

TAL 797 – Seminário

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Phenolic compounds from kombucha and their potential health benefits

M.S. student: Udielle Vermelho Lacerda

Advisor: Frederico Augusto Ribeiro de Barros (Departamento de Tecnologia de Alimentos)

Phenolic compounds are produced by the secondary metabolism of fruits and vegetables. They are considered one of the main classes of bioactive compounds that play a crucial role in the correct functioning of the body, helping to prevent chronic non-communicable diseases such as obesity, cancer and diabetes. Examples of phenolic compounds are catechins, stilbenes, anthocyanins, phenolic acids, theaflavins and thearubigins. Some foods like grapes, wine, green tea and kombucha are widely known for their high content of phenolic compounds and, consequently, potential health benefits. Concern about health is growing and then the consumption of functional foods and beverages has been increasing. In this context, kombucha, which is an ancient beverage obtained by fermenting green or black tea, became popular due to its bioactive properties. The kombucha fermentation process, in addition to influencing the sensory properties, generates a series of biotransformations so that the beverage has a higher phenolic content when compared to the tea. During fermentation, the phenolic acid content tends to increase linearly, the flavonoids, in turn, tend to decrease in the first 4 days and then gradually increase. These facts may indicate a degradation of flavonoids at the beginning of fermentation, which consequently generates an increase in the content of lower molecular weight compounds such as phenolic acids. Because of the high amount and diversity of phenolics, several *in vitro* and *in vivo* studies have shown that the kombucha has a high antioxidant, antidiabetic, hepatoprotective, antiproliferative capacity against some types of cancer cells, antimalarial and antimicrobial activity. In addition, kombucha has potential effects to modulate the gut microbiota, since the phenolic compounds act as prebiotics, improving intestinal health.

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Advisor

Udielle Rosemeþho Leacurda
M.S. student