## Additional file 1

Figure S1. Search Strategy, MEDLINE via EBSCO

- 1. metabolic\*
- 2. cardiometabolic\*
- 3. health\*
- 4. unhealth\*
- 5. normal
- 6. abnormal
- 7. benign
- 8. "at-risk"
- 9. obes\*
- 10.MHO
- 11."BMI"
- 12. "WHR"
- 13. "waist circumference"
- 14. "body composition"
- 15. abdominal
- 16. visceral
- 17.adipos\*
- 18.fat\*
- 19. muscle
- 20. weight
- 21.height
- 22. "body size trajector\*"
- 23. "birth weight"
- 24. birthweight
- 25.growth
- 26. "early onset obes\*"
- 27.pubert\*
- 28.menarch\*
- 29.smok\*
- 30.diet\*
- 31.alcohol\*

- 32. "physical activit\*"
- 33. exercis\*
- 34.fit\*
- 35. sedentary
- 36.psychosocial
- 37.stress\*
- 38. adversity
- 39. adverse experience\*
- 40. maltreatment
- 41. anxiety
- 42.depress\*
- 43. socioeconomic\*
- 44. socio-economic\*
- 45. social occupation\* class
- 46. income
- 47. education
- 48. cortisol
- 49. Limit to English Language
- 50. Limit to publications between 1960-2017
- 51.1 or 2 N3 3 or 4 or 5 or 6 or 7 or 8 N3 9 (Search Title, Abstract, Key words)
- 52.9 and 10 (Search Title, Abstract, Key words)
- 53.11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 (Field searched (Field searched Title, Abstract, Key words)
- 54.51 or 52
- 55.49 and 50
- 56.53 and 54 and 55

**Figure 1** represents the search strategy used, whereby 1- 48 represent all the keywords used in the search, 51-53 represent how the key words were organised into separate fields, 54 represents how the separate were fields were merged to create another search field, 55 represents the restrictions grouped, and 56 represents how the separate fields were combined to formulate the final search in addition to the restrictions that were selected when running the search.