

## Special Issue on **New Insights into the Benefits of Polyphenols in Chronic Diseases**

# CALL FOR PAPERS

Phenolic compounds, present in fruit and vegetables, wine, tea, extra virgin olive oil, chocolate, and other cocoa products, are important for the quality of plant based foods: they are responsible for the colour, substrates for enzymatic browning, and are also involved in flavour properties. Moreover, it has been demonstrated that polyphenols exert beneficial effects in chronic diseases, including cancer, cardiovascular diseases, and neurodegenerative disorders. Health effects of polyphenols are often attributed to their antioxidant activity which includes reduction or scavenging of ROS, chelation of transition metal ions, and inhibition of enzymes involved in oxidative stress. However, due to their poor bioavailability and extensive metabolism in the digestion process, their antioxidant effect *in vivo* is uncertain. The antioxidant action may, however, be exerted in the gastrointestinal tract. Some classes of polyphenols can reach colonic microbiota and after being metabolized can be absorbed and exhibit important biological activities. All these processes depend on the structure of the phenolic compounds but can also be modulated by reactions and interactions taking place in food or in the digestive tract.

This special issue intends to improve the knowledge on polyphenols for prevention and treatment of chronic diseases. We invite investigators to contribute original research articles, comprehensive reviews, and perspective articles aiming to evaluate the bioavailability and bioactivity of food polyphenols.

Potential topics include but are not limited to the following:

- ▶ New methodologies for the analysis of food polyphenols
- ▶ Bioavailability and bioactivity of food polyphenols
- ▶ Human, animal, or *in vitro* studies: effects and dose of food polyphenols
- ▶ Polyphenols for prevention and treatment of chronic diseases
- ▶ Polyphenols in cardiovascular diseases
- ▶ Polyphenols in obesity and metabolic disorders
- ▶ Polyphenols in cancer
- ▶ Polyphenols in neurodegenerative disorders
- ▶ Design of novel functional foods and characterization of natural products and polyphenol extracts in relation to chronic diseases

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/omcl/nib/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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Friday, 7 July 2017

### **Publication Date**

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