

# Time-Dependent Rheological Behavior of Starch-Based Thickeners and Herb Infusion Dispersions for Dysphagia Management

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© 2018 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim The causes of dysphagia include neurological conditions and cancer. Swallowing impairment of liquids represents a risk of aspiration, pneumonia, dehydration, and nutritional deficiencies. Commercial thickeners often based on modified cornstarch address this issue. The herb Matico (*Buddleja globosa* Hope) is used as a wound-healing adjuvant treatment for oral mucositis caused by cancer therapies. This study analyzes the flow behavior of Matico infusion with two thickeners, Thick & Easy™, and Enterex® Food Thickener at three concentrations. A rheological assessment is performed ( $20 \pm 1$  °C subsequent intervals:  $1 \times 100$  s<sup>-1</sup>, constant shear step at  $100$  s<sup>-1</sup>, and  $100 \times 1$  s<sup>-1</sup>, each one with a 120 s span) at five time points (0–60 min). Rheological behavior is adjusted to the Herschel-Bulkley model. Significant differences ( $p < 0.05$ ) are obtained for yield stress ( $\tau_0$ ), consistency coefficient (K), and flow behavior index (n) between time-p