

## Frequently Asked Questions - MMPC and Energy Balance Core

Keywords: [energy balance](#) [Core](#) [quarantine](#) [experiments](#) [questions](#) [ship mice](#) [nutrition](#) [custom diet](#) [non-invasive](#)  
[genotypes](#) [body composition](#)

[Expand](#)**Frequently Asked Questions - MMPC****Q. At what age should I ship mice for clamping procedures?**

A. We prefer mice to be shipped to us at 7 wks of age. Mice will be released from Vandy quarantine by 13-15 wks and undergo surgery at that time.

**Q. I am performing nutrition studies. Can the MMPC use my custom diet?**

A. Yes! Please contact us at least 2 wks before shipping.

**Q. Breeding can be unpredictable and slow. Can we send mice as they become available or do we have to send them as a complete cohort at all one time?**

A. You can send them all at once or as they become available, whatever is most convenient for you. Note however multiple shipments is not recommended. It increases costs (shipping and serology) and will add variability to the data.

**Q. Can I combine your "Non-Invasive Special" with one of your "Clamp Specials"?**

1. Yes! We can make non-invasive measurements and perform a clamp all in the same mouse.
2. **You describe different types of clamps. How do I know which one to request?**

A. To assess (a) insulin sensitivity order a hyperinsulinemic euglycemic clamp; (b) response to low blood glucose order a hyperinsulinemic, hypoglycemic clamp; and (c) beta cell insulin secretion order a hyperglycemic clamp.

1. **If I send you my mice do I retain control of the distribution of the mouse and the data generated by the mouse?**

A. Yes. Please see our Materials Transfer Agreement (<http://www.mmpc.org/MTA.pdf>)

1. **Am I required to include Vanderbilt MMPC faculty and staff as authors on papers including data generated by the MMPC?**
2. No. Vanderbilt MMPC operates on a fee for service basis. Authorship for MMPC faculty and staff is at the discretion of the client investigator.

**Frequently Asked Questions – Energy Balance Core****Vanderbilt MMPC Energy Balance Core: Considerations Before Starting a Study**

1. The **minimum** number of animals recommended per group/treatment/diet/genotype is **eight**.
2. Unless your research question is specifically gender related all animals should be the **same** sex due to known effects of gender on energy balance.
3. At the time of testing animals should be fully mature (8 weeks+) and age matched as much as possible ( $\pm 2$  weeks). It is recommended that all animals be sent in a single shipment.
4. Current Vanderbilt quarantine for animals shipped from external institutions is approximately 6 weeks.
5. When comparing between genotypes (particularly on mixed genetic backgrounds) wild-type littermates should be used as controls.
6. Studies can be performed with animals on special diets but these diets must be received a minimum of 2 weeks prior to the start of the study. If the animals need to be on the diet while in quarantine; fenbendazole must be added to the diet. If fenbendazole is contraindicated for your mice, contact the core director.
7. Measurement of body composition is included in all indirect calorimetry studies.
8. Before starting experiments we need to know the genotype, genetic modification and background strain of the animals. This is required so we can make sure that the experiments are run correctly. **\*\*Please contact the core director for more details\*\*.**

9. On completion of the study ear punches will be returned to the investigator for validation of genotypes.