

TAL 797 – Seminário

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KOMBUCHA BIOACTIVE COMPOUNDS

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The increase in consumption and the search for healthy foods have been driving several studies on foods with bioactive properties. Bioactive compounds are found in many foods and their consumption is related to the prevention of chronic diseases such as cancer, obesity and diabetes. Among the bioactive compounds, we can highlight the phenolic compounds, which are a heterogeneous group of phytochemicals comprising phenol rings containing one or more hydroxyl groups, those which include flavonoids, phenolic acids and condensed tannins. Kombucha is a beverage obtained from the fermentation of black or green tea (*Camellia sinensis*), sweetened with sucrose. Kombucha is rich in flavonoids, since the leaves of *Camellia sinensis* have almost one third of their dry mass from phenolic compounds. Among these flavonoids we can highlight catechin, epicatechin, epicatechin-3-gallate, epigallocatechin, epigallocatechin-3-gallate, compounds of low molecular weight. In black tea kombucha, in addition to low molecular weight phenolic compounds, oxidative condensation generates polymeric phenolic compounds such as teaflavins, teasinensins and tearubigins. Total phenolic content and antioxidant capacity of kombucha may increase with fermentation, due to the biotransformation reactions that occur during the fermentation process. In addition, it has been reported that the phenolic compounds profile of green or black tea is different compared to its respective kombucha, due to the formation of new phenolic compounds during fermentation. Consumption of kombucha has been associated with several health

benefits, such as: reduction of inflammation and triglyceride levels, antioxidant and antimicrobial activities.

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