Figure 13. Arterial plasma Na⁺ during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min.). It was increased by exercise ($P = .0009$) but was unaffected by fat ($P = .36$) or protein ($P = .89$). Time points marked with an asterisk are different from rest ($P < .05$).
Figure 14. Arterial plasma Cl- during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min). There was no effect of protein ($P = .85$) or fat ($P = .98$).
Figure 15. Venous plasma K⁺ during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min. It was increased by exercise ($P = .0001$). It was higher in the LP group ($P = .052$) and tended to be higher in the HF group during recovery $P = .11)$. Time points marked with an asterisk are different from resting values for both groups ($P < .05$).
Figure 16. Arterial plasma SID during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min). A time x protein ($P = .055$) interaction existed with the LP group becoming higher over SET-1.
Figure 17. Arterial plasma pH during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min). It was increased during exercise ($P = .0001$). It was higher in the LP group during recovery ($P = .09$) but was not affected by fat ($P = .27$). Time points marked with an asterisk are different from resting values ($P < .05$).
Figure 18. Arterial plasma HCO$_3^-$ during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min). It tended to be higher in the LP group ($P = .13$) during recovery but was not affected by fat ($P = .98$). Time points marked with an asterisk are different from resting values ($P < .05$).
Figure 19. Venous plasma pCO₂ during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min.). Plasma pCO₂ increased during exercise ($P = .0001$). It was higher in the LF group after the first sprint ($P = .026$) and higher in the LP group during the sprints ($P = .019$). Time points marked with an asterisk are different from resting values ($P < .05$).
Figure 20. Venous plasma pO$_2$ during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min, R3 20 min. and R4 30 min.). It was decreased during exercise ($P = .0001$). It was higher in the HPHF group ($P = .054$) during the sprints and in the LPLF during recovery ($P = .029$). Time points marked with an asterisk are different for all groups from their respective resting value ($P < .05$).
Figure 21. Venous lactate during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min.). Lactate increased with exercise \((P = .0001)\). It was higher for the LF group \((P = .05)\) but was unaffected by protein \((P = .32)\). Time points marked with an asterisk are different from resting values \((P < .05)\).
Figure 22. Venous plasma Na⁺ during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min.). It was increased during exercise ($P = .0002$). It was higher in the LP group ($P = .007$) but was not affected by fat ($P = .67$). Time points marked with an asterisk are different from resting values ($P < .05$).
Figure 23. Venous plasma $K^+$ during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min). It was increased during exercise ($P = .0001$). It was higher in the LP group ($P = .026$) but was not affected by fat ($P = .47$). Time points marked with an asterisk are different from resting values for both groups ($P < .05$).
Figure 24. Venous plasma Cl⁻ during rest (R), sprints (S1, S2 & S6) and recovery (R1 5 min, R2 10 min., R3 20 min. and R4 30 min). It was higher in the HF group ($P = .046$) but unaffected by protein. Time points marked with an asterisk are different from resting values ($P < .05$).