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## Evaluation of aflatoxins degradation submitted to high hydrostatic pressure

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Aflatoxins (AFs) are secondary metabolites produced by fungi and can contaminate many food matrices causing several health damage. In this work, it was studied the effect of High Hydrostatic Pressure (HHP) on aflatoxins B1, B2, G1, G2 and M1 degradation. For this purpose, it was used AFs pool solution in different concentrations (1447, 409, 1306, 373, 415 ng/mL, respectively) that were submitted to 5 HHP levels (138.5, 200.0, 350.0, 500.0 and 561.5 MPa) and 5 processing time (9.18, 10.0, 12.0, 14.0 and 14.82 min). The central composite rotatable design (CCRD) was used to analyze the effect of these operating variables on AFs degradation. Analysis of variance (ANOVA) was used to study the effect of the aforementioned process parameters on AFs degradation responses. Results revealed that AFs concentrations were not significantly ( $p>0.05$ ) reduced in our experimental conditions. A new study in process optimization will be carried out to verify the possibility of AFs degradation by HHP.

**Keywords:** High Hydrostatic Pressure (HHP), aflatoxins, degradation

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