Title: Animal Fasting Procedure	
SOP#:1038	Division: DPR
Category: Animal Husbandry & Colony Management	Subcategory:
Original Author(s): Anonymous	Created On: 2001-02-01
Current Author: Ben Petersen	Version approval date: 2018-03-22

Purpose, Scope and Background

To establish a fasting requirement for animal anesthesia and sedation.

This procedure describes requirements and procedures for fasting animals prior to administration of sedatives or anesthetics. This is necessary to prevent potential aspiration of food after administrations of pharmaceutical agents are used to render nonhuman primates (NHP/NHP's) immobile to allow safe handling for management, veterinary care, prior to administration of inhalant or parental general anesthetics and research program requirements. Except in emergency or exceptional situations, as approved by a member of the veterinary staff, food must be withheld from animals for a minimum of approximately 12 hours prior to administration of sedatives and anesthetics.

Animals are not to be fasted two or more days in a row without a full meal between fasts.

Animals are fed twice per day prior to 8:00 AM and after 1:00 PM and usually a "full fast" begins at the afternoon feeding the day before the animal is scheduled for anesthesia or sedation. Simply not providing feed to fasting animals while others eat is potentially stressful. In an effort to relieve this stress the "fasting" animal will be provided a minimal feeding of two standard diet biscuits and a small piece of fruit. The Veterinary staff will determine exceptions to these procedures on a case-by-case basis. The Veterinary staff should be consulted in cases of problems and/or modifications concerning the implementation of these procedures.

NOTE:

If a mistake is made during the implementation of the fasting procedure a member of the veterinary staff and the group requesting the fast should be notified. The veterinary staff may be able to take additional measures to continue the planned procedure or offer other alternatives.

AM only fasts are usually approved for sedation with ketamine only. For an AM only fast, the scheduled procedure must start at least two hours after the beginning of the fast. Use of an AM only fast for sedatives other than ketamine must be approved by a veterinarian.

Infants have lower nutritional reserves than adults, and prolonged fasting can be detrimental to their health. A routine fast for an infant undergoing anesthesia is four hours.

Procedure

I) Animal Fasting Procedure

Animals are fed twice per day prior to 8:00 AM and after 1:00 PM. As a standard practice fasting will begin at approximately 1:00 PM the day before administration of sedatives or anesthetics. At that time fasted animals will receive a feeding of two standard diet biscuits and a small piece of fruit. No animal may be fasted two or more days in a row without a full meal between fasts. Exceptions to this practice must have veterinary approval.

Consult ARMS to find where the animal is housed. A room census form is posted at the entrance of each animal room and can aid in locating the animal within the room, the "Room Census (Door Posting)" report is used to generate the room census and ca be run by any staff member to aid in locating the animal. (Remember that animal ID's posted on cages are only aids used in locating animals. The animal's "chest tattoo" is the only positive form of identification. Be sure to check the chest tattoo prior to initiating any procedure.)

- A) Requesting fasting Workflow
 - When scheduling procedures in Workflow that require fasting, in the "Fasting" box select either the PM/AM or AM fasting. When the procedure is scheduled the requested fasting will automatically get scheduled on the Husbandry Fasting Calendar.
 - (a) For short notice fasting requests (less than 24hrs), it is the responsibility of the requester to ensure that the fasting occurs. (Note: Notice for procedure requests for Saturday AM through Monday AM must be received by Friday AM). This can be either by performing the fasting themselves or by confirming with the Husbandry supervisor that the fasting request has been scheduled with the husbandry staff.
 - (b) When scheduling a procedure that needs fasting, the person has the option to select "Own" which will allow them to print the fasting request so they can fast their own animals. "Own" requests will not appear on the Fasting Calendar.
 - When the fasting is complete, the person who scheduled the fasting will receive a confirmation email.
- B) Performing fasting
 - 1) Daily the husbandry staff will review the Fasting Calendar for their facility. New fasting requests will be blue. AM fastings will be highlighted in yellow while PM/AM fasts will not be highlighted and will appear on the day prior to the scheduled procedure. The fasting requests for the next day or days will be selected by checking the box next to them. These can now be printed by selecting the "print" button at the top left of the calendar. Once printed, the requests will turn purple to show that they have been printed.
 - The husbandry staff member assigned to the room needing to be fasted will take the printed fasting request to the housing room.
 - (a) They will locate the animal needing to be fasted by confirming the animal ID tattoo and separate it from any social partners if necessary making sure to lock any side gates to ensure that the animal cannot access their partner's feed.
 - (b) The animal's feed will be removed and a "Do Not Feed" sign will be placed on the animal's cage. This should be secured with at least one lock to ensure that the

- animal cannot remove it.
- (c) The bedding will be removed from the bedding pan of the fasted animal
 - For PM/AM fasting, feed the animal 2 biscuits and a piece of fruit in the afternoon during the PM feeding for the room.
 - (ii) For AM fasting, the fasting will occur prior to any other duties in the housing
- (d) The printed fasting request will be dated and signed by the person completing the fast and will be posted either on the room door or on the feed barrel.
- (e) The person performing the fasting will access the Fasting Calendar in Workflow and select the room they performed the fasting in.
 - (i) Once the room(s) are selected either by checking that room's check box and selecting the "Confirm" button on the top right of the Fasting Calendar. The person fasting the animal(s) will then enter the date the fasting was completed, ensure their name is in the "By" box and add any comments if necessary, then they will click the green "Confirm" check at the top left of the Fasting Confirmation box.
 - (1) If an animal cannot be fasted, the date complete and "By" boxes will be left blank and a comment describing why the animal could not be fasted will be entered. It is important to note that the confirmation email sent to the fasting requestor will show animals fasted and animals not fasted as well as any comments.
 - (ii) Once conformed, the request on the calendar will turn green and move to the bottom
- (f) For animals fasted for sedation, when the animal is recovered, the person who sedated or recovered the animal will remove the "Do Not Feed" tag, feed the animal if the PM feeding has already occurred and re-socialize the animal if it was in social housing (this can be identified on the green sheet outside the room). If husbandry staff are needed to remove the tag, feed and socialize the animal, the person who sedated the animal will confirm with the husbandry staff that they can perform these duties.
- 3) Management of the Fasting Calendar
 - (a) Supervisors and Managers have the ability to modify scheduled fasting events in the following manner:
 - (i) Reset if the wrong request is confirmed complete by the husbandry staff the supervisor or manager can reset it to an incomplete status. This will send a notification to requestor notifying them to disregard the previous confirmation email they received.
 - (ii) Update if there was an error made in the data entry (e.g. animal marked fasted that wasn't, wrong date used or a partial or confusing comment entered, etc...) the supervisor or manager can make edits to the confirmed request and update it with the correct information. This will resend the confirmation email to the requestor with the corrected information.
 - (iii) Delete in the event that a fasting event need to be cancelled and the initial scheduler cannot be reached or access the Workflow system, the supervisor or manager can delete the fasting request. The request will then move to the bottom and will show up as being lined out. This will send a notification to the requestor that their fasting request has been cancelled.
- C) Using the Procedure Request Form for a Fasting Request
 - 1) For situations where the requestor doesn't have access to WorkFlow or the workflow

system is down the Procedure request can still be used to request a fasting. To make a request, complete an 'AM/PM Fasting Form' in the Research Support folder in ARMS Reporting or if ARMS is unavailable by using the Procedure request form located in the "Forms" link on the Internal Website and e-mail it to the husbandry "Fasting Request" mail box for the facility housing the animal(s) (e.g. Fasting Requests I-Wing). Provide at least 24 hour advanced notice for the fasting procedure. (Note: Notice for procedure requests for Saturday AM through Monday AM must be received by Friday AM).

- 2) Upon written request the animal technician staff will:
 - (a) For FULL fast (pm-am) the animal technician will:
 - (b) Locate animal(s), remove food and bedding from cage units.
 - (c) Post the fasting request on the food barrel/room door.
 - (d) Complete and hang 'NO FOOD ALLOWED' signs on the animals' cages...
 - (i) NOTE: Be aware some animals are social housed and must be separated for fasting, when doing so be sure to close and lock both side gates to prevent the fasted animal from gaining access to the cage with feed. Also, some animals know how to operate attaching clips, use at least one padlock.
 - (e) Feed the required 2 biscuits and piece of fruit in the afternoon.
 - (f) Do not feed the animal in the morning.
 - (g) Carry out additional instructions provided.
 - (h) When the animal is recovered, the staff member who sedated the animal(s) is responsible for removing the fasting sign from the animal's cage, feeding the animal(s), and re-socializing if appropriate. This responsibility can be taken over by the Animal Technician assigned to the housing room if they agree to it.
- 3) For AM only fast the animal technician will:
 - (a) Perform AM fasting prior to other husbandry activities
 - (b) Locate animal(s), remove food and bedding from cage units.
 - (c) Post the fasting request on the food barrel and/or room door.
 - (d) Complete and hang 'NO FOOD ALLOWED' signs on the animals' cages.
 - (i) NOTE: Be aware some animals are social housed and must be separated for fasting, when doing so be sure to close and lock both side gates to prevent the fasted animal from gaining access to the cage with feed. Also, some animals know how to operate attaching clips, use at least one padlock.
 - (e) Carry out additional instructions provided.
 - (f) When the animal is recovered, the staff member who sedated the animal(s) is responsible for removing the fasting sign from the animal's cage, feeding the animal(s), and re-socializing if appropriate. This responsibility can be taken over by the Animal Technician assigned to the housing room if they agree to it.
- 4) For fasting an infant monkey to be sedated the animal technician will:
 - (a) Hang the fasting sign on the animal's cage.
 - (b) In the comments section of the printed out fasting request the AT writes in sharpie 'Grave person - Pull biscuits at midnight and if the animal is on a formula do not put on an 8am bottle'. If an animal is scheduled for a procedure starting after 9 am, add "put on a bottle at 4 am and pull the bottle four hours before the scheduled start of the procedure." This is how the AT gives instructions to the Nursery Tech who will perform the fast.

- (c) The fasting request is then taped to the door of the animal's room.
- (d) If a researcher is planning on sedating an animal then it is the responsibility of that person or group to either formally submit a fasting request to the Husbandry staff, or record in the lab's Communications Log a request that the grave yard Nursery Tech perform the fasting procedures.

D) Self Posting

- 1) If the animal technician staff is not is not given 24 hours' notice the requestors must "fast" the animal(s) following these steps:
- 2) For FULL fast (pm-am) the research staff will:
 - (a) Locate animal(s), remove food and bedding from cage units.
 - (b) Post the fasting request on the food barrel/room door.
 - (c) Complete and hang 'NO FOOD ALLOWED' signs on the animals' cages.
 - (i) NOTE: Be aware some animals are social housed and must be separated for fasting, when doing so be sure to close and lock both side gates to prevent the fasted animal from gaining access to the cage with feed. Also, some animals know how to operate attaching clips, use at least one padlock.
 - (d) Feed the required 2 biscuits and piece of fruit in the afternoon
 - (e) Do not feed the animal in the morning.
 - (f) Carry out additional instructions provided.
 - (g) When the animal is recovered, the staff member who sedated the animal(s) is responsible for removing the fasting sign from the animal's cage, feeding the animal(s), and re-socializing if appropriate. This responsibility can be taken over by the Animal Technician assigned to the housing room if they agree to it.
- 3) For AM only fast the research staff will:
 - (a) Locate animal(s), remove food and bedding from cage units.
 - (b) Post the fasting request on the food barrel/room door.
 - (c) Complete and hang 'NO FOOD ALLOWED' signs on the animals' cages.
 - (i) NOTE: Be aware some animals are social housed and must be separated for fasting, when doing so be sure to close and lock both side gates to prevent the fasted animal from gaining access to the cage with feed. Also, some animals know how to operate attaching clips, use at least one padlock.
 - (d) Carry out additional instructions provided.
 - (e) When the animal is recovered, the staff member who sedated the animal(s) is responsible for removing the fasting sign from the animal's cage, feeding the animal(s), and re-socializing if appropriate. This responsibility can be taken over by the Animal Technician assigned to the housing room if they agree to it.

E) General Information

- The signs should be filled out with a "sharpie" marking pen, rubbing with alcohol and a rag will erase the pen's marking. After each use the signs should be sanitized in the facility's automatic cage washer.
- The animal husbandry supervisor may be consulted for assistance on any step of the fasting procedure. Fasting signs are available on request.