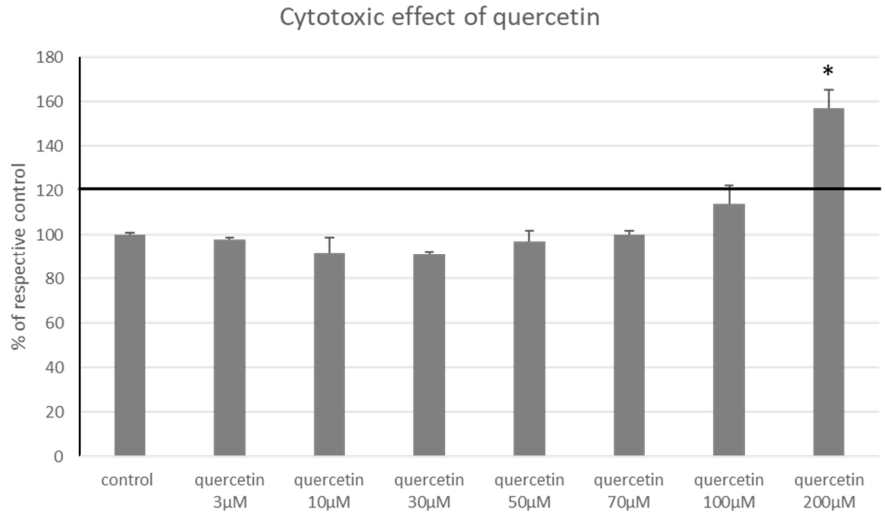
Cytotoxic effect

Potential cytotoxic effect of quercetin on CHUB-S7 cells was determined by the CytoTox 96 Non-Radioactive Cytotoxicity Assay (*Promega, Germany*) following the manufacturer instruction. The assay measures the lactate dehydrogenase (LDH) activity in the cell culture. Data were calculated as percentage of LDH activity, released into the medium after the exposure to quercetin, in comparison to the LDH activity in the control. The concentration of quercetin was considered to be cytotoxic, when the amount of LDH was increased by 20% when compared to the control. In the cytotoxicity test, the toxicity of seven concentrations of quercetin (3μM, 10μM, 30μM, 50μM, 70μM, 100μM and 200μM) was investigated. In the used experimental conditions, only quercetin exerted the cytotoxic effect at the highest concentration of 200μM (Figure below).



*The cytotoxic effect of different concentration (3-200μM) of quercetin in Chub-S7 cells. The results presented as percentage, as mean +S.D. (n=3). * p<0.05 vs control.*

Based on the results of the cytotoxicity assay and literature review, we decided to select five concentrations of quercetin (10μM, 30μM, 50μM, 70μM, 100μM) for further studies. Some researchers use lower concentrations of quercetin in their studies [60]. However, many studies have been conducted on cell lines, including preadipocytes, in which higher concentrations of quercetin were used [46,61].