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A new graphene-based nanomaterial increases lipolysis and reduces body weight gain through integrin linked kinase (ILK)

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SUPPLEMENTARY FIGURE: GMC treatments did not change GLUT4 expression, activity or blood glycaemia. mRNA expression fold changes of GLUT4, normalized to β-actin, from A) differentiated adipocytes and B) scWAT explants from standard diet (STD)- fed wildtype mice (WT), cultured and treated with 20 µg/mL GMC or vehicle (CT) for 24h. C) glucose uptake determination in other scWAT explants from STD-fed WT ex vivo: explants were incubated with insulin (100 nM) for 15 min and the fluorescent deoxyglucose analog 2-NBDG (0.1 mM) was added for additional 30 min and the intracellular 2-NBDG fluorescence fold change was determined afterwards. D) blood glycaemia from STD-fed rats after topical administration of GMC: rats were depilated in the dorsal-inguinal area and subjected to topical applications of 100 µg/mL GMC or vehicle (VH) 2 times per day for 5 consecutive days. Data are expressed as mean ± standard errors (M±SEM) from n=12 experiments.

