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Sucrose Preference Test

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We use this protocol and it's working

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Abstract

The sucrose preference test (SPT) is used to assess anhedonia, a core symptom of depression and motivational dysfunction, which are common non-motor symptoms of PD.

Before start

If you are using the Petco bottles be careful with leaks. We puff air out of the bottle to avoid liquid loss because of air dilation. For the same reason avoid temperature fluctuations in the room where you are performing the test.



Before Starting

- 1 Group-housed animals should first be habituated for 24 hours to consume fluids from tube bottles and to adjust to the 2% sucrose solution

Testing

- 2 The sucrose preference should be measured over 48 hours.
- 3 After habituation, group-housed mice should be individually caged, and present two bottles to them for 24 hours: one with tap water and one with a 2% sucrose solution.
- 3.1 Take initial weight of water or 2% sucrose solution bottles. Consumption of either solution is measured by weighing bottles every 24 hr for 48 hours total.
- 4 Weigh animals after last day of testing

Calculations

- 5 Calculate sucrose preference: $\text{Preference ml/g/day} = [\text{sucrose solution intake (ml)} / (\text{sucrose solution intake (ml)} + \text{water solution intake (mL)} * 100)]$.