeastern China, Korea, Japan, and Manchuria. The Schisandra sphenanthera grows in southern and western parts of China but is hardly exported to Europe (Refs. 1, 3).

In China, Schisandra chinensis is called “Wu wei zi” or “the fruit of five flavours”. The Schisandra fruit indeed has a very characteristic taste profile, which can best be described as a mixture of sweet, sour, slightly salty, spicy, and bitter at the same time; each of the five classically recognised tastes of Chinese herbalism (Ref. 4).

Traditionally, for millennia already, Schisandra chinensis has been used as a medicinal drug. Mention of the plant was first made in the “Divine Husbandman’s Classic of the Materia Medica” which was written approximately 4,000 years ago (Ref. 5). The plant was classified among the superior medicines which were said to “prolong the years of life without ageing” (Ref. 4). Today, Schisandra chinensis and its fruit are listed as an official medicinal herb in Chinese and Japanese pharmacopoeia (Refs. 2, 6).

The perennial Schisandra chinensis plant is often described as a monoecious, but also as a dioecious, lignified climbing liana about 8m long. The young twigs are brown to purple in colour. Annually, three to seven new leaves grow. Either alternately or as on short shoots, they stand in whorls. They are 5 to 11cm in length and 3 to 9cm wide, with an egg-shapedelliptic form and serrate or denticate leaf margins. Their colour varies from dull green to brown. The lower sides of the leaves are partially hairy and the leaf stalks are 10 to 40mm long. Male as well as female blossoms are of creamy-white to pinkish colour and stem from the shoulders of the bracts (Refs. 1, 4, 7).

The fruits of the Schisandra chinensis are irregularly spheroid or applanate-spheroid and have a diameter of 5 to 8mm. Depending on the degree of ripeness, the fruit’s colour is anywhere between deep red to black-brown. Its surface is wrinkly, oily and partially covered with a coating similar to hoarfrost. The fruit itself has one or two kidney-shaped seeds with a yellowish-brown and shiny sur-

The Schisandra chinensis plant

face. The seed’s coat is thin and brittle (Ref. 2).

The skin’s taste is sweet; the pulp is sour, salty and astringent; the seed is bitter and pungent; overall it possesses a salty aftertaste (Ref. 1).

The fruits are harvested ripe in autumn and optionally steamed before drying in the sun. All impurities and the stalks are removed afterwards (Refs. 2, 4).

The Chinese monograph prescribes that the fruit has to be pulvcrised prior to application (Ref. 2).

EFFECTS AND INDICATIONS ACCORDING TO CLASSIC CHINESE MEDICINE THEORY

According to classic Chinese medicine theory, Schisandrae fructus is an invaluable protector of youthfulness, which could be taken every day to secure and