



Nowdays, it is clearly established that excess amount of oxidants in human body can lead to oxidative stress, resulting in DNA and protein damages and an increase in the risks of degenerative diseases such as cancer.

Recent data suggests that agricultural by-products in general contain a variety of biologically active compounds that are mostly going to waste.

Dr Said Ajlouni from the University of Melbourne in Australia says : *“for instance, apple peels represent up to 10% of the whole apple fruit...However, these antioxidant-rich fruit tissues are often discarded during processing, packaging, and canning”*.

In one of his recent publications, Dr Ajlouni explains that “*considerable amounts of polyphenolic compounds, which contain phytochemical high in antioxidants (...) can be isolated from freeze-dried apple waste*”.

In this study, the Ajlouni’s team measured the total polyphenol contents and antioxidant activities of extractable polyphenols and non-extractable polyphenols isolated from freeze-dried apple waste, and investigated their potential anti-cancer effects. They noticed that the industrial apple waste had a high volume of non-extractable polyphenols which had a significant inhibitory effect on human cancer cells.

“*Our results clearly indicated that non-extractable polyphenols from industrial apple waste could be a good source of natural antioxidants with significant antiproliferation efficacy against human cancer cells*”, they added.

In addition they demonstrated that non-extractable polyphenols had significantly higher rate of radical scavenging capacity than extractable polyphenols.

Dr Ajlouni and his researcher’s team conclude by saying that : “***Clearly, apple peels could be an excellent source of natural antioxidants and bioactive compounds that may contribute to human health improvement***”.

How to valorise Apple Waste or Fruits and Vegetables Byproducts ?

Dr Nadine Schulze-Kaysers from the University of Bonn is invited to answer during [Paris Polyphenols 2012 World Congress](#)

which will be held in

Paris

, France in

June 7-8, 2012

Besides, this year, a tailored [**Network Session**](#) is specially organized with industrials, academics and many others professionals of [**Polyphenols Valorisation from Fruits and Vegetables Waste**](#)

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To know more about Paris Polyphenols 2012, please go on the website : [www.polyphenols-sit
e.com](http://www.polyphenols-sit.e.com)

To know more about Network Session on Polyphenols Valorisation from Fruits and Vegetables Waste, please [click here](#) .