Research Services
Institutional Animal Care and Use Committee
Research Resource Facilities



Pain Scoring Using Response Variables

The UofL IACUC Policy/Procedure entitled, "Humane Endpoints" states:

"Humane experimental endpoints that minimize pain, distress, or discomfort by choosing the earliest endpoint that is compatible with the scientific objectives of the research project must be identified within UofL Institutional Animal Care and Use Committee (IACUC) *Proposals*." As described in this policy, scoring systems provide an objective format for determining the severity of experimental impact on health and wellbeing. Several scoring systems may be found in the literature. The example below uses Response Variables and a Scoring System:

Category	Score	Criteria
Body weight changes*	0	Normal
	1	<10% Weight loss
	2	10-15% Weight loss
	3	>20% Weight loss
Body- condition score*	0	Well-conditioned (vertebrae, pelvic, or spinal bones not prominent)
	1	Under-conditioned (evident vertebral segmentation; pelvic bones readily palpable)
	2	Emaciation (skeletal structures extremely prominent; little or no flesh cover)
Physical appearance	0	Normal
	1	Lack of grooming
	2	Rough coat, nasal/ocular discharge
	3	Very rough coat, abnormal posture
Behavior	0	Normal
	1	Minor changes (e.g., limping)
	2	Abnormal; reduced mobility, inactive
	3	Unsolicited vocalizations, self-mutilation, either very restless or immobile

* Body weight is not always accurate as increases in abdominal fluid or tumor growth may mask weight loss. At times, body-condition scores may better reflect an animal's actual condition.

A total score of three or more using the above checklist indicates a need for additional intervention or euthanasia.