

Supplementary Information

Effect of Melanin on the Stability of Casein Films Exposed to Artificially Accelerated UV Aging

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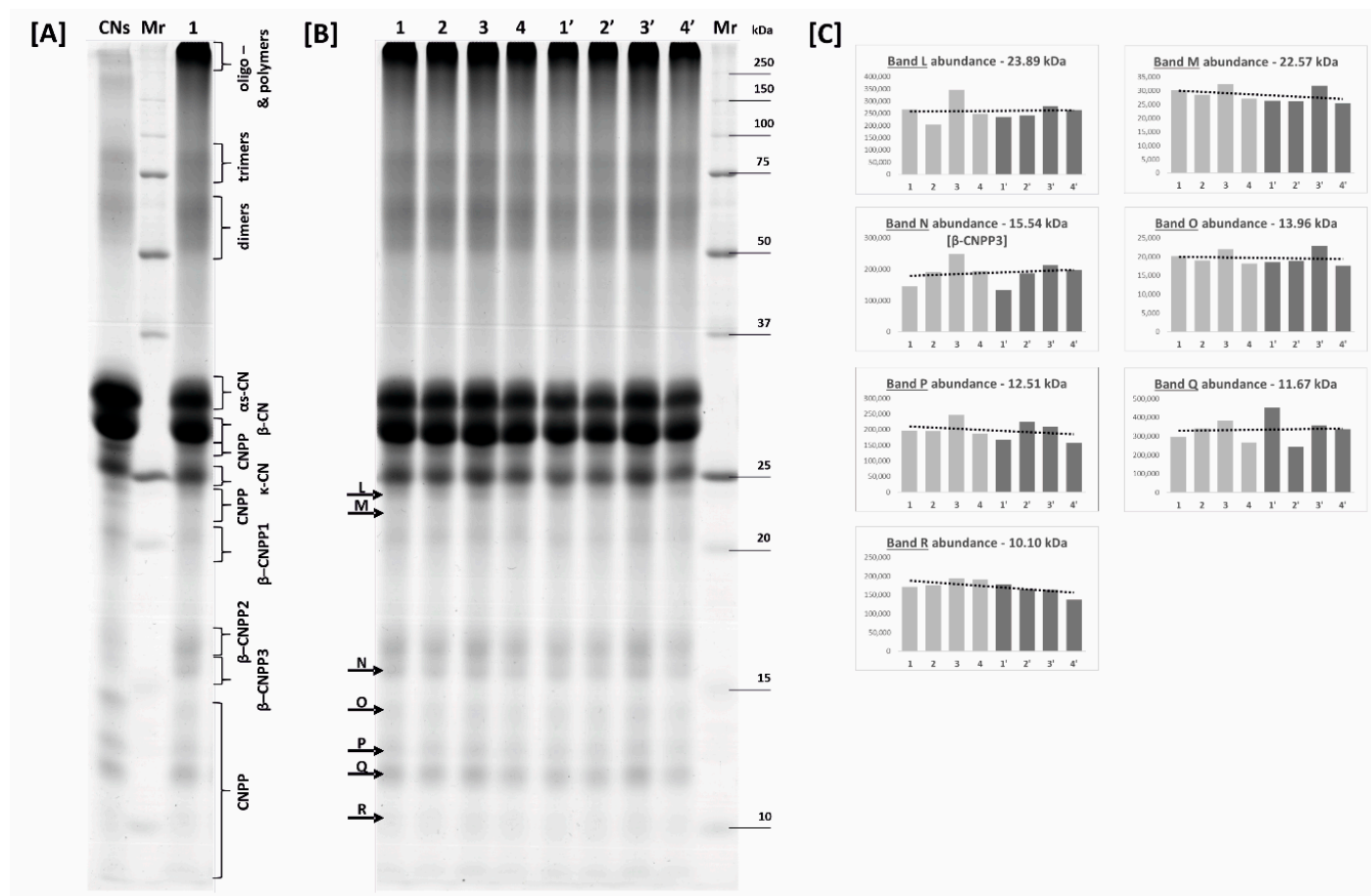


Figure S1. SDS-PAGE electropherograms of casein films. Panel A presents the protein profile of bovine milk casein fraction (CNs) that serves as reference for casein films protein profiles (1-4; 1'-4'). On line 1 representing the Cas sample protein profile the known bovine milk caseins and their dimers, trimers and oligo-, polymers as well as known caseins degradation products are marked according to [45–47]. Panel B represents the casein films protein profiles. Lines 1-4 represent respectively unaged: Cas, 0.10% MEL, 0.25% MEL and 0.50% MEL sample protein profiles. Analogically lines 1'-4' represent respectively artificially UV aged Cas, 0.10% MEL, 0.25% MEL and 0.50% MEL sample protein profiles. Lines marked Mr represent molecular range marker (kDa). Letters from

L to R marks the protein bands that represents milk caseins, and casein proteolysis products that have not differ between aged and unaged films. Panel C presents the graphs with the relative abundance of protein bands in particular lines 1-4 and 1'-4' with a trend line between the groups. α -CN – alpha-caseins; β -CN – beta-casein, κ -CN – kappa-casein, CNPP – casein proteolysis product, β -CNPP1-3 – beta-casein proteolytic product 1, 2 or 3.