

Effect of High Pressure Processing in physicochemical properties and compounds of low molecular weight present in food

FOOD SYSTEM	HPP	RESULTS	REFERENCES
Solution of water-soluble vitamins	600 MPa 3 min	Immediately after HPP: the concentration of thiamine (B1) and pyridoxal (B6) were statistically the same in the processed samples and in the non-processed samples.	(Sancho et al., 1999)
Strawberry puree	400 MPa 3 min	Immediately after HPP: the concentration of vitamin C was not significantly different from the non-processed samples.	(Sancho et al., 1999)
Apple juice	400 MPa 10 min	The concentration of soluble pectin did not change with HPP treatment. The concentration of catechins, hydroxycinnamic, dihydrochalcones and procyanidins were not affected by HPP.	(Baron et al., 2006)
Apple juice	600 MPa 3 min	The concentrations of glucose, fructose and sucrose of the juices elaborated with different varieties of apple (Pink Lady, Granny Smith and Jonagold) were statically the same before and after HPP. The concentrations of malic, citric and quinic acids were statistically the same before and after HPP.	(Yi et al., 2017)
Aronia juice	200-600 MPa 15 min 26 °C	Immediately after HPP: there were no significant differences in the concentration of different phenolic compounds between the processed and non-processed samples (chlorogenic acid, neochlorogenic acid cyanidin 3-galactoside, 4-cianidin-3-xyloside, 5-cianidin-3-arabinoside and 6- cianidin 3-glucoside).	(Błaszczak et al., 2017)
Beet	650 MPa 3, 7, 15 y 30 min	Immediately after HPP: the concentration of total phenolic compounds, ascorbic acid (vitamin C), and betanin were not affected when compared with the non-processed control.	(Paciulli et al., 2016)
Blackberry puree	600 MPa 5 min 42 °C	Immediately after HPP: the concentration of total phenolic compounds, ascorbic acid (vitamin C) and anthocyanins were statistically the same or even increased in comparison to the non-processed samples.	(Barba et al., 2012)
Carrot juice	600 MPa 5 min	The concentration of soluble solids and total acidity were statistically the same in the processed and non-processed samples. Immediately after HPP: the concentration of α -carotene and β -carotene (provitamin A) did not decrease in comparison to the non-processed samples.	(Picouet et al., 2015)
Cucumber juice	500 MPa 5 min 20 °C	Immediately after HPP: the pH, the concentration of total soluble acids and total acidity were statistically identical to the non-processed samples.	(Liu et al., 2016)

FOOD SYSTEM	HPP	RESULTS	REFERENCES
Orange juice	600 MPa 1 min 20 °C	Immediately after HPP: the pH, the concentration of total soluble acids and total acidity of the different varieties of orange juice (Navel and Valencia Late) were the same before and after HPP.	(Bull et al., 2004)
Orange juice	400 MPa, 1 min, 40 °C	Immediately after HPP: the concentrations of six different types of carotenes (provitamin A) were the same in the processed and non-processed samples.	(Sánchez-Moreno et al., 2003)

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