biosensors

MDPI

Article

A Dual Electrode Biosensor for Glucose and Lactate Measurement in Normal and Prolonged Obese Mice Using Single Drop of Whole Blood

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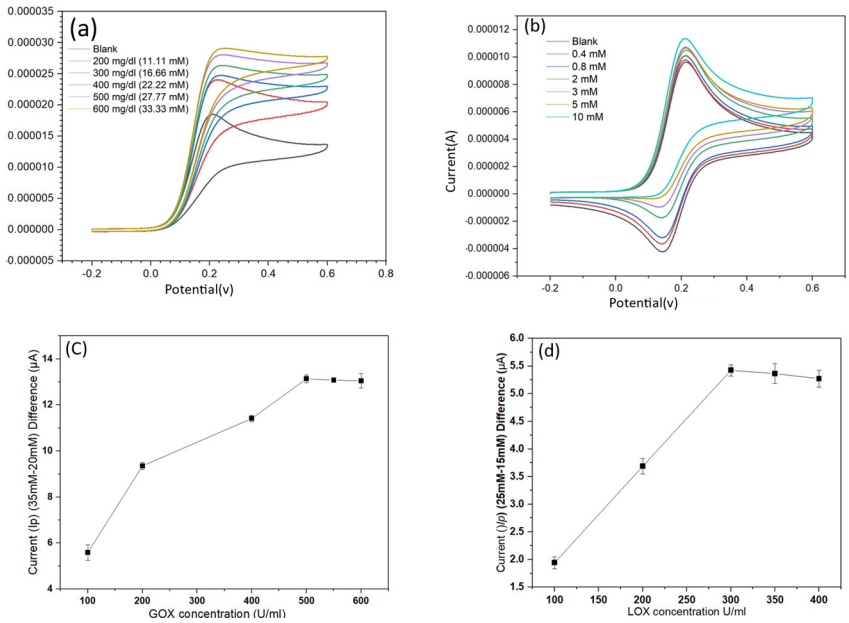

Figure S1. Methodology optimization: (**a**) CV responses of glucose solutions from 200mg/dl to 600mg/dl on GOX deposited SPCES and (**b**) CV responses of lactate solutions from 0.5 to 10 mM on LOX deposited SPCES. (**c**) difference of Ip generated by 35 mM and 20 mM glucose on DWE prepared with linear Gox concentration (100 U/mL to 600 U/mL). (**d**) difference of Ip generated by 25 mM and 15 mM lactate on DWE prepared with linear LOX concentration (100 U/mL to 400 U/mL). The measurement of each condition was conducted in triplicate.

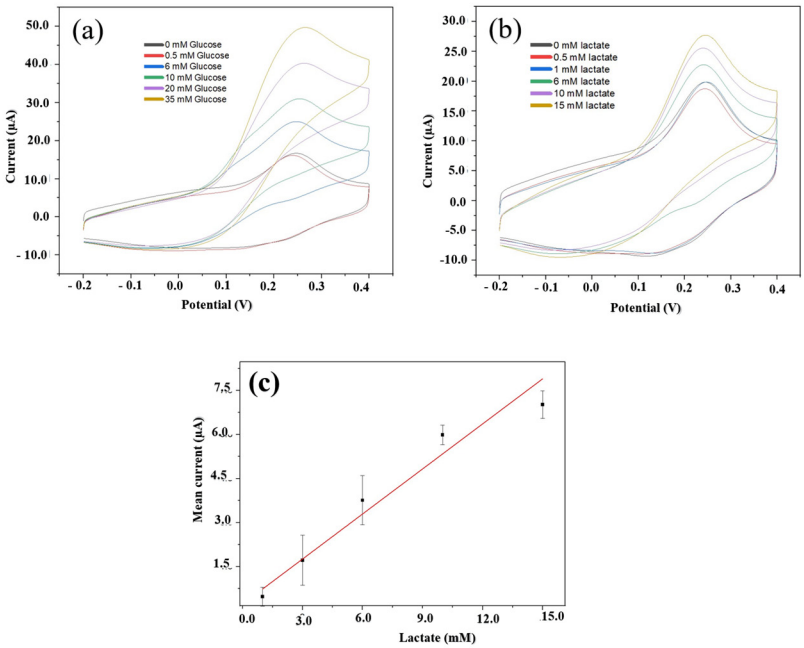

Figure S2. Desorption study: (**a**) CV responses of glucose solutions from 0 to 35 mM on DWE, measured after generation of CV response for lactate present on same solution. (**b**) CV responses of lactate solutions from 0.5 to 15 mM on DWE, measured before glucose solution present on same solution (**c**) calibration curve for lactate generated using Ip of (b). The fluctuation in I_p of glucose and lactate was potentially caused by desorption -mediated diffusion.