Bioactive compounds from blackcurrant processing waste for brain health (BRAINHEALTHFOOD)

Title of project or programme

Bioactive compounds from blackcurrant processing waste for brain health (BRAINHEALTHFOOD)

Principal Investigators of project/programme grant

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Source of funding information

European Commission

Total sum awarded (Euro)

870100

Start date of award

01-02-2009

Total duration of award in months

24

The project/programme is most relevant to

- Alzheimer's disease and other dementias

Keywords
Research abstract in English

Alzheimer's disease (AD) is the most common age-related neurodegerative disorder, and one of the most devastating diagnoses that patients and their families can receive. Currently ~10 % of over 65 year old have AD, and the direct and indirect cost of its care is estimated to be >100 billion $ in the US alone and in the UK ~ 22M, and therefore causing profound medical, social and economic consequences.

New findings in recent epidemiological studies suggest that polyphenolics containing foods may offer effective means to delay the onset of Alzheimer's disease development. This provides great business opportunities for food and nutraceutical companies. The polyphenolic extracts from blackcurrant have recently been demonstrated to provide neuroprotection against oxidative stress induced neuronal damages in human cell cultures, and therefore it may hold a promising natural target for the preparation of bioactive food ingredients for a variety of applications.

In this BrainHealthFood European consortium, our aim is to provide research support for SMEs by integrating the different expertise from chemistry, metabolomics and neurology from European countries to identify neuroprotective compounds from blackcurrant processing waste, which helps SMEs to develop novel products in a business area with a high future potential. Neuroprotection activity will be analyzed in neuroblastoma cells and in a mice model of Alzheimer's disease.

Research provide strong scientific basis for SMEs to the development of novel berry juices, dietary supplements and other products for elderly people having a high risk of developing Alzheimer's disease.

Lay Summary