

## GC data acquisition method

The GC-TOF-MS protocol described by Lindeque *et al.* (2013) was slightly modified for this study. Chromatographic separation was done with an Rxi®-5Sil MS capillary column (Restek, 28.6 m x 250 µm x 0.25 µm). The derivatized samples (1 µL for both muscle types) were injected with the injector operating in splitless mode (hold 30 sec) and the inlet temperature set to hold at 250 °C throughout the entire run. A split/splitless single taper deactivated FocusLiner® with glass wool (Phenomenex, outside Ø 6.3 mm, inside Ø 4.0 mm, length 78.5 mm) was used. The initial GC oven temperature was held at 70 °C for 1 min. Thereafter the oven temperature was increased by 7 °C/min until 120 °C, then 10 °C/min until 230 °C and finally 13 °C/min until 300 °C where the temperature was held for 1 min before cooling to 70 °C in a total run time of ~25.53 min. Helium was used as carrier gas with a pressure-programmed constant flow rate of 1.5 mL/min. Throughout the entire run, the transferline and ion source temperatures were held at 225 °C and 200 °C respectively. Mass spectrometry was operated in electron impact (EI) ionisation (-70 V) mode which enabled the fragmentation of all eluting compounds. After an acquisition (solvent) delay of 250 seconds, data was acquired at a rate of 20 spectra/second using an m/z scan range of 50 – 950 amu.