

1. PURPOSE

The intent of this Standard Operating Procedure (SOP) is to describe an appropriate environmental enrichment program for hamsters.

2. RESPONSIBILITY

Facility Animal Care Committees (FACCs), principal investigators (PIs), animal care staff.

3. PROCEDURES

- 3.1. The purpose of environmental enrichment is to provide hamsters with opportunities to express basic behavior needs, to promote species-typical, non-injurious, behavior and to promote physical and mental health thus enhancing animal welfare. The environmental enrichment should be biologically relevant (i.e.: hiding, socializing, searching) so that it does not lose its enriching value over time.
- 3.2. Social Contact:
 - 3.2.1. Pair- or group-house hamsters of the same gender.
 - 3.2.2. Exceptions for pair or group housing include:
 - 3.2.2.1. Pregnant females
 - 3.2.2.2. Incompatible animals
 - 3.2.2.3. Medical reasons
 - 3.2.2.4. Specific protocol approved by FACC
- 3.3. Housing System:
 - 3.3.1. Animals should be housed with the goal of maximizing species-specific behaviors and minimizing stress-induced behaviors.
 - 3.3.2. House hamsters in solid-bottom cages with contact bedding, unless specifically described in a protocol and approved by the FACC.
 - 3.3.3. Housing system should exceed the minimal space recommendations for a standard hamster cage (~143 sq. inches):
 - 3.3.3.1. One female with one litter, until weaning.
 - 3.3.3.2. Do not exceed 400g (total weight of all hamsters) per cage.
- 3.4. Dietary Enrichment:
 - 3.4.1. Provide some food pellets inside the cage.
 - 3.4.2. Provide hamsters with dietary supplementation as allowed by the PI for positive reinforcement (e.g. sunflower seeds, rodent treats).
- 3.5. Objects:
 - 3.5.1. Nesting material:
 - 3.5.1.1. Provide nesting material (e.g., loose paper strands such as Enviro-Dri®, NESTLET®, corn husk, shredded aspen) in every cage.
 - 3.5.1.2. Transfer the nest to the clean cage with the animals during cage change, add additional nesting material and provide a new shelter if necessary.
 - 3.5.2. Shelter:
 - 3.5.2.1. Provide a cellulose-based (preferable) or plastic shelter.
 - 3.5.2.2. Shelter should provide enough protected space for all cage occupants.
 - 3.5.3. Chewing device:
 - 3.5.3.1. Provide a chewing device (e.g. nylon bone, hardwood block).
- 3.6. Exemption:
 - 3.6.1. Exemption from this environmental enrichment program must be justified and approved by the FACC, or prescribed for medical reasons.