SOP: **LARC-16** Title: **Administering Supplemental Nutrition**
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PURPOSE

The purpose of this Standard Operating Procedure (SOP) is to describe the procedures for administering supplemental nutrition. This SOP applies to animals housed at the Laboratory Animal Research Core's animal facilities on the campus of the University of Missouri-Kansas City.

POLICY

It is LARC policy to meet or exceed all federal, state, local regulations and institutional policies/procedures as they apply to the use of animals in research. Personnel must attend any applicable training in animal care and use, occupational health and safety, equipment operation, and Standard Operating Procedures prior to performing activities outlined in this SOP or work under the direct supervision of a trained LARC staff member.

REFERENCES

A. Laboratory Animal Research Core Personnel

B. *The Guide for Care and Use of Laboratory Animals "The Guide"*

C. Office Of Laboratory Animal Welfare (OLAW)

D. Animal Welfare Act and Animal Welfare Regulations (AWA & AWR's)

E. Charles Rivers Laboratories

PROCEDURES

A. Introduction

a. It is common practice in animal care facilities to provide supplemental nutrients to animals that appear to be lacking nutrition either from weaning, illness, surgery, anesthesia, etc. These supplements are not meant to act as a sole source of diet, but rather an aid to ensure the animal's health is at expectable standards. As an investigator, this should be a consideration when housing animals within the LARC. Therefore, if a particular research project is "animal body weight" or "diet" sensitive, prior notification from the investigator upon ordering animals is vital. LARC staff should be made aware that additional nutrition could impact a research project before the arrival of animals into the facility by noting this information on the Animal Order Form *and* contacting LARC management directly. In these cases, permission will always be requested before administering nutrients unless the investigator/representative cannot be available for contact and the LARC Veterinarian considers the animal's welfare to be jeopardized. ***Otherwise, nutrients will be provided as a good animal care practice without prior approval.***

B. Transgel or Equivalent

a. Transgel (a gelatin substance comprised of 70% water and other nutrients) is given to animals that appear to be dehydrated or to ensure hydration directly after weaning. Usually, 2 to 5 ounces is supplied daily in a small dish placed at the bottom of the cage until the animal appears hydrated. Additionally, animals are ***always*** supplied with Transgel during shipments unless prior IACUC approval is granted.

- **i.** If an adult mouse appears to be dehydrated, Transgel is given to hydrate the animal.
- **ii.** The act of being weaned from their dam for some animals can be overwhelming causing behavior affects that can result in loss

of nutrition. Additionally, some animals may be slightly under size and require additional nutrition during weaning.

C. Wet Food

a. Instances may occur when an animal appears to be suffering from malnutrition. These cases are usually associated with an illness or adverse effects from surgery. In the event an animal requires wet food (normal pellet food that is grounded and mixed with water to resemble a “paste-like” substance) as nutrition, the LARC Veterinarian and the Investigator will be notified of the animal’s disposition.

b. Wet food is usually administered placing the mixture in the bottom of the cage inside a small dish until the animal’s health is deemed to be acceptable.

c. If an animal requires wet food, it is not uncommon to, in addition with wet food, to supply the animal with Transgel in a separate dish to aid in hydration.

D. Subcutaneous Injections

a. Instances may occur when fluids (physiological saline, lactated Ringer’s Solution, etc.) may be administered at 0.5ml/10 gm body weight twice daily through subcutaneous route in order to assist in hydration. This is usually accomplished by scruffing the back portion of the animal behind the neck region and using a hypodermic needle to insert fluids (amount depending on the species and size). An animal given injections for hydration is usually not showing an interest in wet food or Trangel and/or is showing signs of severe illness; therefore, the welfare of the animal is in immediate concern. In these cases, the LARC Veterinarian along with the Investigator will be notified as to the animal’s disposition.