

*In vitro rumen fermentation of diets with different types of condensed tannins derived from sainfoin (*Onobrychis viciifolia* Scop.) pellets and hazelnut (*Corylus avellana L.*) pericarps*

Article

Other

Table 2

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Table 2

In vitro rumen fermentation characteristics of a basal diet alone or with hazelnut pericarps (HP), pellets of sainfoin (PS) and HP + PS after 24 h of incubation.

| | Basal diet | Basal diet + HP | Basal diet + PS | Basal diet + HP + PS | SEM | P-value |
|------------------------------------|-------------------|--------------------|-------------------|----------------------|-------|------------------|
| pH | 6.22 ^b | 6.26 ^{ab} | 6.35 ^a | 6.27 ^{ab} | 0.032 | 0.036 |
| IVDMD (g/kg) | 554 ^a | 494 ^b | 461 ^c | 480 ^b | 26.2 | <0.001 |
| Volatile fatty acids (VFA, net) | | | | | | |
| Acetate (mmol/l) | 104.7 | 107.8 | 94.4 | 96.8 | 11.41 | 0.788 |
| Propionate (mmol/l) | 34.1 | 34.2 | 30.3 | 31.2 | 3.92 | 0.612 |
| Butyrate (mmol/l) | 15.7 | 15.7 | 12.2 | 13.3 | 1.33 | 0.210 |
| Isobutyrate (mmol/l) | 1.61 | 1.56 | 1.23 | 1.28 | 0.165 | 0.348 |
| Valerate (mmol/l) | 2.43 ^a | 2.13 ^{ab} | 1.54 ^c | 1.76 ^{bc} | 0.101 | 0.003 |
| Isovalerate (mmol/l) | 2.65 | 2.44 | 1.90 | 2.01 | 0.267 | 0.256 |
| Caproate (mmol/l) | 0.19 | 0.26 | 0.14 | 0.17 | 0.030 | 0.070 |
| Total iso-VFA (mmol/l) | 4.26 | 3.99 | 3.13 | 3.29 | 0.431 | 0.288 |
| Total VFA (mmol/l) | 161.3 | 164.1 | 141.8 | 146.5 | 16.92 | 0.673 |
| Acetate:propionate ratio (mol/mol) | 3.07 | 3.15 | 3.10 | 3.09 | 0.092 | 0.931 |

IVDMD: *in vitro* dry matter degradability; VFA: volatile fatty acids; SEM: standard error of the mean.

^{a,b,c} Means within a row with different subscripts differ ($P<0.05$).