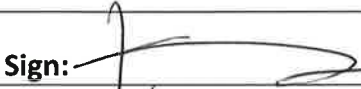





OFFICE OF LABORATORY ANIMAL CARE

STANDARD OPERATING PROCEDURE

SOP Number:	605	Diet/Food Storage and Preparation	Revision #:	1
Date Effective:	3/6/19		Supersedes:	0

Author(s):	Kayla Lynch	Sign:		Date:	3/6/19
Director:	Dr. Gregory Lawson	Sign:		Date:	3/6/19

PURPOSE

These procedures outline the storage of all diets and food items and the maintenance and cleaning of the areas where it is stored.

SCOPE

These procedures apply to all personnel performing duties related to diet/food storage and preparation.

RESPONSIBILITY

Following these procedures is the responsibility of all personnel providing care for animals used in research or teaching.

DEFINITIONS/ACRONYMS

- OLAC: Office of Laboratory Animal Care
- AT: Animal Technician (includes Senior Animal Technicians and Principle Animal Technicians)
- AHT: Animal Health Technician

PROCEDURE

1. Daily:

- Room Temperature:
 - Check room temperature and humidity and record values. When values are out of range (>70 F), report to the Facility Supervisor and document communication in the "Facility Reports" section of the Diet Storage & Feed Preparation Checklist.
- Refrigerator & Freezers Temperature:
 - Record daily readings from the refrigerator and freezer before the units have been opened by other employees which may temporarily artificially drop temperature readings.
 - Store food at an internal temperature of 43 degrees F (5 C) or lower.

- iii. Store frozen foods at temperatures that keep it frozen.
- iv. Report to supervisor if temperature is out of set range (> 43 F) and document communication in the "Facility Reports" section of the Diet Storage & Feed Preparation Checklist.
- c. Cleaning:
 - i. Inspect all utensils, feeding and mixing containers for damage or rust.
 - ii. Discard any damaged or rusted items and notify the facility supervisor.
 - iii. Clean cutting boards, utensils, and mixing containers with dish soap and water between usages throughout the day.
 - iv. Place all items after washing on a drying rack and cover items between usage.
 - v. Dishwasher:
 - 1. If present, check daily.
 - 2. Unload and reload (e.g., knives, cutting boards).
 - 3. Use temperature strip daily and document results in the log book (Appendix E). If temperature strip does not pass, report to facility supervisor immediately.
 - vi. Check trash and remove if $\frac{3}{4}$ full or if any odor is present.
- d. Pest & Vermin Traps: Check all Pest & Vermin live traps daily, if present.
- e. Dry Goods (e.g., treats/enrichment, supplements):
 - i. Receive any new dry goods orders, checking off that all individual items ordered were received.
 - ii. Notify facility supervisor if any items are missing or damaged.
 - iii. Mark all items with date received (R). Space should also be left for the date opened (O) and date of expiration (E). Example format:

R: MM/DD/YY

O: MM/DD/YY

E: MM/DD/YY
 - iv. Discard all goods that have passed manufacturer use by or expiration date.
 - v. Discard all goods with damaged packaging or goods not stored appropriately according to manufacturer recommendations.
- f. Daily Checklist: Fill out completely and initial boxes for tasks completed.
- g. Diet Prep - Bats
 - i. Remove food items from refrigerator, ensuring that items are not spoiled and are within the dates
 - 1. Place amount needed for following day in designated fruit ripening area to allow additional ripening time if you observe that some fruit items are not ripe.
 - 2. Place food items in collection bin or Tupperware once chopped (if required) and weighed.

2. Weekly:

- a. Produce: All new food items must be approved by a veterinarian prior to purchase and use. See Appendix I for approved list of produce.
 - i. Receive all new produce orders, check off all individual items ordered. Turn in all shipping and order receipts to the procurement office.
 - ii. Notify facility supervisor if any items are missing or damaged.
 - iii. Inspect produce, remove from corrugated boxes, clean according to Appendix F, and placed into covered containers.
 - iv. Rotate stock to ensure older items are used before newer items. Discard any Lubee supplement that is 6 months past opening date or past the vendor recommended use by date.

- v. Mark all items with date received (R). Space should also be left for the date opened (O) and date of expiration (E). Example format:
 - R: DD/MM/YY
 - O: DD/MM/YY
 - E: DD/MM/YY
- vi. All fresh produce should be stored inside a refrigerator.
- vii. Some items that require additional ripening time (i.e., bananas) may be stored temporarily outside of the refrigerator if they arrive in an unripened state.
- b. Feed Bags:
 - i. Rotate stock to ensure older items are used before newer items.
 - ii. Feed bags are stored 6" away from the wall, off the floor on elevated pallet beds with milling date visible.
 - iii. Discard any feed that exceeds the recommended expiration date by the manufacturer/vendor.
 - iv. Refer to Appendix B- Diet Expiration Dates for additional information.
- c. Refrigerators:
 - i. Remove older produce and use first, if not spoiled (e.g., broken skin, bruising, discoloration, weeping, apparent water loss, malodor and molding). Refer to Appendix C- Produce Spoilage Guidelines for additional information.
 - ii. Discard any liquids (e.g., fruit juice, supplements) that have been opened longer than 30 days, or sooner according to the manufacturer/vendor.
- d. Refrigerator/Freezer and walk-in units:
 - i. Remove all items and clean all shelves and drawers with the approved disinfectant.
- e. Daily Checklist: A facility supervisor or their designee will check for completion and sign off on the checklist on a weekly basis.

4. Monthly:

- a. Replace water supply in diet prep room with fresh water.
- b. Paperwork: Turn in to facility supervisor on the last day of the month.
- c. Mop Heads: Replace monthly or more often as needed.
- d. Pest & Vermin Traps: Replace fly traps monthly, or more often as needed.
- e. Wipe down external horizontal and vertical spaces of refrigerators/freezers monthly or more often as needed.

5. Annually:

- a. Empty and unplug freestanding refrigerator/freezer units and allow to thaw completely with doors open.
- b. Move refrigerator/freezer away from wall and sweep/mop space within footprint of the unit annually or more often as needed.
- c. Cooling coils should be vacuumed and/or wiped clean of debris.
- d. Walk-in units are maintained by facility services.

REFERENCE DOCUMENTS

- SOP 606-General Facility Sanitation
- SOP 608-Pest and Vermin Control
- Bat Diet Recipes Guideline online document

REVISION HISTORY			
REVISION NUMBER	AUTHOR(S)	EFFECTIVE DATE	REVISION(S)
1	Kayla Lynch	3/1/19	Update formatting and wording
			Added Appendix A-I
			Added 1.g, 2.a, 2.c, 2.d- Bat food preparation information and Retired SOP 502-Fruit Bat Food Preparation

Appendix A:

Fridge/Freezer

Date Received:

Appendix B:

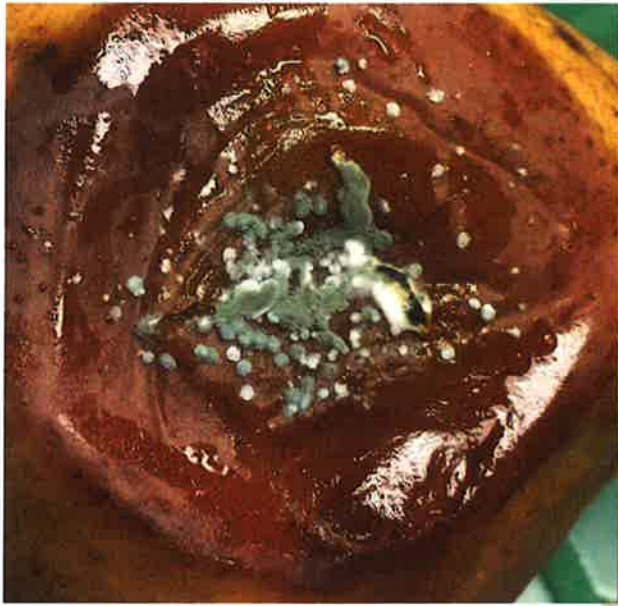
Diet Expiration Dates:

Diet Name	Vendor Approved Expiration
Lab Diet 5053	9 months
Lab Diet 5058	9 months
Lab Diet 5061	9 months
Lab Diet 5062	9 months
Envigo 06596	9 months
Envigo 2918	9 months
Envigo 2919	9 months
Envigo 7195	6 months
Envigo 2041	6 months
Envigo 3031	3 months
Purina Start and Grow	3 months

Appendix C:

Produce Spoilage Guidelines







Appendix D:



University of California, Berkeley
Office of Laboratory Animal Care

Temperature Verification Log

Building: LSA 6 LKS NAF

Month/Year _____ Tunnel Washer Rack Washer Glass Washer

Date/initials:	Date/initials:	Date/initials:	Date/initials:	Date/initials:
Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used
Date/initials:	Date/initials:	Date/initials:	Date/initials:	Date/initials:
Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used
Date/initials:	Date/initials:	Date/initials:	Date/initials:	Date/initials:
Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used
Date/initials:	Date/initials:	Date/initials:	Date/initials:	Date/initials:
Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used	Additional comments/Not Used

Comments: _____

N/A for tasks not applicable to room

Edited: 10/31/2018 By: KL

Appendix E:

Guidelines for Disinfecting Raw Fruit and Vegetables

1. Produce may require disinfection prior to feeding to animals.
2. If produce received is visibly soiled, pre-wash in running water prior to disinfecting. Chlorine loses its effectiveness quickly in the presence of oil, dirt, and organic material.
3. Prepare bleach solution once produce has been received.
 - a. Prepare tub and spray bottles for bleach water with a concentration of 65 ppm of total chlorine.
 - b. Check the bottle to verify the concentration and follow the formula listed below for that concentration.
 - i. 8.25% bleach- 3.1 ml per gallon of water. (ie., 58.9ml bleach to 19 gal of water)
 - ii. 6.15 % bleach- 4 ml per gallon of water (ie., 116.85 bleach to 19 gal of water)
 - iii. 5.25% bleach- 5 ml per gallon of water (ie., 99.75 bleach to 19 gal of water)
4. Place all thick rind or skin produce in wire basket racks for spraying with solution from above.
5. Prepare Ancare bin to immerse fruit.
6. Spray all fruit and vegetables with a thick rind or skin with bleach water for at least 1 minute of contact time.
 - a. Items that do not have a thick rind or skin such as leafy greens and grapes will be immersed in bleach solution for 1 minute.
 - b. Fruits of high concern for pest contamination such as bananas should also be immersed for 1 minute.
7. Do not expose the inside of the fruit or vegetable to the bleach solution.
8. Spray or immerse the fruit or vegetable with tap water for 3 minutes.
9. Immediately move wire racks and food grade storage bins containing all produce from staging area to the designated refrigeration or ripening locations in NAF.

Appendix F:

Guidelines for Fruit/Vegetable Cutting Machine (VC60MS)

1. Always keep machine unplugged until ready for use
2. Use the spring loaded twist lock to the right of handle to open the top half of machine
3. Wearing chainmail or cutting gloves, place the dicer blade over the turn shaft
4. Place the slicer blade over the dicer and twist to lock
5. Close the top half of the machine
6. Use the spring loaded twist lock to the right of handle to lock the unit
7. Plug in the unit
8. Move the compressor handle to the open position to receive fruit
9. Depress the green start button
10. Place fruit in opening
11. Bring the compressor handle down which will activate the blade and chop the fruit
12. Put the handle back to the up position when not in use to deactivate the blade.
13. If a jam occurs or you need to remove fruit backup unplug the machine and place protective gloves on before fixing the problem.
14. Tips: You may turn off the machine and utilize a flexible tool to push beneath the blades where fruit normally drops out. Fruit should be pushed out and the jammed cleared.

Appendix G:

Contact facility supervisor and vet staff if you are unsure if a tag has been placed in error



Fasted for Procedure
(Do NOT Feed)



Veterinary Staff Separation
(or Removal)



Laboratory Staff Separation
(or Removal)



PI CARE ONLY
(Do NOT Touch)



Post-op (Recent Surgery)