



# Body composition (organs)

Version: 1  
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*(note that the following list should be linked to the appropriate location.)*

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**Summary:** *(This area will include a brief description of what the protocol is used for and why someone would need to use it.)*

The EchoMRI 3-in-1 uses <sup>1</sup>H- magnetic resonance spectroscopy to noninvasively measure fat mass, lean mass, and water mass in individual organs. Fat, lean, and water mass composition in specific organs is altered in obesity.

**Reagents and Materials:** *(This should be a comprehensive list of stock solutions and material. The reagent list for the stock solutions is included in the reagent preparation area that is included at the end of this SOP.)*

Reagent/Material	Vendor	Stock Number
EchoMRI 3-in-1	Echo Medical Systems	
Pentobarbital	Oak Pharmaceuticals, Inc.	NDC76478-501-50

## Protocol:

1. Euthanize mice using intraperitoneal injection of pentobarbital.
2. Quickly dissect and extract specific organs to measure their composition.
3. Place specific organ into an instrument column.
4. Measure composition of organ using instrument standard operating procedure.