

Food and Fluid Restriction

I. Purpose: This document delineates the responsibilities and obligations of the Principal Investigator and study personnel using food and fluid restriction.

II. Definition:

Restriction: The total volume of food consumed is strictly monitored or controlled.

I. Overview

When experimental situations require food or fluid restriction, at least minimal quantities of food and fluid must be available to provide for development of young animals and to maintain long-term well-being of all animals. Restriction greater than 18 hours for research purposes must be scientifically justified and approved by the IACUC.

Experimental procedures utilizing food or water restriction must include a program for daily monitoring of physiologic and behavioral indexes, including criteria (such as weight loss or state of hydration) for temporary or permanent removal of an animal from the experimental protocol.

Restriction is typically measured as a percentage of the ad libitum or normal daily intake or as percentage change in an animal's body weight.

II. General Points:

- Restriction must be scientifically justified.
- The least restriction that will achieve the scientific objective should be used.
- Researchers must define criteria (such as weight loss or state of hydration) for temporary or permanent removal of an animal from the experimental protocol.
- Researchers must establish a monitoring program which includes daily observation of the animals (including weekends and holidays) by the investigator and/or laboratory staff.
- A daily log sheet must be maintained, and kept with the animals, with the following information:
 - Record of food/water schedule
 - Health status of the animals
 - Any adverse events
- Record body weight at least once per week.

**Sample Food and Fluid Restriction Log Sheet is attached. Log sheet can be maintained digitally or via paper. Log sheet must be readily accessible.*

Precautions must be used in cases of fluid restriction to avoid acute or chronic dehydration. These precautions include daily recording of fluid intake and recording of body weight at least once a week or more often, as might be needed for small animals, such as rodents. Special attention must be given to ensure that animals consume a

suitably balanced diet. Because food consumption might decrease with fluid restriction, the least restriction that will achieve the scientific objective should be used. In the case of conditioned-response research protocols, use of a highly preferred food or fluid as positive reinforcement, instead of restriction, is recommended.

III. References:

1. NIH (National Institutes of Health). *Guidelines for Diet Control in Behavioral Study*. Bethesda, MD, Animal Research Advisory Committee, NIH.
2. NYAS (New York Academy of Sciences). 1988. *Interdisciplinary Principles and Guidelines for the Use of Animals in Research, Testing and Education*. New York, New York Academy of Sciences.

Daily Log Sheet for Food or Fluid Restriction in Research Animals

Post in the animal room for the entire food/fluid restriction

Animals that are approved by the IACUC to undergo food or fluid restriction must be monitored on a daily basis by research personnel, including weekends and holidays. This log sheet must be posted in the vivarium with the animals for the entire period of food or fluid restriction. Once the period of restriction has ended, the log sheet should be removed from the animal room and retained with the investigator's animal records. For more information, refer to the IACUC guidelines for food or fluid restriction.

Type of Restriction: Food Water Both Protocol #: _____

Length of Restriction Period: _____ Lab Contact: _____

Food/Water Restriction Start Date: _____ Work Ph. #: _____

End Date: _____ After Hrs. #: _____

Date	Number of Animals or Cages on restriction schedule	Animals Fed and/or Watered (Indicate W or F)	Animal Body Weight (must be performed once per week)	Status Notes	Observer's Initials
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