

HEALTH BENEFITS OF THE PHYTOTHERAPEUTIC PRODUCT SOMRAS - RESULTS OF PILOT PROJECT

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Abstract

The phytotherapeutic product Somras (in Sanskrit meaning “Elixir of Health”) is made of phytoherapeutic agents as garlic, ginger, lemon, apple cider vinegar and honey according the Ayurveda technology. Cardiovascular Disease (CVD) is the most common cause of death in a civilized world. The death rate for CVD is still high in the Czech Republic, accounting for 51% of the total annual mortality rate, and 35% in the European Union. The imperative of the time is to look for new ways in the prevention and treatment of risk factors of civilization diseases. In the literature and in the old pharmacopoeia, we find information about the beneficial effect of some phytopharmacs on the function of the cardiovascular system. The main objective of the presented study was to assess the therapeutic preventive effect of phytotherapeutic product Somras as a food supplement, and its influence on selected risk factors of civilization diseases in the pilot research project.

Keywords

Civilization diseases, phytopharmacies, cardiovascular system, food supplement “Somras”, Ayurveda.

INTRODUCTION

Natural dietary supplements strengthen the body against the negative effects of civilization diseases. Halvorsen 2002; Ramkissoon, Mahomoodally, Ahmed et al 2012 presented findings from their study about indication of the potential of some dietary components to prevent and/or inhibit protein glycation. Such dietary components could reduce formation of endogenous AGEs in vivo, thus reducing the likelihood of developing diabetic complications or reducing their progression. It was found that there was no direct correlation between the antioxidant capacity and antiglycation potential suggesting that the two might act through different pathways. Certainly, more studies related to the structure of these dietary adjuncts and the reaction FIG. 5.

Correlation between phytochemical properties: (a) total phenolic content (TPC) and DPPH, (b) TPC and FRAP, (c) TPC and % inhibition of glycation, (d) FRAP and % inhibition of glycation, (e) DPPH and % inhibition of glycation of the 10 extracts.

An evaluation of the efficacy of the combination of ginger (*Zingiber officinale*) and plai (*Zingiber cassumunar*) gel for the treatment of osteoarthritis of the knee using 1% diclofenac gel as a comparator show that both Plygersic gel and diclofenac gel could significantly improve knee joint pain, symptoms, daily activities, sports activities and quality of life measured by KOOS following 6 weeks of treatment. In the repeated ANOVA, there were no differences in the results between the Plygersic and

diclofenac gel groups (Niempoog, Siriarchavatana, Kajsongkram, 2012).

Atherosclerosis which results from gradual deposition of lipids in medium and large arteries is a leading cause of mortality worldwide. Apple juice can effectively prevent the progress of atherosclerosis. This is likely due to antioxidant and anti-inflammatory effect of apple juice (Setorki, Asgary, Eidil et al. 2009).

OBJECTIVE

The main objective of the presented study was to assess the therapeutic preventive effect of phytotherapeutic product Somras as a food supplement, and its influence on selected risk factors of civilization diseases in the pilot research project.

METHODS

Material

The pilot research project was attended by 50 participants, 22 males, 28 females in the age range 53 – 72, in the average age 57 years. All participants after the proper information about the project aims and procedure signed a voluntary participation in the project. No entry criteria were given. All participants were lacto – vegetarians and all practiced regularly yoga according the System Yoga in daily life (Maheshwarananda, 2006).

Procedure

The project intervention lasted one year from September 2014 until September 2015. In the period of October - December 2015 obtained data were collected and analysed.

Diagnostic examinations

In accordance with the main objective of the pilot project, the following diagnostic parameters were monitored:

- blood count,
- cholesterol,
- glycaemia,
- liver tests,
- vitamin B12,
- homocysteine,
- blood pressure,
- sono-carotid
- Questionnaire about overall influence of the phytotherapeutic product Somras

Intervention

Cardiovascular Disease (CVD) is the most common cause of death in a civilized world. The death rate for CVD is still high in the Czech Republic (CR), accounting for 51% of the total annual mortality rate (Kasalová Daňková 2012), and 35% in the European Union (Ginter, Simko 2010). Therefore the imperative of the time is to look for new ways in the prevention and treatment of risk factors of civilization diseases.

In the literature and in the old pharmacopoeia, we find information on the beneficial effect of some phytopharmacs on the function of the cardiovascular system.

Garlic has very important cardiovascular, immune and oncological preventative effects. Garlic contains amino acids, flavonoids, phenolic substances, sterols and saponins that act antibacterially and against molds. The garlic also increases vascular resistance, improves blood flow, lower blood lipid levels and platelet aggregation (NMJ, 2010;

Reinhart, Talati, White et al. 2009; Warshafsky, Kamer, Sivak 1993). Garlic lowers blood pressure (Ried, Frank, Stocks et al. 2008). Research also shows that garlic can be effective in the prevention and treatment of type 2 diabetes and in the treatment of oxidative stress (Devon 2013). There is still no evidence for the possible interaction of garlic with Warfarin (Vaes, Chyka 2000).

Ginger has pronounced anti-inflammatory and anti-rheumatic effects, and is used to prevent colds. Ginger stabilizes glycemia in diabetes (Li, Tran, Duke, Roufogalis 2012). A favourable effect on CKD is documented by an Israeli study of the study demonstrating a statistically significant reduction in serum glycemia, total cholesterol, LDL, VDL and triglycerides (TG), as well as an increase in HDL cholesterol (Fuhrman, Rosenblat, Hayek et al. 2000). Nicoll et al. demonstrate the anti-inflammatory, antioxidant, hypotensive and hypolipidemic effects of ginger, reduce platelet aggregation, which suggests that the barrier might find use in the treatment of CVD (Nicoll, Henein 2009). Jiang et al. demonstrates that therapeutic doses of ginger do not affect the effects of warfarin in healthy individuals (Jiang, Williams, Liauw et al. 2005). Double-blind randomized controlled clinical trial of Iranian 2008 whose hyperlipidemic patients were divided into two randomized treatment group (enjoyed ginger capsules 3 times daily, 3 g), and - a group of placebo (lactose capsules 3 times daily 3 g) for 45 days. Levels of triglycerides, total

cholesterol, and LDL cholesterol in the ginger group recorded a significant decrease compared to the placebo group Khandouzi, Shidfar, Rajab et al. 2015). The level of HDL cholesterol in the gherkin squid increased statistically (Alizadeh-Navaei, Roozbeh, Saravi et al. 2008; Chang, Wang, Yeh et al. (2013).

Lemon is significant with a great deal of vitamin C. From the dietetic and therapeutical point of view, it is not its most interesting nutrients, but so-called companion substances or phytochemicals. These include citric acid, which is the largest, and malic, acetic and formic acid. These increase the effect of ascorbic acid or vitamin C. Hesperidin and other flavonoids contained in lemons strengthen the capillary walls, improve vascular elasticity and reduce blood clot formation (Khan Y, Khan RA, Afroz et al. 2010; Sari, Selim, Dilek et al. 2012). Regular consumption of lemons is recommended for arteriosclerosis, which increases the risk of thrombosis because it reduces cholesterol deposits in the blood vessels and reduces the risk of heart disease (Pamplona-Roger 2008). It acts to prevent the development of cardiovascular diseases.

Apple vinegar is commonly used as a flavour coriander. It produces almost all kinds of fruit through the fermentation process. Most commonly from grapes and apples. Daily use of small doses (0.57 mmol of vinegar - mayonnaise, salads, etc.) reduces systolic blood pressure (Johnston,

Gaas 2006) statistically significantly (20 mmHg). It works in the prevention of cardiovascular disease.

Honey is used at the same time as food, sweetener, flavour prescriptions and cure. Honey contains mainly simple sugars - glucose and fructose, vitamins B1, B2, B3, B5, E, K, C, and carotene, minerals, phosphorus, iron, magnesium, calcium, chlorine, copper, sulfur, and other elements, amino acids and enzymes. It is a digested feed for bee larvae. It does not digest in the stomach but passes smoothly into the intestine. It's a good carrier. It has a good penetration into tissues and cells. He carries the healing substances attached to it. It has antimicrobial properties (Mandal, Mandyl 2011).

Honey contributes to the expansion of coronary heart arteries and to better blood circulation in the heart muscle, not only by providing essential nutrients for muscle - grape sugar, vitamins B and C, trace elements potassium and magnesium. It works in the prevention of cardiovascular diseases (Munstedt, Hoffmann, Hauenschild et al 2009; Yaghoobi, Al-Waili, Ghayour-Mobarhan et al. 2008; Alvarez-Suares, Tulipani, Romandini et al. 2010; Rosa, Tubero, Atzen 2011).

The world's most well-known products include the followed combinations of phytopharmaks (Valera, Maekawa, De Oliveira et al. 2013; Kubra, Murthy, Rao 2013; Gull, Saeed, Shaukat et al. 2012), see Table 1.

Table 1 World's most well-known phytopharmaks in favourite combinations

INGREDIENTS
apple vinegar, garlic, honey - raw juice
apples, carrots, ginger, lemon - raw juice
lemon - in water
garlic, lemon - raw juice
garlic, ginger, lemon, apple vinegar, boil, add honey - concentrated solution
apple vinegar, garlic, honey - raw juice
ginger and turmeric

Naturotherapy information sources describe the use of these substances in the combinations in which they are also produced. They describe their ability to recanalize blood vessels, primarily coronary, their ability to dissolve atheromatic plaques. Our product, Somras, is the most similar composition of Heart bypass, designed to prevent and purify the vascular bed,

primarily coronary and cerebral (Smyth, Cifelli, Ortori et. al. 2010).

The phytotherapeutic product Somras (in Sanskrit meaning "Elixir of Health") is made of phytoherapeutic agents as garlic, ginger, lemon, apple cider vinegar and honey according the Ayurvedic technology. In the Somras food supplement the beneficial effects of the above-mentioned substances

suitably complement and potentiate. In India, in folk healing for millennia, a combination of all five ingredients is used to complete body cleansing.

RESULTS AND DISCUSSION

The composition of the participants was very diverse and unbalanced. Some of the participants did not have any health problems and did not treat any diseases, other participants had a large number of long-term and serious diseases stabilized by pharmacological therapy. Due to the wide variety and heterogeneity of the monitored sample of participants, the results could not be statistically evaluated.

That is why we present the assessment in an individual form via qualitative evaluation in the followed categories:

Vitality – 25 participants experienced improvements in vitality and immunity. They were not so sick, they had a lower incidence of common colds than in previous years. Somras was effective at the onset of colds, which often stopped altogether.

Cholesterol – 15 participants had cholesterol elevated, cholesterol decreased by 7.

Diabetes mellitus – 8 participants had diabetes, 3 had lower blood glucose levels, 1 physician reduced their insulin dose. One participant had a bleeding into the ocular background, which stopped with the use of Somras.

Hypertension – 18 participants had treated hypertension, 5 people reported pressure stability, no pressure fluctuations.

Cervical artery atherosclerosis – in 14 participants, the presence of atheromatic plaques was described in

sono-carotid artery. During their annual use, they did not disappear, nor did they progress. They stabilize the Somras effect here.

Dizziness – 5 elderly subjects had dizzy states, 2 reported a decrease in dizziness.

Hearing Impairment – Improvement of aged hearing loss has not been confirmed.

Homocysteine – only 10 participants, 3 were improvements, 3 worsened.

Vitamin B12 – has not been affected.

Blood image – unaffected.

Digestion – 3 participants reported improved digestion and disappearance of constipation.

Hepatic tests – not affected.

Obesity – One participant has lost 7 pounds, disappeared by the swelling of the lower limbs.

Skin diseases – After 1 month of use, skin seborrhea disappeared, acne improved in 2.

Lower limb veins – 3 participants had varicose veins, reported calming and reduced pain.

One participant noted improvement in vision, one treatment of painful menses and one improvement in potency.

The project did not complete 7 people. One for allergies to garlic, three for stomach problems, three participants did not reason.

The valuable findings of the project were information on good tolerance of Somras, good effect on vitality and immunity. Valuable is evidence of interruption of intraocular bleeding and diabetes. Valuable information about the stabilization of atheromatic plaques in carotids.

Limits of the presented study

Because the input criteria were not exactly done, the sample of participants was incomprehensible to general population. Therefore, the presented results of the study we give as informative only for those interested experts, which are working in the area of health promotion.

CONCLUSION

Over the past five thousand years, human civilization has used different types of medicinal plants based on observations of their effects on the organism. It was a method of trial and error, whether it was in the oldest times or a little later. Medicinal plants have been accompanying a man on his way through life for a very long time.

The Somras' greatest contribution is the prevention of civilization diseases. It also participates in the stabilization of civilization diseases already infected. In case of more serious chronic illness, Somras is supportive, not therapeutic. In order to obtain further and accurate information on the effects of Somras, it will be appropriate to carry out further investigations under the exactly specified conditions.

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