

3rd International Conference and Exhibition on **Nutrition & Food Sciences**

September 23-25, 2014 Valencia Convention Centre, Spain

The colourless carotenoids phytoene and phytofluene: Promising food ingredients?

Antonio J Melendez-Martinez
Universidad de Sevilla, Spain

Carotenoids are versatile isoprenoid compounds that play key roles in Nature. For many years their interest in Food Science and Nutrition lied in the colour they impart and the fact that some of them can be metabolized into compounds exhibiting vitamin A activity. In the last 25 years the research on them has expanded considerably due to studies indicating that they may provide health benefits. It is estimated that human diets contain ca. 100 carotenoids, of which only a few (mainly lutein, zeaxanthin, β -cryptoxanthin, α -carotene, β -carotene, lycopene, phytoene and phytofluene) are found in plasma and tissues. Of them, the colourless carotenoids phytoene (PT) and phytofluene (PTF) have not been studied in depth within the Food Science and Technology and Nutrition fields yet despite they are precursors of all the remaining carotenoids and they are readily bioaccessible and bioavailable in humans. In this talk, the existing knowledge about these compounds will be summarized. Special attention will be paid to their differential structures, properties, occurrence in foods and possible biological actions.

ajmelendez@us.es