For the treatment of high cholesterol, high LDL cholesterol, hypercholesterolemia.

**Zerchochol** is a food supplement with natural plant sterols

Several clinical studies have shown that plant sterols (phytosterols) reduce the LDL cholesterol level. Most of these studies show that a daily intake of 1 to 3 grams of plant sterols result in a reduction of the ‘bad cholesterol’ (LDL cholesterol) between 8 and 15 % over a period of 3 to 6 weeks (see chart).

Reduction in terms of percentage of the LDL cholesterol in clinical studies with plant sterols:

At the same time there is an insignificant change in the HDL cholesterol level and the triglyceride content in the blood.

**Operational mechanism of plant sterols**

Plant sterols (phytosterols) lower the LDL cholesterol because in the intestines they compete with cholesterol from food and the cholesterol cycle for absorption through the wall of the intestine. Most of the plant sterols (phytosterols) are excreted in the faeces.

Taking into account this operational mechanism, a reduction of the LDL cholesterol level is only possible with a regular daily consumption.

**Composition**

Zerchochol comprises natural plant sterols (phytosterols) in their free (non esterified) form. The plant sterols (phytosterols) are immediately active in the body.

Zerchochol tablets were especially developed to obtain an excellent dispersion in the intestinal tract. Each tablet contains 800 mg plant sterols (phytosterols).

**Galenic form**

Zerchochol consists of film-coated tablets for swallowing. Each tablet contains 800 mg plant sterols (phytosterols).

**Directions for use**

The recommended daily dose amounts to 2 tablets a day with the main meal. You can prescribe up to 3 tablets a day. In that case it is best to take 2 tablets with the main meal and the remaining tablet with another meal.

**Contraindications and precautions**

Because of their bad absorption plant sterols do not result in systemic toxicity.

However, plant sterols do lower the absorption of β-carotenoids which are important for the production of vitamin A. It was proven that the consumption of (margarine enriched with) 3 g plant sterols a day for one year results in a 33% reduction of the β-carotene mirror.

However, this is not appropriate for groups with a higher vitamin A need, such as pregnant women, breastfeeding women and young children. That is why Zerchochol is not recommended for pregnant and breastfeeding women as well as children under the age of 5.

In case of long-term use of Zerchochol, the combination of Zerchochol with a healthy diet rich in fruit and vegetables is recommended to avoid a possible reduction in the absorption of β-carotenoids.

For people who suffer from sitosterolaemia (a genetic disorder of the plant sterol mechanism, 50 cases known worldwide) there is a risk. They not only hyper-absorb cholesterol but also other sterols such as plant sterols, which are then not broken down but deposited in tissue, including the vascular intima. Zerchochol is not suitable for them.

**Side effects - Interactions with medicines**

At present neither side effects nor interactions with medicines are known. Zerchochol can support and supplement the effect of cholesterol reducing medication.

Latest update: August 2006.

**Innoceutics bvba**

IIC University of Ghent Technologiepark 3 9052 Zwiinaarde Belgium

www.innoceutics.com

contact@innoceutics.com

Tel: +32 (0)9 241 56 00

Fax: +32 (0)9 241 56 56

**References**

- JGC van, Opperhuizen A, Jansen EJHM (2005) Accumulation of phytosterols in food. Evaluation of the adverse effects following the intake of high dose of phytosterols, RIVM rapport 340240001, Amsterdam, 2005.