# Biosorption of Cadmium Ions by Different Yeast Species

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Toxicity and accumulation of $Cd^{2+}$ in yeasts were studied in eight different yeast species. The adaptation to toxic concentration of this metal was dependent on the production of extracellular yeast glycoproteins. The highest concentration of $Cd^{2+}$ ions in the growth medium was tolerated by a *Hansenula anomala*, strain while the lowest tolerance was found by the strain of species *Saccharomyces cerevisiae.* Extracellular glycoproteins of *Hansenula anomala* absorbed nearly 90% of the total content of $Cd^{2+}$ ions bound by yeast cells, while extracellular glycoproteins of *Saccharomyces cerevisiae* bound only 6% of the total amount of cadmium. This difference is caused by the variable composition of the saccharide moiety in the extracellular glycoproteins. The composition of extracellular glycoproteins changed during the adaptation of the yeast cells to the presence of $Cd^{2+}$ ions.