INCENTIVE VALUE LEARNING IN DOMESTIC HENS

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The incentive value learning theory states that the value assigned to a resource depends on the motivational state of an animal when it first encounters that resource. The present experiment investigated whether domestic hens, *Gallus domesticus*, assign different incentive values to a novel food depending on their deprivation state when they encounter this novel food. Hens were first trained to find a novel food type hidden under wood shavings in a large food dish. Then, after half of the animals were food-deprived and half left not food-deprived, all hens were re-exposed to the novel food in a small food dish in a second test arena. Next, all hens were food-deprived and then given access to the original food dish with wood shavings but no food in the original test arena. Hens that had been food-deprived before re-exposure spent more time looking, pecking or scratching at the wood shavings in the dish and pecked more at the dish than did the hens that were re-exposed while sated. The sated hens also tended to sit down longer in the test arena than did deprived hens. Thus, hens that had been deprived before re-exposure to the novel food searched more actively for the food than hens that had been sated before re-exposure, indicating a higher motivation. These results prove for the first time that incentive value learning occurs in domestic hens.