

<b>FEEDING</b>	Animals must be fed an adequate diet to support their normal condition and weight. [3.9, 3.29, 3.54, 3.82, 3.105, 3.107, 3.129, Policy #25]
<b>Criteria</b>	<p>Dietary regimens must be discussed with and approved by the attending veterinarian.</p> <p>A diet is adequate if :</p> <ul style="list-style-type: none"> <li>• fed in sufficient quantities</li> <li>• contains sufficient nutritive value</li> <li>• appropriate for an individual animal's age, species, size and condition</li> </ul> <p>Animals must be fed at least once a day <b>except</b>:</p> <ul style="list-style-type: none"> <li>• as required for veterinary care</li> <li>• during hibernation</li> <li>• during normal fasting</li> <li>• as required as part of an IACUC-approved protocol</li> <li>• for other professionally accepted feeding practices</li> <li>• juveniles and infants who may require more than once a day feedings</li> </ul>
<b>Species Specific</b>	<p><b>Marine Mammals</b></p> <p>Marine mammals must be fed once a day, EXCEPT as directed by the attending veterinarian. [3.105(a)]</p> <p>Inappetence exceeding 24 hours must be reported immediately to the attending veterinarian. [3.105(c)]</p> <p>Attendants or employees feeding marine mammals individually must be able to: [ 3.105(c)]</p> <ul style="list-style-type: none"> <li>• determine quality and quantity of food</li> <li>• recognize deviations from a normal state of good health</li> <li>• adjust the diet according to the animal's health needs</li> </ul> <p>Public feeding must be done in the presence and under the supervision of a sufficient number of attendants or employees who are:</p> <ul style="list-style-type: none"> <li>• knowledgeable, and</li> <li>• uniformed</li> </ul>

	<p>Public feeding must be done</p> <ul style="list-style-type: none"> <li>• with the proper amount of food</li> <li>• with the proper type of food</li> <li>• only with food supplied by the facility</li> </ul> <p><i>Feeding records</i> [3.105(c)] Feeding records must be kept on the daily food consumption of each marine mammal.</p> <p>An accurate account of food intake must be maintained for marine mammals that are:</p> <ul style="list-style-type: none"> <li>• individually fed, and</li> <li>• not subject to public feeding</li> </ul> <p>An estimated account of food intake must be maintained for marine mammals that are fed:</p> <ul style="list-style-type: none"> <li>• in large, group colonies, and/or</li> <li>• in part, by the general public</li> </ul> <p>Feeding records must be:</p> <ul style="list-style-type: none"> <li>• maintained at the facility for 1 year</li> <li>• available for APHIS inspection</li> </ul>
<b>FOOD</b>	[3.9, 3.29, 3.54, 3.82, 3.105, 3.129, Policy #25]
<b>Criteria</b>	<p>Feed must be:</p> <ul style="list-style-type: none"> <li>• wholesome</li> <li>• uncontaminated</li> <li>• palatable</li> <li>• of sufficient nutritive value</li> <li>• of appropriate size and consistency for the animal's age, species, size and condition</li> <li>• digestible - feed may <b>not</b> be digestible if the following conditions are observed: <ul style="list-style-type: none"> <li>▶ excessive quantities of feces</li> <li>▶ feces resembles the food product</li> </ul> </li> </ul>

**Species Specific**

Methods for determining wholesomeness of meat or chicken obtained from a packing plant include, but are not limited to:

- meat marked with charcoal is wholesome for animals
- meat marked with green or blue dye is unwholesome
- chicken marked with red dye is unwholesome

**Guinea Pigs**

Guinea pig diets require Vitamin C either as a component of the feed or as a supplement to meet the animal's daily nutritional requirement. [3.29(a)]

The guinea pig's Vitamin C requirement is:

- 10-15mg per day under normal conditions
- 15-25mg per day if pregnant, lactating, or growing

Vitamin C can be provided by: [3.29(c)]

- commercially-prepared feeds with a Vitamin C additive if within 90 days of manufacturing date
- commercially-prepared diets with manufacturer's documentation of Vitamin C viability longer than 90 days, such as Harlan Teklab Guinea Pig Diet #7006
- commercially-prepared Vitamin C supplements added to the water
- fresh fruits and vegetables containing Vitamin C (see below)

NOTE: Guinea pigs eat 39 grams of feed per day.

Examples of fruits and vegetables high in Vitamin C include:

- citrus fruits
- broccoli
- mustard greens
- kale
- parsley
- water cress
- turnip greens
- cabbage
- leafy greens

Scurvy is caused by an inadequate amount of Vitamin C.

Signs of inadequate Vitamin C include, but are not limited to:

- posterior paresis
- abortion
- poor hair coat
- respiratory distress
- excessive bleeding during births or abortions
- sudden death

**Nonhuman Primates**

Diets must: [3.82(a)]

- be appropriate for the type of nonhuman primate, i.e., prosimians, Old and New World monkeys, and apes (see list of “Commonly Seen Nonhuman Primates” on page 12.3.5)
- contain Vitamin D supplementation for New World monkeys
- contain Vitamin C supplementation for leaf-eaters

Vitamin C can be provided by:

- commercially-prepared feeds with a Vitamin C additive if within 90 days of manufacturing date
- commercially-prepared diets with manufacturer’s documentation of Vitamin C viability longer than 90 days
- fresh vegetables high in Vitamin C (see below)

Examples of vegetables high in Vitamin C include:

- broccoli
- mustard greens
- kale
- parsley
- water cress
- turnip greens
- cabbage
- leafy greens

Multiple feeding sites must be provided for: [3.82(c)]

- group-housed primates with a dominant individual
- primates fed with other species

Animals must be observed to determine that each animal receives a sufficient quantity of food. [3.82(c)]

### COMMONLY SEEN NONHUMAN PRIMATES

PROSIMIANS	OLD WORLD MONKEYS	NEW WORLD MONKEYS	APES
Aye-ayes	African green monkeys	Capuchins**	Bonobos*
Galagos/Bush-babies**	Baboons	Goeldi monkeys	Chimpanzees*
Lemurs**	Barbary apes	Howler monkeys	Gibbons*
Loris	Celebes monkeys	Marmosets**	Gorillas (young*)
Tarsiers	Colobus monkeys	Owl monkeys**	Orangutans*
Tree shrews	Gelada baboons	Saki monkeys	Siamangs*
	Guenons	Spider monkeys*	
	Langurs	Squirrel monkeys**	
	Macaques	Tamarins**	
	Mandrills	Titi monkeys	
	Mangabeys	Woolly monkeys*	
	Patas	Woolly spider monkey*	
	Proboscis monkeys		
	Rhesus monkeys		
	Vervets		

\* - Brachiating species    \*\* - Scent-marking species

### **Marine Mammals**

Food preparation and handling must be conducted so as to assure the wholesomeness and nutritive value of the food. [3.105(d)]

Fish fed to marine mammals must be wholesome and palatable. [3.105(a)]

Signs of wholesome, palatable fish include, but are not limited to:

- fresh, fishy smell
- firm, elastic flesh
- eyes which are clear and not sunken
- pink or bright red gills
- an abdomen which cannot be opened by running finger down midline
- internal organs which are discernable

Signs of unwholesome fish include, but are not limited to:

- sour odor
- soft, slimy, flabby flesh
- scales that fall off easily
- opaque, sunken eyes
- dry, brown gills
- an abdomen which can be opened by running finger down midline
- internal organs which are indistinct and mushy

Frozen fish or other frozen food must be: [3.105(d)]

- stored, thawed, and maintained until fed in a manner which:
  - ▶ minimizes contamination
  - ▶ retains the food's nutritive value
  - ▶ retains the wholesome quality of the food
- stored in a freezer at a maximum temperature of 0° F (-18° C)
- covered or stored in a manner to prevent freezer burn
- thawed before feeding
- thawed in cold water when standing or running water is used

- fed within 24 hours of:
  - ▶ thawing if thawed under refrigeration, or
  - ▶ removal from the freezer if thawed by any other method

### **Other Animals**

#### *Large Felids* [Policy #25]

Commercially prepared diets should be used to feed large felids, such as:

- lions
- tigers
- cougars/pumas/mountain lions
- leopards

Non-commercially prepared diets **must be approved**, in writing, by the attending veterinarian.

The written diet must specify:

- the contents of the diet
- the amount of each ingredient
- any nutritional supplements added, including:
  - ▶ type
  - ▶ quantity
  - ▶ frequency of addition
- amount of food fed routinely
- feeding schedule

Unacceptable diets include, but are not limited to:

- diets composed exclusively of the following without appropriate supplementation:
  - ▶ poultry necks
  - ▶ meat
  - ▶ fish
- exclusively bakery products
- spoiled food of any kind
- unwholesome, spoiled road kill
- sick animals
- animals that died of illness or unknown causes
- animals euthanized with chemical euthanizing agents

	<ul style="list-style-type: none"> <li>animals euthanized by gunshot if the lead pellets were not removed prior to feeding</li> <li>downer animals exhibiting signs of central nervous system disorders</li> </ul> <p>NOTE: Downer animals with physical injuries only may be used for food if properly processed.</p> <ul style="list-style-type: none"> <li>animals known or suspected of having Johne's disease</li> <li>outdated meat from grocery stores if not kept refrigerated or frozen until used</li> </ul> <p>Uneaten food must be removed from pens:</p> <ul style="list-style-type: none"> <li>within 12 hours of feeding, or</li> <li>sooner, if the food spoils</li> </ul> <p>In order to mimic their natural feeding behavior, felids may be fasted for 1 or 2 nonconsecutive days per week, if <b>approved in writing</b> by the attending veterinarian.</p> <p>NOTE: During this fasting, the felids should be provided with long, femur bones, oxtails, horsetails, or rawhides.</p> <p>Young felids not kept with their dams until weaned must be fed a diet <b>approved in writing</b> by the attending veterinarian. This diet should be:</p> <ul style="list-style-type: none"> <li>a balanced formula, and</li> <li>fed on an appropriate schedule</li> </ul>
<b>FOOD RECEPTACLES</b>	[3.9, 3.29, 3.54, 3.82, 3.105, 3.129]
<b>Criteria</b>	<p>Food receptacles must be:</p> <ul style="list-style-type: none"> <li>accessible to all animals</li> <li>located to minimize contamination</li> <li>kept clean and sanitary</li> <li>maintained to prevent molding, caking, deterioration, contamination, and wetting of food</li> </ul> <p>Non-disposable receptacles must be:</p> <ul style="list-style-type: none"> <li>made of durable material</li> <li>cleaned and sanitized regularly</li> </ul>



**Species Specific**

- replaced if no longer properly sanitizable i.e., rough, chewed edges

Disposable receptacles must be discarded after one use.

Self-feeder receptacles must be:

- used for dry food only
- kept clean and sanitary

**Dogs & Cats [3.9(b)]**

Food receptacles must be:

- used to feed the animals
- protected from rain and snow
- sanitized at least once every 2 weeks if not disposable

**Guinea Pigs & Hamsters [3.29(d)]**

Food receptacles:

- are optional
- must be sanitized at least once every 2 weeks if used and not disposable

**Rabbits [3.54(b)]**

Food receptacles must be sanitized at least once every 2 weeks if not disposable.

**Nonhuman Primates [3.82(d)]**

Food receptacles must be sanitized:

- before being used for other primates
- at least once every 2 weeks if not disposable

**Marine Mammals [3.105(b)]**

Food receptacles must be:

- cleaned after each use, and
- sanitized after each use

<b>FOOD PREPARATION</b>	[3.107]
<b>Species Specific</b>	<b>Marine Mammals</b> [3.107(b)] <i>Food Preparation Areas</i> Kitchens and other food preparation areas must be: <ul style="list-style-type: none"><li>• cleaned at least once daily, and</li><li>• sanitized at least once a week</li></ul> <i>Equipment and Utensils</i> Equipment and utensils used in food preparation must be: <ul style="list-style-type: none"><li>• cleaned after each use, and</li><li>• sanitized after each use</li></ul>