

Food and Fluid Restriction Guidelines

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 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. Guidelines:

- Restriction must be scientifically justified.
- The least restriction that will achieve the scientific objective should be used.
- Criteria must be defined (such as weight loss or state of hydration) for temporary or permanent removal of an animal from the experimental protocol.
- A monitoring program must be established 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*

Precautions that should be used in cases of fluid restriction to avoid acute or chronic dehydration 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.

