

FOOD OR FLUID RESTRICTION **DEFINITIONS, POLICIES AND GUIDELINES**

Food or Fluid Restriction Definitions

- **Standard for Food Intake:** "Animals should be fed palatable, non-contaminated, and nutritionally adequate food daily or according to their particular requirements...." (P. 38, "Guide for the Care and Use of Laboratory Animals," National Research Council, 1996.)
- **Standard for Water Intake:** "Ordinarily, animals should have access to potable, uncontaminated drinking water according to their particular requirements." (P. 40, "Guide for the Care and Use of Laboratory Animals," National Research Council, 1996.)
- **Restriction** is any deviation from the standards for food and water intake.
- **Deprivation** is total withholding of either food or fluid.
- **Fasting for surgical procedures** is usually for a period of less than 12 hours, with the exception of farm animals which would have a longer period of fasting. This is not considered deprivation and the following guidelines below do not apply.

Food or Fluid Restriction Policy and Guidelines

The IACUC endorses as policy the following excerpt from page 12 of the 1996 National Research Council "Guide for the Care and Use of Laboratory Animals."

"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 well-being 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 (Van Sluyters and Oberdorfer 1991). 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 (NIH 1990)-or more often, as might be needed for small animals, such as rodents. Special attention should be given to ensuring that animals consume a suitably balanced diet (NYAS 1988) because food consumption might decrease with fluid restriction. The least restriction that will achieve the scientific objective should be used."

The plan for appropriate periodic weighing, starting with a pre-experimental weight, and monitoring of animal health must be included in the protocol.

When **food deprivation** is planned:

- **additional provisions for close monitoring of weight at time intervals** appropriate to the species must be included in the protocol; and
- Animals that acutely lose more than 20% of their body weight (compared to matched controls) should be eliminated from the study (euthanized) or placed back on a normal diet.
- it must be specified that when there are prolonged weight losses greater than 30% (taking into account the normal anticipated growth for that animal), the deprivation must be terminated or the animal must be euthanized if weight loss continues beyond 30%.

Requests for deviations from this policy must include a scientific justification.