## **Electronic Supplementary Information**

## Label-free molecular mapping and assessment of glycogen in *C. elegans*

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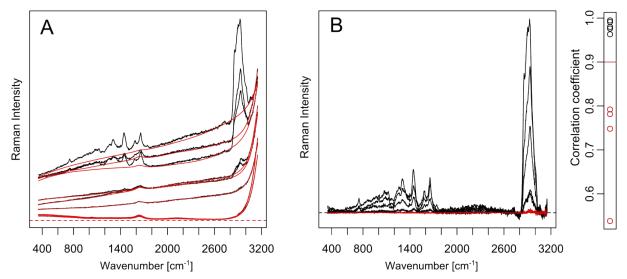
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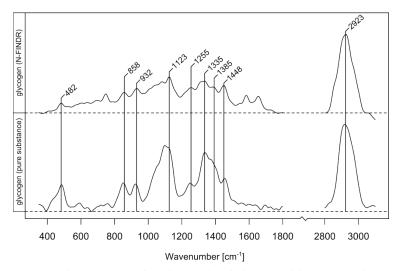
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**Fig. S1** Raman spectra were background corrected employing Extended Multiplicative Scattering Correction (EMSC) using representative spectra from water and *C. elegans,* respectively. 9 randomly chosen spectra from the dataset are displayed together with the estimated background (red) in the left panel (A). After background correction Pearson's correlation coefficients for all spectra are calculated regarding the aforementioned reference spectrum of C. elegans and those spectra with coefficients below 0.9 were discarded from the dataset. 4 out of 9 randomly chosen spectra (red) can be identified as pure water spectra (B).



**Fig. S2** Applying N-FINDR algorithm on the whole spectral dataset reveals a single Raman spectrum (top panel), which resembles a pure glycogen spectrum (bottom panel) taken from a powder sample.