

**Supplementary Figure S1** Non-linear dose–response curves between continuous BMI and semen quality parameters in only non-smoking sperm donors. The BMI was included as a natural cubic spline function in the linear mixed model, adjusting for age, ethnicity, education, smoking, marital status, abstinence period and season. For better interpretation, the percent changes were estimated relative to the median value of normal weight (22.1 kg/m²). The vertical dotted lines gave the range of normal weight (18.5–24.9 kg/m²).