

**Birth weight, body silhouette over the life course, and incident diabetes in 91,453 middle-aged women from the French Etude Epidemiologique de Femmes de la Mutuelle Generale de l'Education Nationale (E3N) Cohort.**

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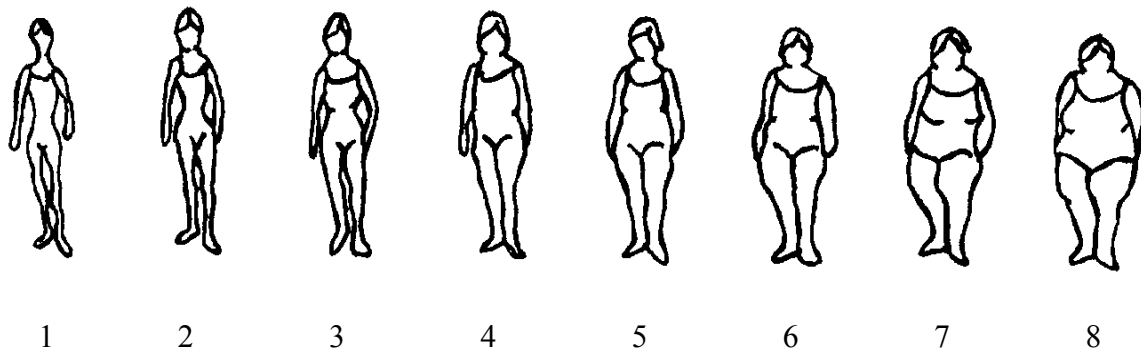
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**Online Appendix Figure 1.** Body Silhouettes used in baseline questionnaire (as first proposed by Sørensen et al, 1983).



The silhouettes are represented by drawings of figures which are ranked from 1 to 8, corresponding to increasing body size (from the leanest to the largest). Women reported the drawing that reflected their perceived body size at specific ages (at approximately age 8 years, at menarche, at age 20–25 years, at age 35–40 years, and at the time of completion of the questionnaire).

**Online Appendix Table 1.** Hazards ratio [95% CI] for incident diabetes in relation to body silhouette history in the E3N cohort (1990-2007, n=91,453) according to baseline overweight.

	BMI < 25 kg/m <sup>2</sup> at baseline			BMI ≥ 25 kg/m <sup>2</sup> at baseline		
	Cases / total person-years	Model 2*	Model 3†	Cases / total person-years	Model 2*	Model 3†
<b>Birth weight</b>						
- Low	98 / 91,222	1.29 [1.02 - 1.62]	1.31 [1.04 - 1.65]	144 / 15,362	1.38 [1.13 - 1.68]	1.41 [1.16 - 1.72]
- Medium	631 / 806,447	1	1	838 / 139,445	1	1
- High	56 / 94,407	0.76 [0.58 - 0.99]	0.71 [0.54 - 0.94]	104 / 23,626	0.70 [0.57 - 0.86]	0.66 [0.54 - 0.81]
- Missing	229 / 165,899	1.23 [0.97 - 1.57]	1.28 [1.01 - 1.63]	434 / 44,902	1.13 [0.92 - 1.38]	1.12 [0.91 - 1.38]
		P <sub>trend</sub> = 0.0008	P <sub>trend</sub> = 0.0002		P <sub>trend</sub> < 0.0001	P <sub>trend</sub> < 0.0001
<b>Body silhouette</b>						
<b>- at 8 years</b>						
1	669 / 615,982	1.89 [1.49 - 2.40]	2.04 [1.61 - 2.60]	771 / 95,459	1.54 [1.31 - 1.81]	1.66 [1.41 - 1.95]
2	156 / 232,916	1.27 [0.96 - 1.67]	1.32 [1.00 - 1.74]	267 / 43,374	1.24 [1.03 - 1.50]	1.31 [1.08 - 1.58]
3	75 / 141,760	1	1	185 / 37,160	1	1
≥ 4	59 / 109,817	0.97 [0.69 - 1.36]	0.91 [0.65 - 1.28]	196 / 34,439	1.15 [0.94 - 1.40]	1.11 [0.91 - 1.36]
Missing	55 / 57,501	1.48 [1.04 - 2.10]	1.55 [1.09 - 2.20]	101 / 12,904	1.41 [1.10 - 1.80]	1.50 [1.17 - 1.92]
		P <sub>trend</sub> < 0.0001	P <sub>trend</sub> < 0.0001		P <sub>trend</sub> < 0.0001	P <sub>trend</sub> < 0.0001
<b>- at puberty</b>						
1	315 / 266,020	1.44 [1.20 - 1.72]	1.60 [1.33 - 1.91]	284 / 29,989	1.53 [1.31 - 1.80]	1.70 [1.45 - 2.00]
2	350 / 366,606	1.21 [1.02 - 1.44]	1.27 [1.07 - 1.51]	458 / 63,558	1.22 [1.06 - 1.40]	1.29 [1.12 - 1.48]
3	199 / 260,272	1	1	346 / 60,115	1	1
≥ 4	109 / 225,759	0.62 [0.49 - 0.79]	0.58 [0.46 - 0.74]	340 / 59,849	0.98 [0.84 - 1.14]	0.92 [0.79 - 1.07]
Missing	41 / 39,318	1.07 [0.76 - 1.50]	1.07 [0.76 - 1.50]	92 / 9,824	1.44 [1.14 - 1.82]	1.46 [1.15 - 1.84]
		P <sub>trend</sub> < 0.0001	P <sub>trend</sub> < 0.0001		P <sub>trend</sub> < 0.0001	P <sub>trend</sub> < 0.0001

- at 20-25 years

1	148 / 129,329	1.28 [1.05 - 1.56]	1.61 [1.32 - 1.96]	102 / 9,734	1.56 [1.26 - 1.93]	1.75 [1.41 - 2.16]
2	453 / 506,214	1.04 [0.90 - 1.21]	1.19 [1.03 - 1.38]	441 / 58,688	1.24 [1.09 - 1.41]	1.33 [1.17 - 1.51]
3	303 / 365,299	1	1	537 / 89,638	1	1
≥4	79 / 129,580	0.70 [0.54 - 0.89]	0.61 [0.48 - 0.79]	375 / 59,085	1.05 [0.92 - 1.20]	0.90 [0.79 - 1.03]
<i>Missing</i>	<i>31 / 27,555</i>	<i>1.00 [0.69 - 1.46]</i>	<i>0.97 [0.67 - 1.41]</i>	<i>65 / 6,191</i>	<i>1.53 [1.18 - 2.00]</i>	<i>1.49 [1.15 - 1.95]</i>
		$P_{\text{trend}} < 0.0001$	$P_{\text{trend}} < 0.0001$		$P_{\text{trend}} = 0.0014$	$P_{\text{trend}} < 0.0001$

- at 35-40 years

≤2	270 / 426,578	0.70 [0.61 - 0.82]	0.99 [0.85 - 1.16]	82 / 12,753	1.02 [0.80 - 1.29]	1.08 [0.85 - 1.37]
3	464 / 507,983	1	1	397 / 64,554	1	1
4	196 / 165,379	1.23 [1.04 - 1.45]	0.91 [0.77 - 1.08]	510 / 85,623	0.98 [0.86 - 1.12]	0.92 [0.81 - 1.05]
≥5	49 / 29,007	1.55 [1.15 - 2.08]	0.89 [0.66 - 1.20]	467 / 53,567	1.35 [1.17 - 1.55]	0.95 [0.82 - 1.10]
<i>Missing</i>	<i>35 / 29,029</i>	<i>1.04 [0.73 - 1.47]</i>	<i>1.06 [0.75 - 1.51]</i>	<i>64 / 6,839</i>	<i>1.3 [0.99 - 1.70]</i>	<i>1.11 [0.85 - 1.45]</i>
		$P_{\text{trend}} < 0.0001$	$P_{\text{trend}} = 0.2747$		$P_{\text{trend}} = 0.0021$	$P_{\text{trend}} = 0.2414$

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\* Model 2: Includes physical activity (<34 / 34-47 / 47-62 / ≥ 62 MET-h/week), education (≤ 9 / 10-11 / 12-14 / 15-16 / ≥ 17 y), prematurity (no / yes), family history of diabetes (none / only one parent / both parents), smoking (never / former / current smoker, time-dependent variable), high cholesterol level (no / yes), hypertension (no / yes, time-dependant variable), menopausal status (no / yes, time-dependent variable), hormone replacement therapy (never / ever, time-dependent variable), oral contraceptive pills (never / ever), parity and age at 1<sup>st</sup> child (nulliparous / 1st child before 30 y, 1-2 children / 1<sup>st</sup> child before 30 y, 3+ children / 1<sup>st</sup> child at 30 y or more), age at menarche (≤12 / 13 / ≥14 years old), according to birth cohort (1925–1930 / 1930–1935 / 1935–1940 / 1940–1945 / 1945–1950).

† Model 3: Confounders as above and further adjustment for adult BMI as a time-dependent variable