T=80°C/500W, and with 30 % ethanol or acetone that yielded roughly two times more TP than water. Addition of HCl did not significantly increase amount of totally extracted polyphenols regardless of solvent.

Conclusions: Microwave-assisted extraction with aqueous solutes (ethanol or acetone) is appropriate approach for extraction of polyphenols from sage.

Keywords: (maximum 5): microwave-assisted extraction, medicinal and aromatic plants, sage, Salvia officinalis L., total polyphenols

## 149/732. Prevalence of health-related claims on pre-packaged foods: a five-country study in Europe

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Introduction: CLYMBOL (Role of health-related CLaims and sYMBOLs in consumer behaviour) is a European Commission supported project.

Objectives: This study aimed to determine the prevalence of symbolic and non-symbolic nutrition and health claims found on prepackaged foods in five European countries.

Method / Design: Food and drink products were sampled based on a randomised sampling protocol, using store lists or a store floor plan. Data collection took place in 2013, across five countries (Germany, the Netherlands, Slovenia, Spain, and UK), in three types of stores (large supermarket/national retailer, discounter and neighbourhood store).

Results: A total of 2,036 products were sampled and packaging information was analysed. At least one nutrition or health claim was identified in 26% of the total products sampled (528/2,036 products). This was represented by 94% non-symbolic and 6% symbolic claims. The majority of all claims were nutrition claims (64%), followed by health claims 29%) and then health-related ingredient claims (6%). The most common health claims were nutrient and other function claims (47%). Disease risk reduction accounted for 5% and children's development and health claims 8% of identified health claims. The category of foods for specific dietary use (baby foods) had the highest proportion of both nutrition (78%) and health claims (70%).

Conclusions: The prevalence of symbolic and non-symbolic nutrition and health claims varies across European countries and between different food group categories. This study provides baseline data for regulators and food industry to monitor and evaluate the use of claims in food information to consumers. It is also the basis for subsequent phases of CLYMBOL involving consumer understanding and use of such information in purchase and consumption behaviour. Furthermore, the protocol designed and used in this study, particularly the addition of the health-related ingredient claim may assist future research in this area.

Keywords: (maximum 5): nutrition claims; health claims; health symbols; CLYMBOL.

## 149/735. Protein profile and texture of fermented dairy products obtained by nonconventional starter culture

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Introduction: Novel studies have investigated the possibility of kombucha application, as non-conventional starter culture, and its interesting nutritional aspects in manufacturing of fermented dairy products. Different starter cultures may have influence on allergenic properties of final milk products due to their proteolytic activity. Consequently, biochemical changes of milk components during fermentation have a main role in texture, microstructure and nutritional quality of fermented milk products.

Objectives: The aim of this study was to investigate the protein profile, texture and microstructure of fermented dairy products obtained by kombucha starter.

Method / Design: Milk samples were fermented at 37°C (sample K37) and 42°C (sample K42) sample with addition of 10% kombucha inoculums (pH=3.17). During fermentation process, samples were taken at the pHs: 5.4, 5.1, 4.8 and 4.6 for texture and microstructure analysis.

Results: Sample K42 had shorter fermentation time than sample K37. During fermentation the relative content of lysozyme, lactoferrin (protein with antimicrobial activity),  $\alpha$ - lactalbumin,  $(\alpha - la) \beta$ - lactoglobulin ( $\beta$ -lg) and  $\kappa$ - casein decreased. Sample produced at 37°C had lower content of both allergenic fractions ( $\alpha$ -la and  $\beta$ -lg) than in sample K42. Protein profile analysis revealed more stable  $\alpha$ - and  $\beta$ - casein fractions compared to other protein fractions during milk fermentation. The analysis of the textural properties showed an increase in their values during fermentation and statistically significant differences (P < 0.05) among fermentation points, except between the pHs 4.8 and 4.6. The highest changes in microstructure at both temperatures were