Waste products from industrially processed onions may have potential uses as food sources of food ingredients including phenolic ingredients such as quercetin, according to a new scientific study.

The authors, led by Vanesa Benitez from the Autonomous University of Madrid, Spain, showed that each waste would have a profit. For instance, "*industrial onion waste (…) are interesting source of phytochemicals and natural antioxidants and their application in food, which increases their health promoting properties, is a promising field*
", said the researcher's team.

According to Benitez and colleagues, onions (*Allium cepa L.*) are the second most important horticultural crop worldwide, after tomatoes, with current annual production around 66 million tonnes. " *Lately, there has been an increase in demand for processed onions which has led to an increase in waste production. Accordingly more than 500 000 tonnes of onion waste are produced annually in the European Union, mainly from Spain, UK and Holland*
", they said.

The researchers said that the brown skin, top, and bottom of onion waste has potential for use as an ingredient rich in dietary fiber and in total phenolics and flavonoids, with high antioxidant activity. "*Moreover, brown skin showed a high concentration of quercetin aglycone and calcium, and top-bottom showed high concentration of magnesium, iron, zinc and manganese* ,"

said Benitez and colleagues.

They added that the outer scales "*could be used as source of flavonols, with good antioxidant activity* ".

"*It would be interesting that processors will separate the different parts of onion obtained during the onion processing due to their added value* ' said the researchers, who noted that to date such the processing of waste products to add value has not been effectively exploited.

Benitez and colleagues added that the different functional compositions of the wastes suggest that industry should have a "***great interest***" in separating them to "*exploit them as source of different bioactive compounds*
".

They conclude by saying that : "***Moreover, if the recovery and the production of new products from the industrial onion waste are successful***
(…)
environmental problems could be solved
".

This year, during the **6 th World Congress on Polyphenol Applications : Paris Polyphenols 2012** which will be held in **Paris**, France in **June 7-8, 2012** , a tailored **Network Session** is specially organized to discuss on **Polyphenol & Waste Valorisation from Fruits and Vegetables Processing** between industrials, academics, researchers, professionals and many others people from all countries and all specialties.

The Network Session is a perfect moment to meet people who can bring you new opportunities… and to get in touch with the right person.

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Source : Plants Foods for Human Nutrition

"Characterization of Industrial Onion Wastes (Allium cepa L.): Dietary Fibre and Bioactive Compounds" by V.Benitez, E.Molla, M.A Martin-Cabrejas, Y.Aguilera, et al