

A. PURPOSE

To provide investigators with guidelines for the proper monitoring and record keeping for animals undergoing food or fluid regulation or restriction.

B. GUIDELINES

Control of food or fluid intake may be required for some physiological or behavioral experiments. This control may be:

- Regulation, involving scheduled access to food or fluid, so an animal consumes as much as desired at regular intervals
- Restriction, in which the total volume of food or fluid consumed is strictly monitored and controlled

Any food or fluid regulation or restriction that is not part of normal animal husbandry must be scientifically justified, reviewed and approved by the IACUC prior to implementation. Food regulation or restriction does not include the use of specialized diets (i.e high fat diet). However, specialized diets must be justified, reviewed, and approved by the IACUC prior to implementation.

The development of protocols that involve food or fluid regulation/restriction requires the evaluation of:

- The species, strain, sex and age of the animal
- The amount of food or fluid regulation/restriction (e.g., 85% of normal caloric intake)
- The duration of food or fluid regulation/restriction
- The nutritive value of any food or fluid used to replace normal rations
- Potential adverse consequences of food or fluid regulation/restriction
- Methods for assessing the health and well-being of the animal
- Criteria for removing an animal from food or fluid regulation/restriction

Investigators should use the least amount and duration of food or fluid regulation/restriction necessary to achieve scientific objectives while maintaining animal well-being. In the case of behavioral studies, use of a highly preferred food or fluid as positive reinforcement, instead of restriction, is recommended, where possible.

Animals must be closely monitored to ensure that food and fluid intake meets their nutritional needs. Primary enclosures must be marked with appropriate cards as per UAC SOPs to indicate when the regulation or restriction starts and ends. Body weights must be recorded at least weekly, and more often for animals requiring greater restrictions. Written records must be maintained for each animal to document daily food and fluid consumption, hydration status, and any behavioral and clinical changes used as criteria for temporary or permanent removal of an animal from a study.

C. REFERENCES, MATERIALS, AND/OR ADDITIONAL INFORMATION

• Guide for the Care and Use of Laboratory Animals pp. 30-31