

Introduction to IPFN

What is the Integrated Irish Phytochemical Food Network?

The Irish Phytochemical Food Network is an alliance of scientists from various food related research fields (horticulturist/agronomist, food engineers, food chemists, nutritionists, consumer behavior and marketing experts, economists...) that gathers and exchanges knowledge on naturally occurring nutrients and bioactive compounds (phytochemicals) in Irish fruits and vegetables.

But...What are phytochemicals?

Phytochemicals are chemical compounds that are found naturally in plants (the ancient Greek word *phyton* means plant). Phytochemicals can occur in many sorts of plants, and therefore some of them occur in fruits and vegetables that are part of human diet.

And...Why phytochemicals in Food ?

Numerous studies suggest that phytochemicals can be responsible for considerable health benefits to humans such as reduction of the risk of developing many forms of cancer (lung, prostate, pancreas, bladder and breast), the reduction of the risk of cardiovascular diseases and/or other benefits such as anti-inflammatory properties.

Why a Network?

By working together, Network members are able to draw on their collective experiences, knowledge, resources and efforts. A Network provides an occasion to get the most out of available resources particularly through a reduction in unnecessary duplication, identification of knowledge gaps and fragmentation of activities and greater cooperation and collaboration.

Why in Ireland?

The study of phytochemicals in Irish grown and consumed fruits and vegetables (from the seedling to their consumption, passing through the harvesting, storage and processing...) can develop a better understanding of their mechanisms in human health.

The expected impact of this network is to gain a better understanding of the role and biological modes of action of phytochemicals at molecular, cellular and whole-organism levels. A greater understanding of the roles of phytochemicals in promoting health will lead to improved formulation of foods and recommendations for consumers concerning the specific contribution made by individual phytochemicals in foods. The new food formulations, accompanied with nutrition and health claims, will increase competition and trade opportunities in Europe. Recommendations to promote health will be developed, taking into account the diverse eating patterns in Ireland.

