Preference of domestic rabbits for grass or coarse mix feeds

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Abstract

The motivation of juvenile rabbits to graze was tested by offering a choice of coarse mix or grass as rewards to rabbits fed a nutritionally adequate diet of carrots and hay. Before measuring the motivation of the 16 rabbits, eight were offered access to grass for 16 days and the remaining eight were kept in outdoor hutches. An initial preference test was then conducted using a Y-maze apparatus, in which the rabbits were offered a choice of grass or coarse mix for 3 min. The rabbits that had not previously been offered grass had a strong preference for the grass reward, whereas those that had chose coarse mix and grass equally. Measurement of rabbits' behaviour during the reward period revealed that rabbits spent longer eating if their reward was grass; this difference was particularly notable toward the end of the 3 min period. If they received a coarse mix reward, they spent more of the 3 min self-grooming, standing still and chewing the wire of the cage. Feeding rabbits with a coarse mix diet may therefore increase the likelihood of problem behaviours including inactivity and trichophagia. The rabbits were also trained in a novel operant test of motivation for the two rewards, in which they were required to circumnavigate an object several times before receiving a reward. The number of circumnavigations before a reward was offered was progressively increased, and rabbits were offered two opportunities to take the reward at each level. Although the rabbits were prepared to circumnavigate the object up to 11 times on average, there was little evidence that they would work harder for a grass reward than for a coarse mix reward. This may have been because they had previously had experience of grass during the preference tests. It is concluded that juvenile rabbits show a strong initial preference for a grass reward, compared with coarse mix, but that this preference disappears after brief exposure to grass. There was no strong evidence that rabbits will work harder to receive a grass reward than to receive a coarse mix reward.

Key words: Animal welfare, Coarse mix, Grazing, Pasture, Preference

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