Species-Specific Considerations for Food or Water Restriction/Deprivation
(When Used for Behavioral Modification Studies)

1. **Mice & Rats:** Meal-eaters rather than nibblers; most mice and rats have a circadian rhythm of feeding and are likely to eat during dark cycle; some stocks/strains which tend to eat continuously (Sprague-Dawley, Long-Evans hooded), may never stabilize at an ad libitum fed weight, and so at 80% of this (overweight) weight, they may not work reliably for food. Note: mice are more or less intolerant of food restriction than are rats.
   a. Since rodents are more active during the dark phase, it may be more appropriate to provide the limited item (food or water) during that phase to encourage maximum intake while it is available
   b. Some studies have indicated that for long-term restriction protocols, rodents may actually adapt better to water restriction than food restriction, with less overall weight loss and lower cortisol levels.

2. **Hamsters:** Have limited flexibility in their meal size and do not compensate for infrequent availability of food by increasing meal size.

3. **Guinea Pigs:** Can be more difficult and delicate than other rodents to alter food type or access; may need more highly preferred foods, because use of regular food/water reinforcers have been found to be problematic by some investigators.

4. **Non-Human Primates:** May require more individually tailored protocols as metabolic requirements can vary greatly between individuals. Reduction to a percentage of free-feeding weight may be necessary in initial training, but may be able to be more relaxed once the task is learned. Use of positive reinforcement is highly preferred e.g. administration of fruit juice.

5. **Fish & Other Aquatics:** Individual species have different needs and requirements. Please make sure that you are familiar with your individual model and consult ULAM veterinarians with any questions.

6. **Reptiles:** Individual species have different needs and requirements. Please make sure that you are familiar with your individual model and consult ULAM veterinarians with any questions.

7. **Amphibians:** Individual species have different needs and requirements. Please make sure that you are familiar with your individual model and consult ULAM veterinarians with any questions.