SUPPLEMENTARY DATA

Supplementary Table SIII Association between age and BMI at adiposity peak/rebound and between weight classes in different age groups and fertility outcomes.

		Decreased fecund- ability at age 31 years	Infertility assess- ments before age 46 years	Infertility treatments before age 46 years	Childlessness at age 50 year
Adiposity peal	k OR 95% CI		•••••		
Age (years)	Crude	0.88 (0.57-1.36)	0.86 (0.59-1.24)	0.91 (0.61-1.36)	1.01 (0.73-1.39)
	Model I	0.89 (0.58-1.37)	0.86 (0.59-1.24)	0.91 (0.61-1.36)	1.00 (0.70-1.42)
	Model II	0.86 (0.57-1.37)	0.86 (0.60-1.24)	0.91 (0.61–1.36)	0.98 (0.70-1.41)
BMI (kg/m2)	Crude	1.08 (0.86–1.34)	0.88 (0.73–1.06)	0.87 (0.71–1.08)	0.84 (0.70-0.99)
	Model I	1.08 (0.86–1.34)	0.88 (0.74–1.06)	0.88 (0.71–1.08)	0.83 (0.69–1.00)
	Model II	1.08 (0.87-1.35)	0.89 (0.74-1.07)	0.88 (0.71-1.08)	0.83 (0.69-1.01)
Adiposity rebo	ound OR 95% CI				
Age (years)	Crude	0.86 (0.72-1.04)	1.06 (0.91–1.24)	1.09 (0.92-1.29)	0.89 (0.76-1.02)
	Model I	0.87 (0.72–1.04)	1.06 (0.91–1.24)	1.10 (0.93–1.31)	0.86 (0.73-0.99)
	Model II	0.87 (0.72-1.05)	1.07 (0.91–1.25)	1.09 (0.92–1.31)	0.86 (0.74–1.00)
BMI (kg/m2)	Crude	1.10 (0.95–1.27)	0.87 (0.76-0.99)	0.88 (0.76-1.01)	1.01 (0.89–1.14)
	Model I	1.10 (0.95–1.27)	0.87 (0.77-0.99)	0.87 (0.76–1.01)	0.99 (0.87–1.13)
	Model II	1.10 (0.95–1.27)	0.87 (0.76-0.98)	0.88 (0.75–1.01)	0.99 (0.87–1.12)
Age 3-6 years	OR 95% CI				
Underweight	Crude	1.12 (0.50–2.51)	1.45 (0.81–2.62)	1.39 (0.71–2.70)	1.23 (0.67–2.25)
	Model I	1.10 (0.49–2.47)	1.42 (0.80–2.59)	1.36 (0.69–2.65)	1.55 (0.83–2.89)
	Model II	1.16 (0.51–2.61)	1.48 (0.81–2.64)	1.39 (0.71–2.72)	1.59 (0.85–2.98)
Overweight	Crude	0.99 (0.64–1.52)	0.84 (0.58–1.21)	0.83 (0.55–1.26)	0.83 (0.55–1.26)
	Model I	0.98 (0.64–1.52)	0.84 (0.58–1.21)	0.83 (0.55–1.25)	0.83 (0.55–1.25)
	Model II	0.99 (0.64–1.53)	0.84 (0.58–1.22)	0.83 (0.55–1.26)	0.83 (0.55–1.26)
Obese	Crude	1.25 (0.73–2.41)	0.65 (0.38–1.14)	0.67 (0.37-1.25)	0.82 (0.50–1.34)
	Model I	1.23 (0.72-2.12)	0.65 (0.37-1.13)	0.67 (0.36-1.24)	0.74 (0.43-1.26)
	Model II	1.24 (0.72-2.13)	0.64 (0.36-1.11)	0.66 (0.35-1.22)	0.74 (0.43-1.25)
Age 7-10 years	OR 95% CI				
Underweight	Crude	0.86 (0.44-1.69)	1.37 (0.86–2.16)	1.31 (0.79-2.18)	1.03 (0.63-1.68)
	Model I	0.86 (0.44-1.69)	1.35 (0.86–2.14)	1.30 (0.78-2.16)	1.00 (0.69-1.70)
	Model II	0.84 (0.46-1.65)	1.37 (0.87-2.18)	1.31 (0.78-2.18)	1.00 (0.59-1.71)
Overweight	Crude	1.28 (0.81-2.05)	1.13 (0.77-1.67)	1.10 (0.71-1.68)	1.23 (0.85-1.78)
	Model I	1.28 (0.80-2.04)	1.12 (0.76-1.65)	1.07 (0.70-1.65)	1.35 (0.91–2.00)
	Model II	1.28 (0.80-2.04)	1.11 (0.75-1.64)	1.08 (0.70-1.66)	1.31 (0.88-1.94)
Obese	Crude	1.88 (1.08-3.27)	0.71 (0.37-1.35)	0.73 (0.36-1.47)	1.18 (0.70-1.98)
	Model I	1.87 (1.07-3.24)	0.70 (0.37-1.35)	0.71 (0.35-1.44)	1.00 (0.56-1.77)
	Model II	1.86 (1.07-3.28)	0.71 (0.37-1.35)	0.73 (0.36-1.47)	0.99 (0.56-1.77)
Age II-I5 yeai	rs OR 95% CI				
Underweight	Crude	0.92 (0.53-1.58)	1.42 (0.97–2.09)	1.54 (1.02-2.33)	1.14 (0.76–1.71)
	Model I	0.92 (0.53–1.58)	1.42 (0.97–2.09)	1.55 (1.02-2.34)	1.25 (0.82–1.93)
	Model II	0.89 (0.51-1.53)	1.43 (0.97–2.10)	1.55 (1.02–2.36)	1.27 (0.82-1.95)
Overweight	Crude	1.16 (0.74–1.82)	0.87 (0.58-1.31)	0.93 (0.60-1.46)	1.68 (0.96-1.96)
	Model I	1.16 (0.74–1.83)	0.86 (0.57-1.32)	0.91 (0.58-1.42)	1.57 (1.08-2.29)

Supplementary Table SIII Continued

		Decreased fecund- ability at age 31 years	Infertility assess- ments before age 46 years	Infertility treatments before age 46 years	Childlessness at age 50 years
	Model II	1.04 (0.63–1.73)	0.86 (0.57-1.30)	0.94 (0.59–1.45)	1.56 (1.06–2.27)
Obese	Crude	1.78 (0.97-3.23)	1.21 (0.68-2.16)	1.13 (0.59-2.18)	1.68 (1.01-2.79)
	Model I	1.75 (0.97-3.21)	1.21 (0.68–2.15)	1.11 (0.57-2.14)	1.77 (1.02-3.01)
	Model II	1.82 (0.99–3.33)	1.22 (0.68–2.18)	1.16 (0.60–2.24)	1.77 (1.02–3.07)

Normal weight is used as a reference group.

Women with polycystic ovary syndrome were excluded. Women who reported to have never attempted to achieve pregnant were excluded from the analyses.

 $Underweight \ (BMI < 5th \ percentile \ (pc)), \ normal \ weight \ (BMI \ 5th - 85th \ pc), \ overweight \ (BMI \ 85th - 85th \ pc), \ obese \ (BMI \ > 95th \ pc).$

Results are shown as OR with 95% Cl.

Model I: adjustment for marital status during reproductive period.

Model II: Model I + adjustment for education and smoking.
The bold values significance is expressed in the Tables as ORs.