

ACCUMULATION OF THE CHROMIUM (VI) BY YEAST *Saccharomyces cerevisiae* INDUCES OXIDATIVES CHANGES IN PROTEINS AND LIPIDS

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Heavy metals have their use greatly spread in the industry, for this reason they are present, as polluters in waters, soil a sediment. One of the most toxic heavy metal is chromium. Chromium (VI) is very toxic, carcinogenic and potentially genotoxic making necessary the search of new technologies to treatment this metal. The technology of environment remediation with microorganisms, that is, the bioremediation, has increase acceptation to treatment of diluted industrial effluents. The main objective of this research was to evaluate the incorporation of chromium (VI) by *Saccharomyces cerevisiae* (W303-WT) cells. The biochemical mechanisms used by the yeast cells were evaluated with the presence of high concentrations of Cr (VI) which generate high quantities of free radicals. The incorporation of chromium by cells has influence on growth and viability of the cell. It was verified that in the presence of chromium (VI) the growth was delayed but didn't inhibit, and that growth after a long lag period is not due to mutant selection since the profile of mitochondrial DNA was done. It was verified that the presence of chromium (VI) induced a great lipid peroxidation and protein carbonylation.