

Guinea Pig

(*Cavia porcellus*)



Natural History

The guinea pig is a native of Peru, Brazil, and Argentina that was domesticated by the Inca Indians. Guinea pigs are also known as “cavies”, a term derived from the South American vernacular. Male guinea pigs are called “boars” and females are “sows”.

Taxonomy

Class Mammalia

Order Rodentia

Suborder Hystricomorpha

Family Caviidae

Breeds

Eleven breeds are recognized with the three most popular being:

- Peruvian: long hair
- American or English: short hair
- Abyssinian: whorled or rough hair

Diet

Guinea pigs require exogenous vitamin C. Commercial guinea pig pellets contain vitamin C. Also supplement vitamin C with small amounts of fruit and vegetables. Feed small amounts of pellets (1/4 cup per day) and free-choice grass hay.

Husbandry

Guinea pigs are crepuscular. Caging should be well ventilated with solid flooring. Be sure to provide visual security in the form of a hide box.

Clean and change water bottles frequently. Clinically normal rabbits harbor a variety of bacterial organisms that can cause death and disease in guinea pigs. Never house guinea pigs and other rodents near rabbits.

Normal Physiologic Values

Temperature	99-101.5 F	37.2-38.6 C
Pulse	230-380	
Respiration	40-100	
Body weight	Adult Male	900-1200 g
		700-900 g
Mean life span	Adult Female	
	5-7 y	
Sexual maturity	2-4 months	2 months (F) 3 months (M)

Males will exhibit mounting behavior as early as 1 month of age. Females can become pregnant as early as 4-5 weeks of age.

Gestation	59-72 days (average 68 days)
Litter size	1 to 13 (2 to 4 is the usual)
Birth weight	45-115 g (inversely related to litter size) 70-100 g
Weaning age	21 days (180 g)
Target environmental temperature	65-79 F 18-26 C

Anatomy/ Physiology

Musculoskeletal: Females must be bred before 6-9 months of age. Immature males and females have a fibrocartilaginous pelvic symphysis fusion, which becomes ossified over 1 year of age. The symphysis remains cartilaginous in primiparous sows so the pelvic canal can dilate allowing passage of the large fetus.

Urogenital: Males have lateral scrotal swellings on each side of the anus. Accessory glands include a prostate, coagulating gland, bulbourethral gland, and seminal vesicles. Seminal vesicles are large, yellow-white tubular structures, which lie dorsal to the bladder. The seminal vesicles may be confused with the uterus.

**Gastrointestinal:
Dental formula** Incisors 1/1 Canine 0/0 PM 1/1 Molar 3/3
All teeth are open-rooted.
The lower incisors are normally 3X longer than the upper incisors.

Respiratory: All rodents are obligate nasal breathers.

Important Medical Conditions

- Bacterial pneumonia
- Dystocia
- Fur mites
- Hypovitaminosis C or scurvy (can reportedly occur w/in 4d of dietary decrease)
- Malocclusion
- Pododermatitis

Restraint

Most pet guinea pigs are calm, gentle animals that rarely bite. To pick up a guinea pig, cup one hand gently under the thorax and use the other hand to support the hind end.

Venipuncture

Large volumes: Jugular vein, cranial vena cava
Small volumes: Cephalic vein, lateral saphenous vein

Antibiotics to Avoid

Avoid antimicrobials that attack only gram-positive bacteria such as beta-lactams.

P.L.A.C.E.:

- Penicillin
- Lincosamide, lincomycin
- Amoxicillin, ampicillin
- Cephalosporins, clindamycin
- Erythromycin

References

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