

**preSurgery**  
2004-2008

**studyTime**  
2016

**w/oApp**

**Intact**

**w/oApp**

**Intact**

Anthropometric  
and biochemical  
variables

Anthropometric  
and biochemical  
variables

Anthropometric  
and biochemical  
variables

Anthropometric  
and biochemical  
variables

Appendix tissue

Feces

Feces