# The ultimate solution for cholesterol management

powered by cardioll



### Designed by nature, developed by science

Dodatak ishrani na bazi glukomanana ifermentisanog crvenog plinica s secroni izabdivačima

30 kesica / 5g

# TABLE OF CONTENTS

Intro	3
LauraLean at first glance	4
Red Yeast Extract at first glance	5
Key determinantes in Chol Syn	6
HMG CoA Reductase blockage	7
Key determinantes in Chol. Syn.	8
Lipid resorption ommition	9
Bile excretion stimulation	10
Cardioll	11
Summary	14





## is a synergistic combination of highly purified Glucomannan and Red Yeast Rice extract



## LuraLean at the glance

- \* Laura Lean is a water-soluble, high molecular weight fiber
- \* Extracter from the Amorphophallus konjac plant
- \* Once hydrated Glucomannan forms a highly viscosity gel
- \* Expands 200-fold its initial volume
- \* Acting as fat trapping magnet
- \* Prevents dietary fats from being absorbed at the gastrointestinal tract

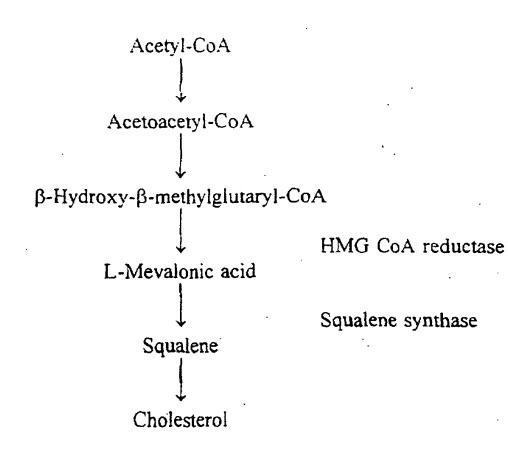


## Red Yeast Rice at the glance

- \* Red yeast rice is used to colour a wide variety of food products
- \* Its use has been documented as far back as the Tang Dynasty in China in 800 AD
- \* It is taken internally to invigorate the body, aid in digestion, and revitalize the blood
- \* In the late 1970s, researchers in the United States and Japan were isolating lovastatin from Aspergillus and monacolins from Monascus.
- \* Chemical analysis soon showed that lovastatin and monacolin K are identical.
- \* Red yeast rice went on to become a contentious non-prescription dietary supplement.



## Key determinantes in Chol. Syn.



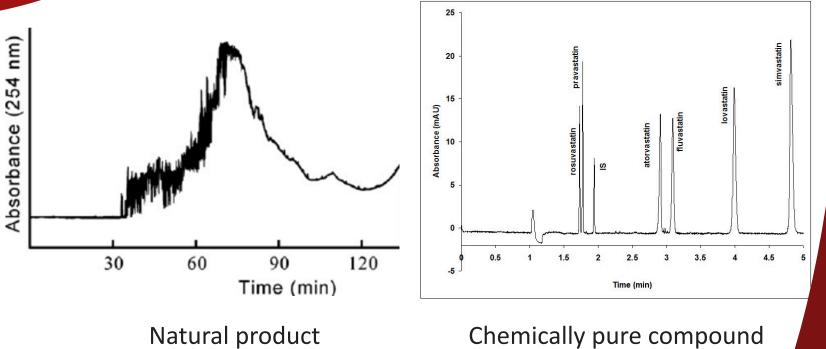


## HMG CoA Reductase blockage

- \* Monocolin K inhibits HMG CoA Reductase
- \* The effect can not be distinguished from the effect of Lovastatine or other statin drugs
- \* Monocolin K from Red Yeast Rice is a natural product thus it is a mixture of several different ingredients and not chemically pure compound







Chemically pure compound



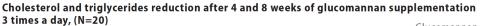
## Lipid resorption ommition

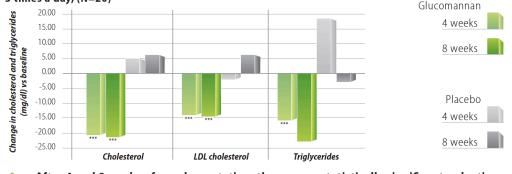
#### **CLINICAL STUDIES**

• Several clinical studies showing the efficacy and safety of glucomannan in both indications for both adults and children have been published in scientific journals



Weight loss after 4 and 8 weeks of glucomannan supplementation 3 times a day





After 4 and 8 weeks of supplementation, there was a statistically significant reduction of body weight and cholesterol and triglycerides levels in subjects taking glucomannan, which was not observed in the placebo groups.

Walsh DE. et al., Effect of Glucomannan on Obese Patients, International Journal of Obesity; 1984(8); 289-293.



## Bile excretion stimulation

- \* LuraLean is demonstrating gelling effect in the digestive tract
- \* LuraLean is increasing excretion rate of bile
- \* The excess bile is removed trough feces
- \* The re-resorption of cholesterol is blocked
- \* LuraLean is decreasing cholesterol level in blood
- \* LuraLean is decreasing triglyceride level in blood



## Cardioll

- \* Cardioll is a combination product
- \* The effect of Lura Lean synergistic to the effect of Red Yeast Rice extract.
- \* These two ingredients combined together will strongly suppress cholesterol synthesis and increase cholesterol excretion
- \* The resulting effect will be better lipid status of the patients



## Cardioll

EFSA Journal 2011;9(7):2304

SCIENTIFIC OPINION

Scientific Opinion on the substantiation of health claims related to monacolin K from red yeast rice and maintenance of normal blood LDL-cholesterol concentrations (ID 1648, 1700) pursuant to Article 13(1) of Regulation (EC) No 1924/2006<sup>1</sup>

EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA)<sup>2, 3</sup>

European Food Safety Authority (EFSA), Parma, Italy

#### SUMMARY

Following a request from the European Commission, the Panel on Dietetic Products, Nutrition and Allergies was asked to provide a scientific opinion on a list of health claims pursuant to Article 13 of Regulation (EC) No 1924/2006. This opinion addresses the scientific substantiation of health claims in relation to monacolin K from red yeast rice and maintenance of normal blood LDL-cholesterol concentrations. The scientific substantiation is based on the information provided by the Member States in the consolidated list of Article 13 health claims and references that EFSA has received from Member States or directly from stakeholders.

The food that is the subject of the health claim is red yeast rice (i.e. rice fermented with the red yeast *Monascus purpureus*). The Panel considers that, whereas red yeast rice is not sufficiently characterised in relation to the claimed effect, the food constituent, monacolin K from red yeast rice, is sufficiently characterised.

The claimed effects are "cholesterol" and "cholesterol management/heart health". The target population is assumed to be adults in the general population. In the context of the proposed wordings,



## Cardioll



EFSA Journal 2009; 7(9):1258

#### **SCIENTIFIC OPINION**

Scientific Opinion on the substantiation of health claims related to glucomannan and maintenance of normal blood cholesterol concentrations (ID 836, 1560) pursuant to Article 13(1) of Regulation (EC) No 1924/2006<sup>1</sup>

EFSA Panel on Dietetic Products, Nutrition and Allergies<sup>2,</sup>

European Food Safety Authority (EFSA), Parma, Italy

#### SUMMARY

Following a request from the European Commission, the Panel on Dietetic Products, Nutrition and Allergies was asked to provide a scientific opinion on a list of health claims pursuant to Article 13 of Regulation 1924/2006. This opinion addresses the scientific substantiation of health claims in relation to glucomannan (Konjac mannan) and the maintenance of normal blood cholesterol concentrations. The scientific substantiation is based on the information provided by the Member States in the consolidated list of Article 13 health claims and references that EFSA has received from Member States or directly from stakeholders.

The food component that is the subject of the health claims is glucomannan (Konjac mannan). Glucomannan is a water-soluble type of fibre with high molecular weight and high viscosity in water solution. Glucomannan does not occur naturally in foods. The Panel considers that the food constituent, glucomannan, is sufficiently characterised.

The claimed effects are "cholesterol" and "cholesterol level". The Panel assumes that the target population is the general population. The Panel considers that maintaining normal blood (LDL) cholesterol concentrations is beneficial to human health.



## Summary

- \* Cardioll is a combination product
- \* Strong suppression of cholesterol synthesis
- \* Rapid increase of cholesterol excretion
- \* Natural product
- \* Addition to already existing hyperlipidemic therapy
- \* Standalone product for small to moderate increased blood lipids