

# Division of Research and Innovation IACUC

## **Food and Fluid Restrictions**

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## Food and Fluid Restrictions - Policy & Guide

**Performance standard:** All animals receive species- or breed-specific qualities and quantities of food and water to promote health and assure well-being, except as scientifically justified for defined purposes and periods.

## **Definitions:**

- Standard for Food Intake: "Animals should be fed palatable, uncontaminated diets that meet their nutritional and behavioral needs at least daily, or according to their particular requirements...."

  (Guide, 2011, p. 65)
- **Standard for Water Intake:** "Animals should have access to potable, uncontaminated drinking water according to their particular requirements." (Guide, 2011, p. 67)
- **Deprivation** is complete withholding of either food or fluid and has a defined end time. Animals are tested, then returned to free access, or otherwise removed from study.
- **Restriction** describes controlled rations, typically for a prolonged period of time. These protocols usually produce a physiologic need that influences motivation and behavior.
- Ad libitum is unrestricted access. Not necessarily "gold standard" for all species.
- Surgical procedure fasting refers to food only and is exempted from these guidelines. The goal is to have a relatively empty GI tract to prevent retrograde movement of food & digestive acids and associated complications such as aspiration pneumonia. Appropriate periods can vary according to species, age, condition, etc.

#### **Guidelines:**

- A consult with the Attending Veterinarian at LARC is recommended.
- When designing condition-response studies, the IACUC recommends use of a highly preferred food or fluid as a positive reinforcement/motivator, instead of restriction.
- Significant periods of acute deprivation or chronic restriction of water or food requires scientific justification for IACUC approval.
- Body weights should be recorded at least weekly or more often for animals requiring
  greater restrictions. For situations where weekly weights are not feasible (for example,
  juvenile fish) a plan for monitoring the impacts of restriction should be described in an
  approved IACUC protocol.
- Written records should be maintained for each animal documenting daily food/fluid consumption, hydration status, and any behavioral or clinical changes
- The proposal should include:
  - establishing baseline weight
  - o acclimation schedule, as appropriate
  - o appropriate periodic weighing
  - health monitoring and acceptable parameters or endpoints for species and age
  - o environmental enrichment considerations if a social animal must be isolated
  - o plans for removal from study if health conditions are not acceptable
- Age—related control weights or growth curves should be considered during prolonged periods of restriction.