

Toward Oral Supplementation of Diamine Oxidase for the Treatment of Histamine
Intolerance

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Supplementary Materials

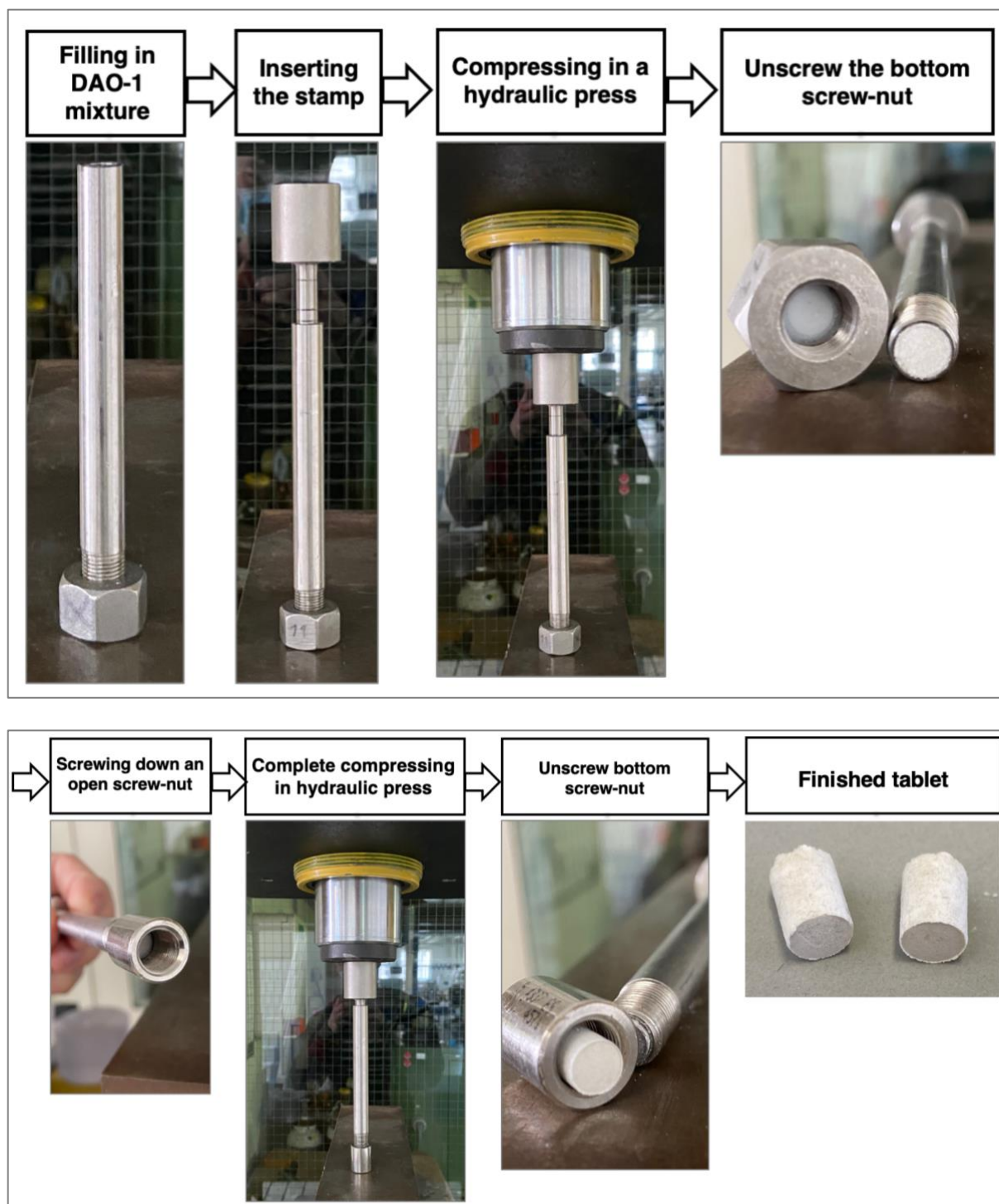


Figure S1. Preparation of DAO-1 tablets using a self-built tablet press.

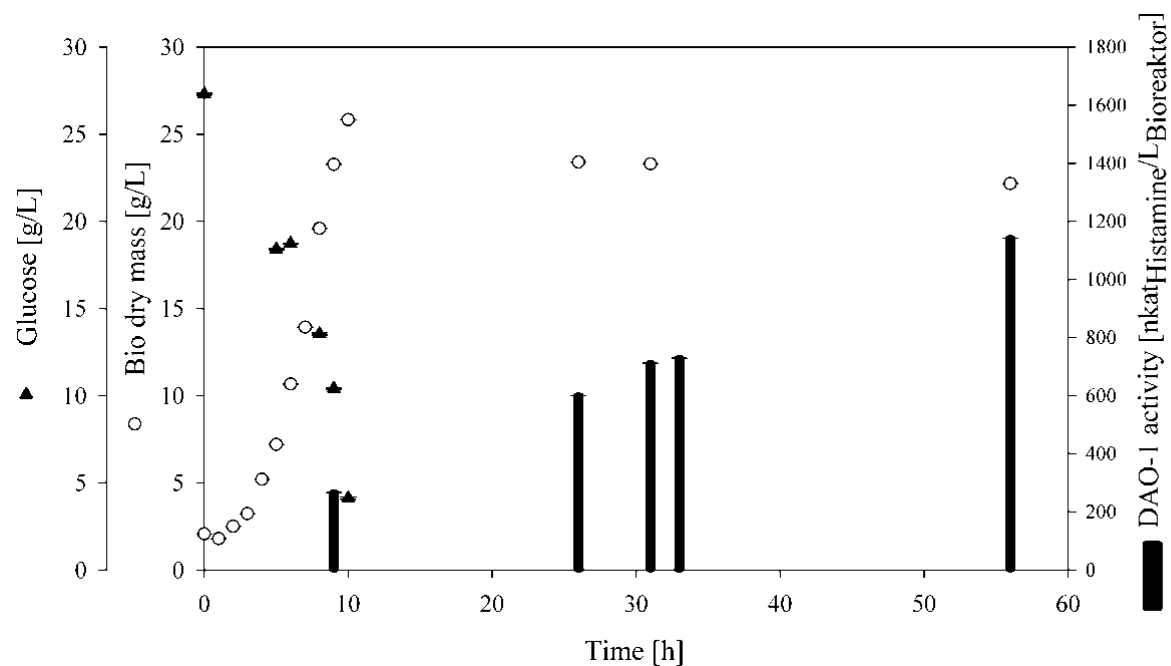


Figure S2. Bioreactor cultivation of *Yarrowia lipolytica_axp_dao-1* in YPD_{Ura} media; working volume 5 l at 28 °C (pH 6.5). *Y. lipolytica* cells were disrupted for DAO-1 activity determinations using the TissueLyser II (Qiagen, Düsseldorf, Germany) with glass beads (0.75 mm in diameter). DAO-1 activity was determined under standard assay conditions using the DA-67 assay.

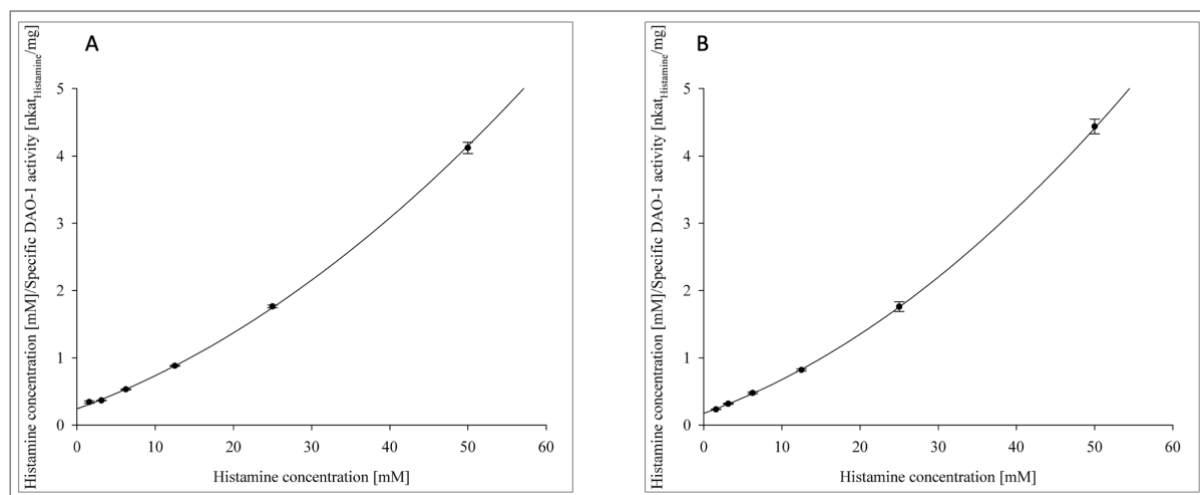


Figure S3. Michaelis-Menten kinetics of DAO-1 in a pancretin-free and pancretin-treated food-matrix simulated intestinal fluid (SIF 3) at 37 °C. Linearization according to Hanes-Woolf. Histamine concentration ranging from 1.56 to 50 mM.

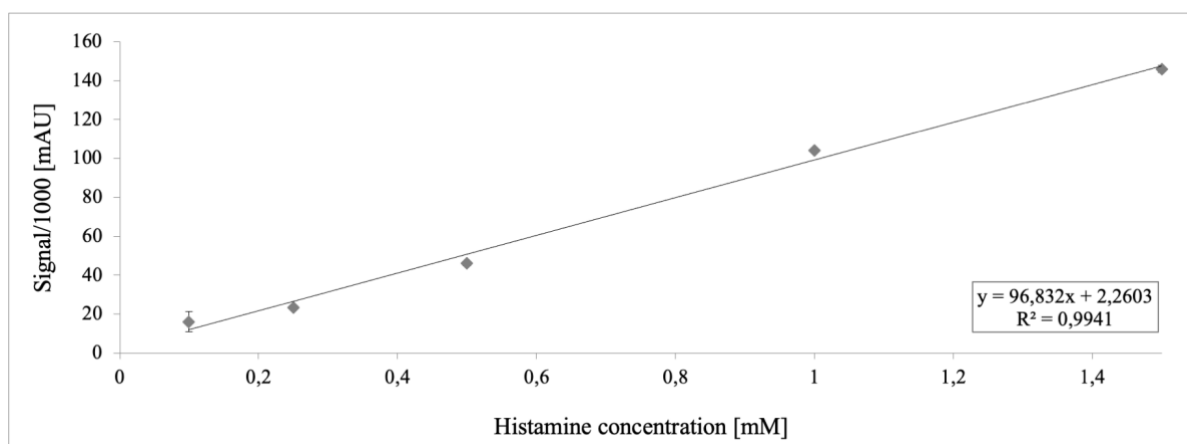


Figure S4. Exemplary histamine calibration for the quantification of histamine in the food-matrix SIF bioconversion samples (90 min) on the AquaC18 column (150 x 4.6 mm; 200 Å) from Phenomenex (Platinblue UHPLC system from Knauer (Berlin, Germany)). Detection at 210 nm.