Post market monitoring of novel foods: Plant sterols

Area of research interest: Novel and non-traditional foods, additives and processes
Study duration: 2006-02-01
Project code: G03021
Conducted by: TNS Global, London

Background

Since the late 1990s, a growing range of food products, including margarine and yoghurts have contained plant sterols (the two leading brands in the UK being Benecol and Flora Pro.activ). The majority of these products require a novel food authorisation. In addition, EC regulation 608/2004 requires that all products containing plant sterols should be labelled in a consistent manner. This is in order to inform consumers that they should avoid excessive or inappropriate consumption.

The Food Standards Agency, as the UK Competent Authority for the Novel Foods Regulation 258/97, is receiving an increasing number of enquiries and novel food applications from manufacturers who wish to launch new products containing plant sterols to the UK market.

Plant sterols inhibit the absorption of cholesterol and they exist in two different forms, phytosterols and phytostanols. They have an almost identical chemical formula and studies to date indicate that they elicit the same cholesterol lowering mechanism.

Scientific studies indicate that the consumption of 2-3g plant sterols per day can significantly reduce the level of the 'bad' low density lipoprotein (LDL) cholesterol in individuals, if consumed as part of a healthy diet.

There is some evidence that the long term consumption of high amounts of plant sterols may effect the absorption of fat soluble vitamins. In view of this (EC) 608/2004 imposes a statutory requirement for all products with added plant sterols to be labelled in a manner that indicates the maximum daily dose of plant sterols. The labelling should also advise individuals who are likely to be most susceptible to a reduced vitamin status (namely pregnant or nursing women and children under 5) to avoid consuming these products.

The aim of this research is to understand who is consuming plant sterol products, the quantities and whether consumption is within recommended limits. This is in order to monitor the effectiveness of the advice given on the product labels.

Research Approach

A two-stage approach will be used. The first stage will use the TNS Family Food Panel (FFP) to establish who is consuming plant sterols products, in what quantities and how often. The second stage, dependent on the results of the first, is likely to use a Omnibus Panel for an ad-hoc study to investigate awareness of labelling on daily limits and on consumption amongst those 'at-risk'

groups.

Results

This project has provided information on consumer consumption of cholesterol lowering phytosterol products in order to assess whether these products are being consumed according to the advice provided on product labels that stipulates a daily consumption amount and avoidance by non-target groups. The results of the project indicate that the advice is generally being adhered to, but care needs to be taken over this issue in future assessment of new products containing phytosterols. Otherwise there is the potential for consumers to confuse these with other similarly packaged products.

Research report

England, Northern Ireland and Wales

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