**Water dispersible edible films based on cellulose microfibrils**

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Edible films are constructed of cellulose microfibrils (CMFs) and xanthan gum (XG). To control the aggregation of CMFs when dried, water soluble polysaccharides are added. Water insoluble dietary fibre comprising cellulose, hemicellulose and pectin was used as a source of CMFs. The dispersions with different ratios between of XG and CMF are obtained by homogenisation. The dispersions were made into films by solvent casting and evaporation under vacuum. The resulting films’ thickness ranged from 22 to 32 micrometre and had a density ranging from 1.1 to 1.6 g/mL. The film thickness increased with increasing CMF/XG ratio, while the density inversely scaled with this ratio. Uni-axial mechanical testing was performed to obtain tensile strength (TS), elongation at break (EAB) and Young’s modulus (E). Films with higher CMF/XG ratios had higher TS and E, but lower EAB than films with a low CMF/XG ratio. Glycerol was found to be an effective plasticizer, reducing TS and E, but increasing the EAB of all films. Dispersibility of the films was obtained by measuring the viscosity in water. Films became less dispersible when the CMF/XG ratio increased and at low CMF/XG ratios the rheology of the dispersions was fully recoverable to the one of the initial dispersions. Our result show that these films could be used as a delivery system for beneficial ingredients in food products.