**Lidocaine/IV insertion and**

 **Bilateral skin incision**

**Baseline Blood/ Muscle Bx/ Fat Bx**

**Right Side**

**Exercise session**

**(See questions below)**

**Randomize 1/3 of participants**

**To each time-point for muscle**

**Blood draws at all time-ponts**

**OGTT/ Body composition/Surveys**

**Participant at Home**

**Immediate post-exercise**

 **Blood/ Muscle Bx/ Fat Bx**

**Left Side**

**2-Hour post-exercise**

**Muscle Bx/Blood**

**4-Hour post-exercise**

**Muscle Bx/Blood**

**6-Hour post-exercise**

**Muscle Bx/Blood**

**24-Hour post-exercise**

 **Blood/ Muscle Bx/ Fat Bx**

**Left Side**

**Right Side**

* **Meals –** where do they fit on this timeline? How many? Liquid meals only? Fasting for 12 hours prior to this visit?
* **Exercise Training Questions:**
	+ Match AT moderate and AT high on energy expenditure
	+ Wendy Khort suggests 4 sessions/wk for all groups
		- RT – 2x/wk for upper body and 2x/wk for lower body
	+ Which intensities are best for moderate and vigorous? Is 50% too low?
	+ RT **–** 7 machines: lat pulldown, row, chest press, shoulder press, leg curl, leg extension and leg press
* **Acute exercise bout:**
	+ **AT –** Mimic exercise session; match the two groups for energy expenditure
	+ **RT –** Full upper and lower body session? Number of sets/reps? Leg extension last

Baseline testing based on %1RM, Post-intervention intensity based on exercise sessions or a new 1RM test?