

Supplementary materials

Table S1. Probability of the effect of the interactions between age (A, 11, 18, 25, 32, 39 and 45 d), feeding system (F, ad libitum *vs.* restricted), genotype (T, standard *vs.* high breast yield), and sex (F, females *vs.* males) on the percentage of chickens per pen performing a behaviour.

| Behaviours ¹ | A × F | A × T | A × S | F × T | F × S | T × S |
|-------------------------|--------|--------|--------|-------|-------|-------|
| Feeding | <0.001 | <0.001 | <0.001 | 0.130 | 0.285 | 0.610 |
| Drinking | <0.001 | 0.040 | <0.001 | 0.144 | 0.087 | 0.016 |
| Standing | <0.001 | <0.001 | <0.001 | 0.379 | 0.220 | 0.069 |
| Sitting/lying | <0.001 | <0.01 | <0.001 | 0.054 | 0.158 | 0.043 |
| Walking | <0.001 | <0.001 | <0.001 | 0.295 | 0.418 | 0.286 |
| Pecking floor | <0.001 | <0.001 | 0.001 | 0.017 | 0.506 | 0.143 |
| Comfort | <0.001 | <0.001 | <0.001 | 0.629 | 0.465 | 0.142 |

¹*p*-value is missing for behaviours (pecking other bird) which data were not suitable for statistical analyses because of their low frequency of occurrence.

Table S2. Probability of the effect of time (minutes, M) with respects to feed distribution (-10, 0, +5, +10, +15 min), feeding system (F, ad libitum *vs.* restricted), genotype (T, standard *vs.* high breast yield), and sex (S, females *vs.* males) and their interactions on the percentage of chickens per pen performing a behaviour at 18 d.

| Behaviours ¹ | M | F | T | S | F × M | F × T | F × S | T × S |
|-------------------------|--------|--------|--------|-------|--------|--------|-------|-------|
| Feeding | <0.001 | 0.933 | 0.165 | 0.720 | <0.001 | 0.300 | 0.635 | 0.324 |
| Drinking | <0.001 | 0.988 | 0.066 | 0.790 | <0.001 | 0.029 | 0.953 | 0.324 |
| Standing | <0.001 | 0.193 | <0.001 | 0.619 | <0.001 | <0.001 | 0.132 | 0.074 |
| Sitting/lying | <0.001 | <0.001 | 0.695 | 0.286 | <0.001 | 0.004 | 0.960 | 0.200 |
| Walking | <0.001 | 0.996 | 0.738 | 0.096 | <0.001 | 0.424 | 0.815 | 0.117 |
| Comfort | <0.001 | <0.001 | 0.514 | 0.125 | <0.001 | 0.637 | 0.001 | 0.998 |

¹*p*-value is missing for behaviours (pecking the floor, pecking other bird) which data were not suitable for statistical analyses because of their low frequency of occurrence.

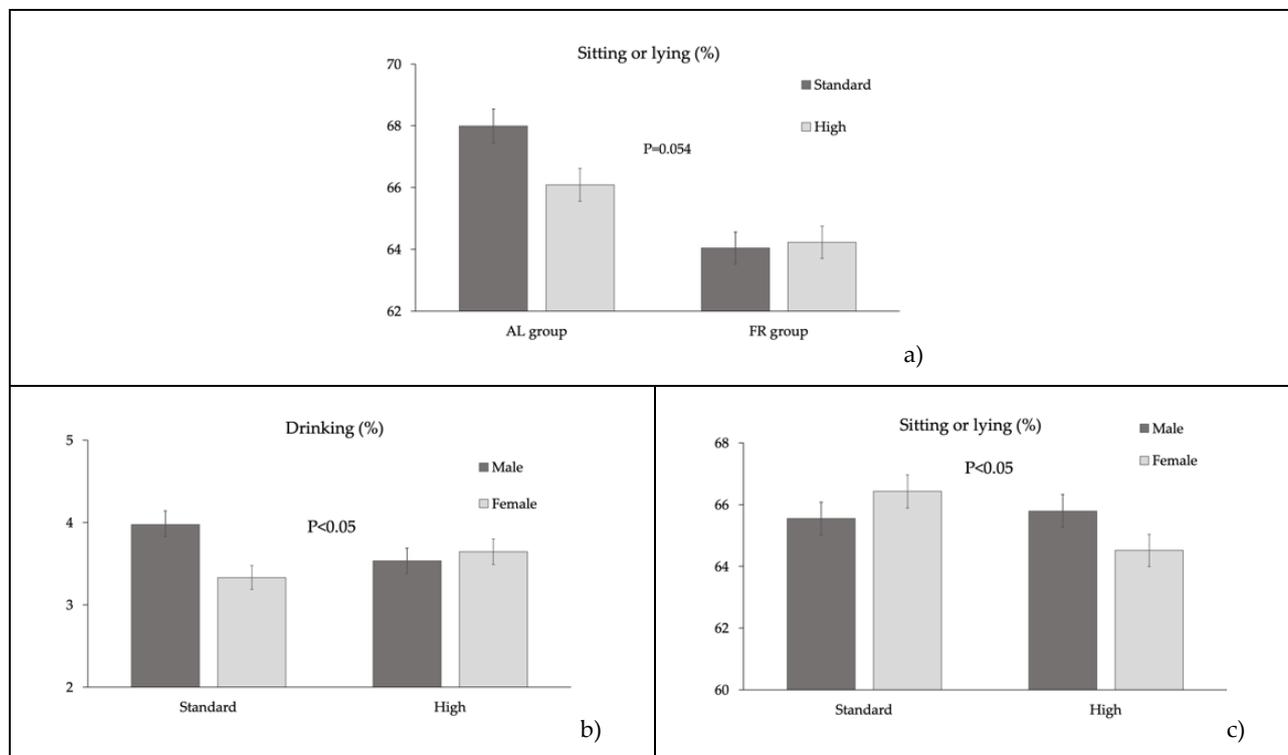


Figure S1. Percentage of chickens per pen (LS means ± SEM) performing a behaviour; average of recordings at 11, 18, 25, 32, 39 and 45 d of age: significant interactions between feeding system × genotype (a) and between genotype × sex (b, c).