



IACUC Policy for Food and/or Water Restriction

The Institutional Animal Care and Use Committee (IACUC) of the Medical Sciences Campus at the University of Puerto Rico have adopted the following policy based on the 1996 *The Guide for the Care and Use of Laboratory Animals*, National Research Council:

"When experimental situations require food or fluid restriction, at least minimal quantities of food and fluid should be available to provide for development of young animals and to maintain long-term wellbeing of all animals. Restriction for research purposes should be scientifically justified and a program should be established to monitor physiologic or 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."

"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. Special attention should be given to ensuring 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."

Definition: *Water restriction* is defined as water deprivation for 12 hours or longer. *Food restriction* is defined as food deprivation for 12 hours or longer.

1. At a minimum, each of the above areas of concern must be addressed in the Experimental Design section of the Animal Study Proposal Form (ASPF). Those following guidelines must be followed:
 - a. When experimental conditions require food or fluid restriction, at least minimum quantities of food or fluid should be made available. Sufficient food and water should be available to provide for development of young animals and to maintain long-term wellbeing.
 - b. The need for restriction and the level of restriction for research purposes needs to be scientifically justified and a program established to monitor physiologic or behavioral parameters, including criteria for removal of the animal from the experiment (such as weight loss or hydration state). These criteria need to be established clearly before the experiment starts.

- c. If animal loses 20% of its pre-study body weight, food and/or water intake must be increased immediately until the weight is regained.
 - d. The restrictions need to be described in terms of percentage of normal diet or percentage in change of animal's weight.
 - e. In the case of conditioned-response experiments, use of a highly preferred food or fluid as a positive reinforcement, instead of a restriction is recommended. The type of the feed/fluid reward to be used must be specified in the ASPF.
 - f. An animal may not be deprived of water for 12 hours or longer without strong justification.
2. Each Animal Use Protocol proposing the use of water or food restriction will be considered and reviewed by the IACUC on a case by case basis and further information may be requested from the investigator.
 3. Weight records, as well as daily records of intake, must be maintained and be available for review by the IACUC and the Attending Veterinarian.
 4. Each animal under food and/ or fluid restriction must be observed at least daily by trained and experienced investigative staff.



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Date