Figure ESI S1: Effect of reaction time and temperature on sialic acid derivatisation.
**Figure ESI S2:** Linearity response of derivatised sialic acid standards.

**Figure ESI S3:** Linearity response of sample injection volume of sialic acid.
Figure ESI S4: HPLC chromatograms obtained from the analysis of the yeastolate samples overlaid with a sialic acid standard. Chromatographic conditions are as described in Figure 4.5. Peaks: (1) sialic acid, (2) 2-deoxy-D-ribose.
Figure ESI S5: Selected HPLC chromatograms obtained from the analysis of the in-process samples overlaid with a sialic acid standard. Chromatographic conditions are as described in Figure 4.5. Peaks: (1) sialic acid, (2) 2-deoxy-D-ribose.