

Supplementary material

Appendix 1

Fig. A1. Photos of the experimental setup for experiment 1 and 2. On the left: wooden board with the three small dishes used for experiment 1 (photo courtesy of Charlotte Rousseau). On the right: the three plastic bottles for HP, HL and HC foods used for experiment 2 (photo courtesy of Chloe Peneaux).



Fig. A2. Schematic of the extractive problem-solving tasks. All containers were glued to an identical sized piece of wood. During the innovation test, each petri dish contained a dog pellet as a reward. The petri dishes (with lids) were presented either: right way up, so the lid could be removed by either levering or pushing the lid upwards, or by grabbing a small piece of tape attached to the edge and pulling; or upside down (i.e. the edges of the top smaller container were contained within the larger bottom container), so the lid had to be removed by grabbing a small hook attached to its surface.

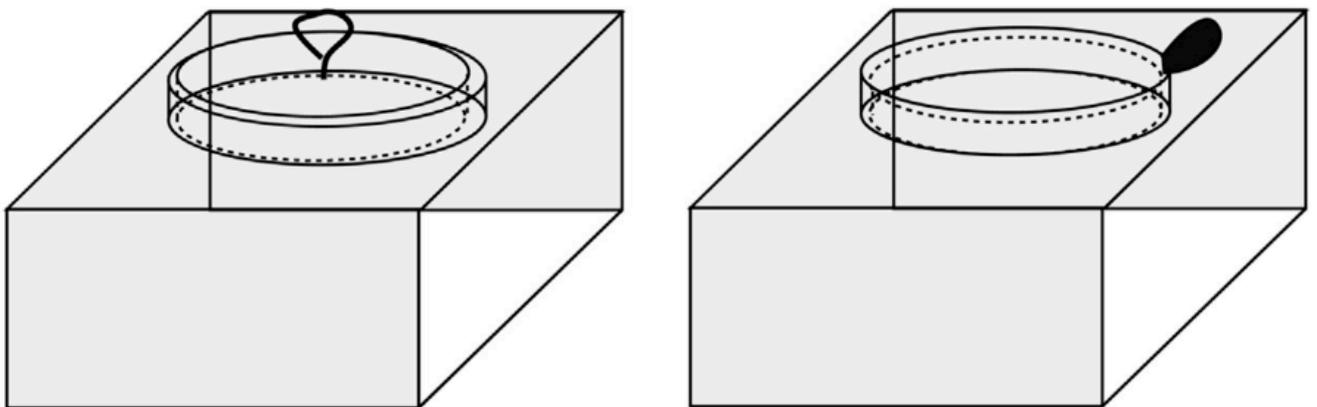
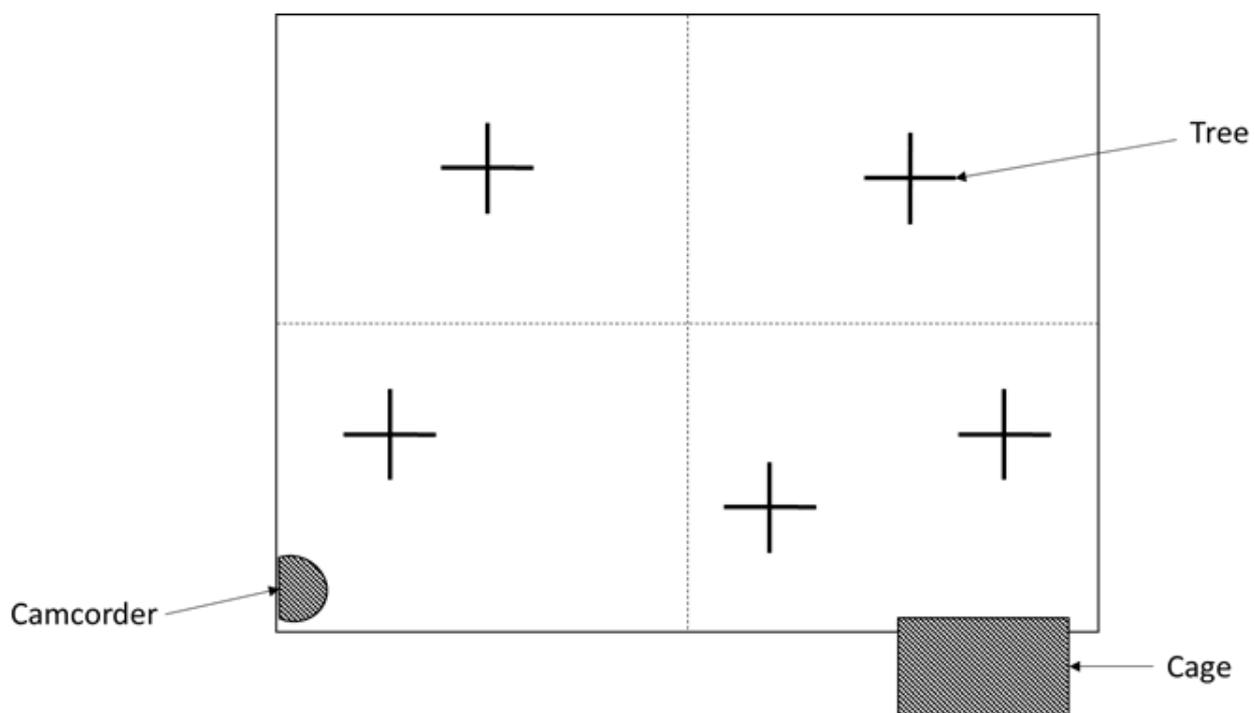


Fig. A3. Plan of exploration room (1.7m x 2.80 m x 2.70 m). The room contained five wooden artificial trees of 1.5 m high. Each tree had four lateral branches of 20 cm long. The upper branches were positioned 5 cm below the top (also considerate as a perch) and perpendicular to the lower branches, which were located 30 cm from the top.



Appendix 2

Table A2. Correlations between behavioural traits and macronutrient consumptions in Experiment 3. Test values were calculated using Approximate General Independence Tests.

Correlations	Results	
	Z	p
<i>Innovation – Protein</i>	-0.63	0.56
<i>Innovation – Lipid</i>	1.37	0.17
<i>Innovation – Carbohydrate*</i>	-1.89	0.04*
<i>Exploration – Protein*</i>	1.91	0.04*
<i>Exploration – Lipid</i>	-1.31	0.20
<i>Exploration – Carbohydrate</i>	-0.59	0.58

Fig. A2. Scatter plot panel of the correlation analysis between behavioural traits and consumption in macronutrients in Experiment 3.

