

Materials List for:

# Conducting Maximal and Submaximal Endurance Exercise Testing to Measure Physiological and Biological Responses to Acute Exercise in Humans

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TODO, TODO

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URL: <https://www.jove.com/video/58417>

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## Materials

Name	Company	Catalog Number	Comments
Metabolic cart/portable system	MCG Diagnostics	Mobile Ultima CPX System	The flow calibration syringe, and calibration gases should come with system. There are numerous possible options/alternatives.
Pulmonary function software (Breeze Suite)	MCG Diagnostics		Software used will depend on the metabolic system
Upright cycle ergometer	Lode ergoline	960900	Numerous possible options/alternatives
12-Lead ECG	GE Healthcare	CASE Exercise Testing System	Used for 12 lead ECG capture, control bike. Having a full 12-lead is ideal for maximal exercise test so can monitor for arrhythmias, but alternative for just HR would be a wireless chest strap heart rate monitor
Pulse oximeter	Masimo	MAS-9500	Usually multiple probe options: finger, forehead, ear lobe. Usually avoid finger as tight handlebar grip can cause measurement inaccuracies
Pneumotach (preVent Flow Sensor)	MCG Diagnostics	758100-003	Alternative systems can use a turbine
Nose piece (disposable)	MCG Diagnostics	536007-001	Numerous possible options/alternatives
Mouthpiece with saliva trap	MCG Diagnostics	758301-001	Suggest filling the saliva trap with paper towel/gauze and tape cap to limit dripping
Headband	Cardinal Health	292866	Used to secure the forehead pulse oximeter and the lines for the cart
Stethoscope	3M Littman	3157SM	Numerous possible options/alternatives
Blood pressure cuff	HCS	HCS9005-7	Cuff size will depend on the population planning to test
ECG Electrodes	Cardinal Health	M2570	only needed with lead based ECG/HR monitoring
K <sub>2</sub> EDTA tube 5mL	Becton Dickinson	368661	
*The table provides a list of the supplies and equipment utilized in this protocol and comments related to the equipment. Brand name/company is provided, but the use of other brands will not affect the results, key is to keep it consistent			

throughout testing in a particular study.			
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