

**Forced Exercise / Walking
Wheel Bed System
IACUC Standard Procedure
Effective Date: July 27, 2021**

Description of Procedure:

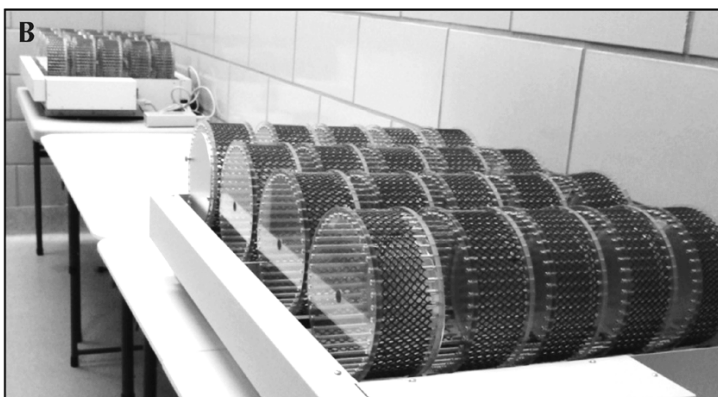
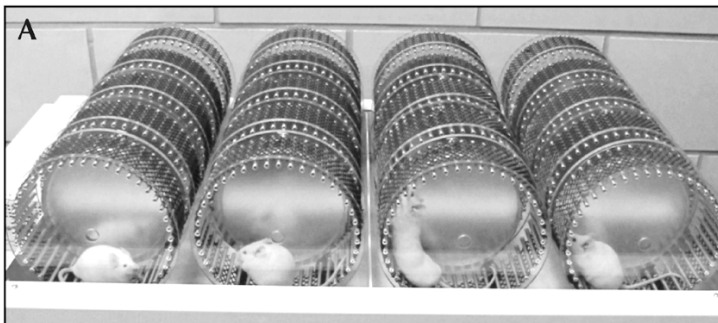
The forced exercise test with walking wheel bed system is a test that can be used for physiologic and behavioral (i.e. sleep deprivation, forced exercise) studies. The exercise/walking wheel bed supports 1-20 exercise/walking wheels. Each animal has its own running wheel with a swing-hatch system for easy animal loading and removal. The hand held LCD interface permits a single exercise speed, exercise time, rest time, and number of cycles. The exercise program consists of training animals to run on a motorized wheel system for up to 7 m/min., which is well below the exercise tolerance level in mice (Lafayette Instrument Co.).

Supplies:

- Lafayette Instrument Forced Exercise/Walking Wheel Bed system with LCD interface

Procedure Steps:

1. The initial two-week training period involves training the animals to acclimate to the walking wheel and exercise bed and learning to run at a certain speed, for a certain amount of time.
2. The initial exercise speed will be 2.5 m/min. for one hour.
3. The speed is then incrementally increased up to 7.0 m/min for up to one hour.



References:

1. Hunter, Randy & Choi, Dong-Young & Kincer, Jeanie & Cass, Wayne & Bing, Guoying & Gash, Don. (2007). Fenbendazole treatment may influence lipopolysaccharide effects in rat brain. *Comparative medicine*. 57. 487-92.