A. BACKGROUND INFORMATION
   a. Food or fluid restriction may be required in order to achieve a variety of research and/or husbandry objectives.
      i. Behavioral research protocols to train animals to perform a task.
      ii. Nutritional studies altering the levels of specific nutrients.
      iii. Limiting feed for sedentary laboratory species to control obesity.
      iv. Food may be withheld for a specified period prior to surgery in order to prevent vomiting and aspiration.
      v. Restricted feeding under “pair-feeding” may be necessary in some studies.
   b. Some methods of food and/or fluid restriction may be physiologically and/or psychologically stressful and can be physically harmful to an animal.
   c. The rationale for restricting food or water intake may be to establish food or water as positive reinforcement, to study caloric restriction, or to prevent obesity and protect the health of the animals. Justification for food and/or water restriction must be stated in the protocol.

B. RESPONSIBILITIES
   a. It is the responsibility of the Principal Investigator and research staff to follow this SOP.
   b. It is the responsibility of the IACUC to assure this SOP is followed.

C. PROCEDURES
   a. Categorization of Protocols
      i. Food and/or water restriction studies conducted in healthy animals will be considered category C if:
         1. The final weight is not less than 80% of the body weight from established growth curves, unrestricted control animals or, in the case of adults, healthy pre-study control weights
         2. The target weight is not less than 85% of this established body weight
         3. The experimental treatment is not expected to produce further weight loss than the restriction alone
         4. If the restriction is temporary and not a lifelong restriction.
      ii. Deviation from these conditions may rank the protocol as category E.
Food and/or water restriction studies in species other than mice or rats will be considered category E unless the IACUC determines otherwise.

b. Purpose
i. The goal of these guidelines is to ensure that:
   1. Dietary restrictions are well justified and necessary for study objectives.
   2. Animals subjected to dietary restriction are appropriately monitored.
   3. The protocol clearly defines the process as “scheduled access” or restriction (in which volume is controlled and monitored).

c. Guidelines:
   i. Food and/or fluid restriction that deviates from the normal husbandry procedures must be described in the Animal Care and Use Protocol and approved by the IACUC.
   ii. The protocol must use the least restriction necessary to achieve the scientific goal while maintaining animal well-being.
   iii. The protocol must define the necessary level of restriction and potential adverse consequences and methods for assessing health and well-being of the animals.
   iv. Methods of monitoring must be defined; body weights must be recorded weekly at a minimum and more often for more severe caloric restriction (CR). Records must also include daily food and fluid consumption (as applicable), and any behavioral or clinical changes.
   v. End points must be established with specific defined actions clearly provided for temporary or permanent removal of an animal from the protocol.
   vi. Food and/or water deprivation for a period of greater than 24 hours requires scientific justification.
   vii. In conditioned response research, use of highly preferred food as positive reinforcement should be used instead of food restriction and literature searches for alternatives must be provided.
   viii. Whenever an animal obtains any portion of its diet through positive reinforcement (food reward), the investigator must ensure that the sum of the nutritional value of the food earned through reward and of the food provided “free” (without necessity of earning it) is sufficient to maintain the animal in a stable weight.
   ix. The investigator is responsible for assuring that specially formulated diets are nutritionally adequate and palatable and fortified at levels to maintain health especially in long term restriction defined as over 14 days.
x. Intervention endpoints must be specified in the protocol. Examples of specific endpoints include:
   1. Failure of animals that would normally be growing to gain weight.
   2. For mice and rats, when segmentation of vertebral column is evident; dorsal pelvic bones are readily palpable.

xi. Weight records of all animals on food/water restriction must be available to IACUC and/or DLAM staff when requested.

xii. Investigators must use the Special Care by PI form, or a laboratory-created form that has the minimum amount of information required, to document water and/or food restriction. If using the DLAM form, this should be requested from DLAM and it will be placed in the room by DLAM staff. Instructions for use are also included (see attachment).

xiii. A special care by the PI cage card must be on each cage of animals and documented appropriately. Please notify DLAM staff that these cards will be needed.

D. ATTACHMENTS
   a. Special Care by PI form with instructions
   b. Special Care by the PI cage card example
### Special Care by PI

**Dept. of Laboratory Animal Medicine**

**Month/Year:** ________________  **Building:** ________________  **Room #:** ________________

**Dates Care To Be Provided By PI**

<table>
<thead>
<tr>
<th>FROM:</th>
<th>TO:</th>
<th>DLAM Assumes Care:</th>
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<table>
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<tr>
<th>Day of Month</th>
<th>No Food</th>
<th>No Water</th>
<th>PI Feed</th>
<th>PI Water</th>
<th>PI Change Cage</th>
<th>Other:</th>
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**Pl/Research Staff must initial each task when completed for dates of special care.**

**IACUC approved protocol #:** ____________________________  **Protocol expiration date:** ____________________________

**Person responsible for special care:** ____________________________  **Signature (PI or designee):** ____________________________

**Emergency contact info**  **Ph #:** ____________________________  **Email:** ____________________________

**Describe in detail the special care that the PI will provide:**

<table>
<thead>
<tr>
<th>Study Group</th>
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<tr>
<th>Cage Card Numbers</th>
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FMDLAM006-01
Special Care by PI - Instructions

General Information

- Research staff uses this form to document their responsibility for services outlined under ‘PI special care’ items.
- Feed and water restriction must be described on Investigator’s approved IACUC protocol.
- When services conclude, DLAM staff will collect the room sheet from the room.

Research Staff

- Identify cages that will receive a ‘PI special care’ item by placing a ‘Special Care by PI’ card or individualized identification tag on each cage.
- Every day, including weekends and holidays, initial the cell for the specific date & item PI is providing ‘special care.’ If several days supply of food/water is provided at a time, annotate this in the “Description Box” to explain the absence of initials on each and every day. Likewise, specify the cage change frequency. Change cages according to the standard schedule for the room, and more frequently if needed.
- In the “Other” column, add a keyword that represents the special care, when applicable.
- The “Study Group” box is available to identify different groups, if more than one is present. For example, a group consists of cages requiring same services for the same period of time. If cages are added with a new date range, then this would constitute a new study group. Hence, requiring a separate form and a new group designation. Add the cage card numbers to the form as cages are added to identify different group sets.
- When an animal is labeled as ‘PI feed’ and ‘PI water,’ it is the investigator’s responsibility to ensure the animals are fed and/or watered each day, unless other arrangements are made with the DLAM Facility Manager or designee. Animals not fed/watered in a timely manner may result in the animals being fed the standard rodent chow and/or water by DLAM staff (after attempting to contact PI). If there are other extenuating circumstances where an individual is unable to attend to their animals in a timely manner, please contact the DLAM Facility Manager or designee to make any necessary arrangements.
- When DLAM assumes care of cage/s, the cards or tags will be removed and cage returned to original set up. Once all cages are back to DLAM care, the sheet will be removed from room.

DLAM Staff

- Review form for proper completion. Ensure services are being provided by research staff as outlined on “Description Box.”
- Daily, review date on ‘DLAM Assumes Care’ box. When the date is reached, return cage to its default husbandry state (e.g., animals fed, water bottles filled with water, automated water, and/or cages changed) and remove ‘Special Care by PI’ card.
- Contact your supervisor if any questions arise.
- When services conclude, remove form from room. Staple any corresponding cards to sheet and return documents to supervisor.
- Ensure a new monthly form, if required, is available and completed before the beginning of new month.
SPECIAL CARE BY THE PI
Cage Card # ____________
Study Group: ____________

Please check the appropriate item(s)

☐ No Food       ☐ No Water
☐ PI Will Feed   ☐ PI Will Water
☐ Do Not Change the Cage
☐ Other (See room sheet for details)

Approved Protocol #

PI ASSUMES RESPONSIBILITY FOR ITEM(S) CHECKED ABOVE.
CCDLAM005-00

SPECIAL CARE BY THE PI
Cage Card # ____________
Study Group: ____________

Please check the appropriate item(s)

☐ No Food       ☐ No Water
☐ PI Will Feed   ☐ PI Will Water
☐ Do Not Change the Cage
☐ Other (See room sheet for details)

Approved Protocol #

PI ASSUMES RESPONSIBILITY FOR ITEM(S) CHECKED ABOVE.
CCDLAM005-00

SPECIAL CARE BY THE PI
Cage Card # ____________
Study Group: ____________

Please check the appropriate item(s)

☐ No Food       ☐ No Water
☐ PI Will Feed   ☐ PI Will Water
☐ Do Not Change the Cage
☐ Other (See room sheet for details)

Approved Protocol #

PI ASSUMES RESPONSIBILITY FOR ITEM(S) CHECKED ABOVE.
CCDLAM005-00

SPECIAL CARE BY THE PI
Cage Card # ____________
Study Group: ____________

Please check the appropriate item(s)

☐ No Food       ☐ No Water
☐ PI Will Feed   ☐ PI Will Water
☐ Do Not Change the Cage
☐ Other (See room sheet for details)

Approved Protocol #

PI ASSUMES RESPONSIBILITY FOR ITEM(S) CHECKED ABOVE.
CCDLAM005-00