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Topic title: Antioxidant And Phenolic Compounds In Sweet Potato Peels And Leaves: Food Applications And Health Benefits

Research work on sweet potato at the FSLab is focused on the valorisation of its wastes, as peels and leaves, into antioxidant functional ingredients and foods. New types of food products with several health-promoting functions in humans based on sweet potato root had been developed recently, but peels and leaves are still considered as wastes in the majority of the processing methods. Phytochemicals from sweet potato have antioxidant and radical-scavenging activity that are known to decrease oxidative stress and thus have beneficial effects on human health. Peels and leaves are high in phenolics and can reach as three times more antioxidant activity than the other plant tissues. Aiming the knowledge and technology transfer to industrial sectors, research focuses is on how to convert sweet potato wastes into high value added products. Composition and antioxidant activity is used to model and optimized both product formulation and processing conditions, through the use of design of experiments tools. Finally, research on the improvement of a physiological function in the human body due to functional ingredients and foods will be addressed. The industry may benefit from this knowledge by converting sweet potato wastes from a liability to an asset.

