

## Commentary on the use of anti-inflammatory and antioxidant supplementation in healthy individuals.

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### Commentary

In the study Dietary supplementation with procyanidin-rich Pinus pinaster extract is associated with attenuated Ehrlich tumor development in mice [1], the extract was used before the inoculation of Ehrlich tumor to increase antiinflammatory and antioxidant protection. The desired endpoint was, indeed, to delay the progression of tumor development. In fact, good results were obtained in this study so that, in conclusion, Pinus pinaster extract was considered a candidate for multi-targeted dietary-based cancer prevention approaches. Broadly speaking, when similar studies are under evaluation, there is a tendency to focus on the beneficial properties of the extracts and most often clinical studies with humans are suggested in the end. However, we propose to consider these results through a different stand-point: could increase inflammation and oxidation protection be obtained through systematic supplementation to delay the ageing process and associated diseases that come along with increased age? In fact, in the Post-Genomic Era, a new focus on prevention has been considered: we realise that we already have knowledge and technology to maintain health along our lives, as proposed by Applied Healthspan Engineering, published in 2010 by James

Larrick and Andrew Mendelsohn [2]. Paolo Giacomoni, an Italian researcher, in his article, Ageing, Science and the Cosmetics Industry [3], published in 2005, described the ageing process as “damage accumulation with time” and the damage he referred to were biochemical processes such as inflammation and oxidation. Also, he emphasized that there are parameters that can be measured to quantify the level of inflammation and oxidation in the body which can be followed periodically, what may be referred to as age management. In this context, we propose that a broad variety of extracts, such as Curcuma longa, Crocus sativus, Zingiber officinale, astaxantina, resveratrol, pomegranate, and also, Pinus pinaster, among others, could be used under regular, approved doses in a systematic basis to increase anti-inflammatory and antioxidant protection in healthy individuals in order to delay the process of ageing and decrease the incidence of cancer and other chronic diseases which have inflammation and oxidation strongly related to their initiation and progression. This is, in fact, a straightforward approach to maintain healthy along our lives, which is, as it was mentioned before, the new focus of prevention in the XXI century.

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### References

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