

grazed from 12 March to 5 June 2019, with a grazing period (GPn) of 15 days (from GP1 to GP7) by two groups of 24 Sarda ewes, homogeneous for milk yield (1426 ± 213 g milk ewe⁻¹ day⁻¹) body weight (BW, 49.9 ± 4.5 kg) and BCS (2.30 ± 0.2). After grazing, the ewes were stall-fed with ryegrass-based hay (0.6 in P6 and 0.8 kg head⁻¹ day⁻¹ in P4), corn grain and faba beans organic supplementation (0.3 in P6 and 0.6 kg head⁻¹ day⁻¹ in P4). Herbage mass, ewe BW, BCS were measured at the beginning of each GP. Individual milk production and quality were recorded fortnightly. Supplementation intake was measured daily. Data were analysed by a mixed model using system, GP and their interaction as fixed effects and ewe within GP as random effect. Herbage mass availability was 1.9 (P4) and 2.8 t DM ha⁻¹ (P6) and it increased throughout the experiment (GP effect $p < .05$). BCS and BW were not affected by the system whereas they increased during the observation period. BCS was higher in P6 than P4 in GP3, BW was higher in P6 than P4 in GP1. No differences were observed between groups for milk yield, 1383 ± 53 (P6) and 1275 ± 53 g day⁻¹ (P4), which decreased during the period reaching the lowest value in GP7. The milk production pattern was different between the two groups: P4 had a sharp decrease from GP6 to GP7 ($p < .05$) whereas P6 showed a linear decrease ($p < .05$). Milk fat ($5.89\% \pm 0.09$ vs. $5.64\% \pm 0.09$; $p = .05$) and protein ($5.55\% \pm 0.07$ vs. $5.32\% \pm 0.07$; $p < .05$) content were higher in P4 than in P6, respectively, and increased during the GP ($p < .05$). Lactose was not significantly different between groups, but it was influenced by the GP. Increasing the access time to pasture allowed P6 to cover 79% of total energetic requirement with grazing pasture compared to P4, where pasture covered only 51%. The results showed the positive effect of a higher access time to pasture in the self-sufficiency of the organic feeding system, but a slightly negative effect on milk quality.

P061

Effect of salty or sweet food leftover based diets on serum metabolites in piglets

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Nowadays, agriculture and livestock production face several challenges for what concerns sustainability. In particular, animal feed production competes with human food production for the use of lands and natural resources. The use of alternative feed ingredients could thus increase the sustainability of livestock production. In this study, conventional cereal grains have been partially

replaced by confectionery or bakery former food products (FFPs) in pigs' diets to evaluate their effect on pig serum metabolites. FFPs are safe and healthy ingredients produced for human consumption, but no longer intended for this purpose. Specifically, 36 post-weaning female piglets were fed with three different diets: (1) control diet (CTR), 0% FFPs; (2) FFP-C diet, (30% cereals replaced by 30% confectionery FFPs); (3) FFP-B diet, (30% cereals replaced by 30% bakery FFPs). The diets were formulated to meet the NRC requirements and to be iso-energetic (15.3 MJ/kg DM) and iso-nitrogenous (19% CP DM). During the 42 days of trial, blood samples were collected on days 0 (t0), 21 (t1) and 42 (t2). The serum metabolites, measured using a standard enzymatic colorimetric analysis, were: total proteins, albumin, globulin, albumin/globulin (A/G), urea, alanine aminotransferase (ALT-GPT), aspartate aminotransferase (AST-GOT), alkaline phosphatase (ALP), total bilirubin, glucose, triglycerides (TG), non-esterified fatty acids (NEFA), α -amylase, total cholesterol, calcium, phosphorus, magnesium. Data were analyzed using one-way analysis of variance (one-way ANOVA) and further explored by principal component analysis (PCA). The results showed that the levels of serum metabolites were similar across the three experimental groups in the three different time points. The only exceptions were observed for α -amylase and TG. In particular, α -amylase tended to be lower in both experimental groups (FFP-C and FFP-B) in comparison with CRT group throughout the experiment, whereas TG were lower in the FFP-C experimental group only at t1. In conclusion, the inclusion of FFPs (up to a level of 30%) in post-weaning piglets' diet does not lead to a significant perturbation of the level of several serum metabolites, thereby enhancing the hypothesis of their reuse in animal nutrition. However, further studies are needed to strengthen these results and increase the knowledge.

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P062

Farming wild-caught glass eels for habitat restocking in Sardinia

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Conservation programs of some endangered species involve the artificial restocking of habitats that sometimes rely on wild-captured populations. As in the case of the European eel *Anguilla anguilla* (L.), which cannot be artificially reproduced, stocking