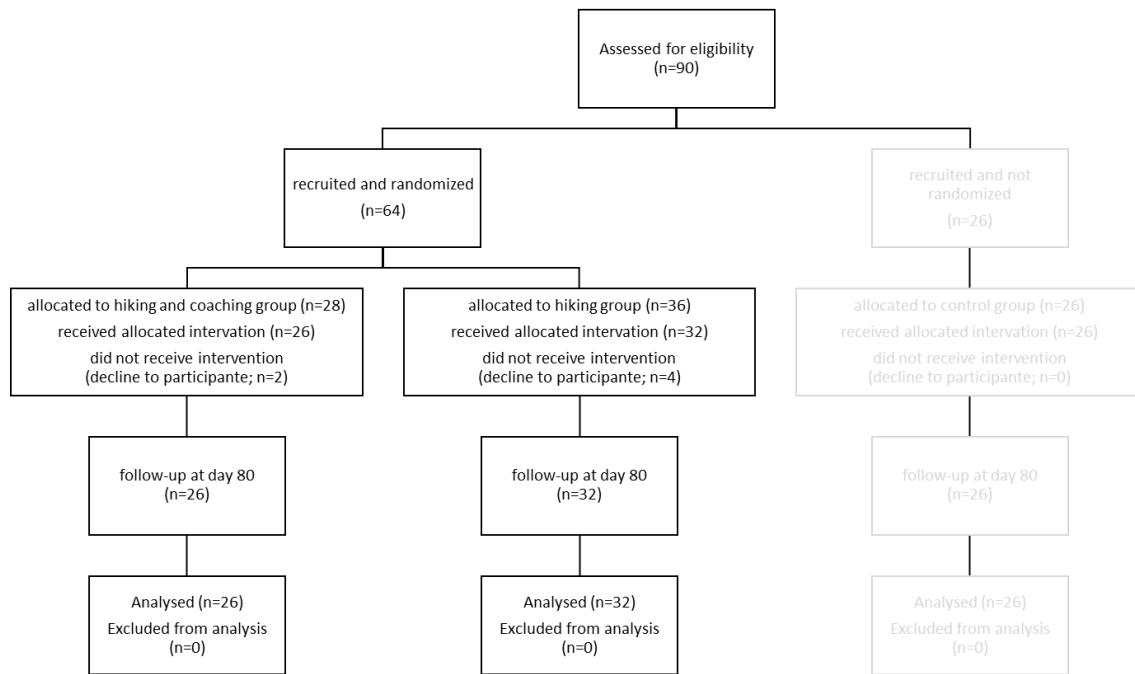


Participant Flow Chart



Baseline Characteristics

| Baseline Characteristics | | all | coaching (co) | hiking (hi) | control (kg) |
|--------------------------|-----------------|-----------------|-----------------|-----------------|--------------|
| Mean age (min – max) | 37.73 (22 – 54) | 41.96 (22 – 52) | 36.24 (22 – 54) | 35.12 (29 – 51) | |
| gender (male/female) | 43/45 | 14/14 | 16/18 | 13/13 | |
| smoking (yes/no) | 18/70 | 7/21 | 5/29 | 6/20 | |

Adverse Effects HICO-Study

All participants tolerated the intervention well – no harms or adverse effects like injuries or cardiovascular events were observed in any group.

Outcome Measures

| | | Summary of outcomes | | |
|--------------------|----|---------------------|---------------|---------------|
| | | day 0 | day 7 | day 80 |
| VO2MAX | co | 43,16 (7,2) | 45,62 (5,65) | 48,06 (7,56) |
| | hi | 47,83 (7,97) | 48,29 (7,54) | 50,92 (12,9) |
| | kg | 48 (6,72) | 46,71 (7,13) | 47,55 (7,12) |
| FVC % | co | 1,09 (0,15) | 1,08 (0,13) | 1,1 (0,12) |
| | hi | 1,1 (0,16) | 1,09 (0,13) | 1,09 (0,14) |
| | kg | 1,09 (0,17) | 1,09 (0,17) | 1,11 (0,23) |
| FEV1 % | co | 1,03 (0,13) | 1,02 (0,12) | 1,02 (0,11) |
| | hi | 1,05 (0,14) | 1,03 (0,13) | 1,04 (0,13) |
| | kg | 1,01 (0,13) | 1,03 (0,14) | 1,02 (0,16) |
| PEF % | co | 1,11 (0,22) | 1,1 (0,18) | 1,05 (0,14) |
| | hi | 1,01 (0,17) | 1,01 (0,2) | 1,01 (0,16) |
| | kg | 1,03 (0,19) | 1,09 (0,18) | 1,05 (0,18) |
| EQ5D - VAS | co | 80,38 (15,09) | 87,31 (7,78) | 82,69 (10,79) |
| | hi | 83,44 (9,71) | 86,88 (9,31) | 83,13 (12,3) |
| | kg | 79,23 (16,95) | 81,92 (15,75) | 78,85 (20,26) |
| EQ5D - Score Index | co | 0,97 (0,04) | 0,97 (0,04) | 0,98 (0,04) |
| | hi | 0,97 (0,05) | 0,98 (0,04) | 0,98 (0,04) |
| | kg | 0,97 (0,04) | 0,96 (0,05) | 0,95 (0,05) |
| SF36 - PF | co | 95,77 (4,17) | 96,73 (3,73) | 96,92 (4,26) |
| | hi | 97,66 (4,21) | 97,66 (5,53) | 98,44 (4,66) |
| | kg | 95,77 (5,6) | 97,5 (4,3) | 97,88 (3,79) |
| SF36 - RP | co | 97,12 (10,79) | 95,19 (14,18) | 95,19 (12,29) |
| | hi | 92,97 (18,22) | 93,75 (16,8) | 96,88 (17,68) |
| | kg | 87,5 (30,21) | 91,35 (24,44) | 88,46 (30,19) |
| SF36 - BP | co | 73,69 (21,4) | 81,12 (17,3) | 79,12 (20,36) |
| | hi | 86,38 (18,13) | 83,78 (20,16) | 86,5 (18,35) |
| | kg | 77,08 (22,94) | 79,27 (18,84) | 81,23 (19,16) |
| SF36 - GH | co | 76,81 (11,09) | 81,58 (10,47) | 81,38 (12,02) |
| | hi | 81,09 (11,92) | 85,19 (12,39) | 84,44 (11,16) |
| | kg | 74,42 (17,13) | 78,42 (15,58) | 75,35 (16,65) |
| SF36 - VT | co | 64,23 (12,86) | 64,81 (12,53) | 66,15 (16,14) |
| | hi | 62,66 (15,4) | 67,34 (15,4) | 65,47 (19,97) |
| | kg | 61,73 (18,16) | 62,12 (13,94) | 64,81 (13,89) |
| SF36 - SF | co | 85,58 (22,83) | 88,94 (16,33) | 88,94 (19,47) |
| | hi | 88,28 (14,53) | 90,23 (14,1) | 88,28 (19,03) |
| | kg | 87,98 (16,39) | 90,87 (16,79) | 91,83 (13,67) |
| SF36 - RE | co | 89,74 (24,53) | 93,59 (18,9) | 96,15 (10,86) |
| | hi | 89,58 (19,74) | 94,79 (14,93) | 100 (0) |
| | kg | 89,74 (26,28) | 93,59 (21,12) | 92,31 (23,68) |
| SF36 - MH | co | 77,08 (10,34) | 78,15 (11,82) | 78,77 (12,12) |
| | hi | 76,63 (14,59) | 77,25 (12,5) | 77,38 (18,36) |
| | kg | 80,46 (13,31) | 80,92 (11,05) | 80,15 (14,15) |

co: coaching and hiking group, hi: hiking group, kg: control group

all values: means (sd)