

Calculations of flux

Leg and hepato-splanchnic fluxes (release or uptake) of acylcarnitines were calculated by multiplying the arterial-to-venous difference by the plasma flow:

$$Flux_x \left(\frac{nmol}{min} \right) = \left\{ [x]_{artery} \left(\frac{nmol}{L} \right) - [x]_{vein} \left(\frac{nmol}{L} \right) \right\} \times Plasma\ flow \left(\frac{L}{min} \right)$$

The leg blood flow was measured by ultrasound Doppler technique whereas the hepatic blood flow was measured using indocyanine green clearance. The blood flow was converted into a plasma flow by adjusting with the hematocrit, as detailed in Ref. 18. In the one-legged exercise study, the leg flux during fasting was calculated from both legs using the pre-exercise time point (t=0).