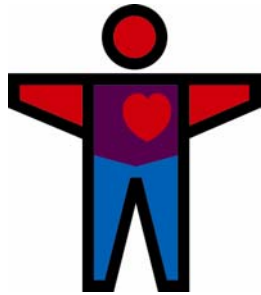


Celebrating 30 years of the MIDSPAN Studies



Obesity

Graham Watt

TRENDS IN OBESITY IN FAMILIES

Prevalence of
obesity (BMI>30)

Fathers 1972-76

9.1%

Sons 1996

18.4%

Mothers 1972-76

15.4%

Daughters 1996

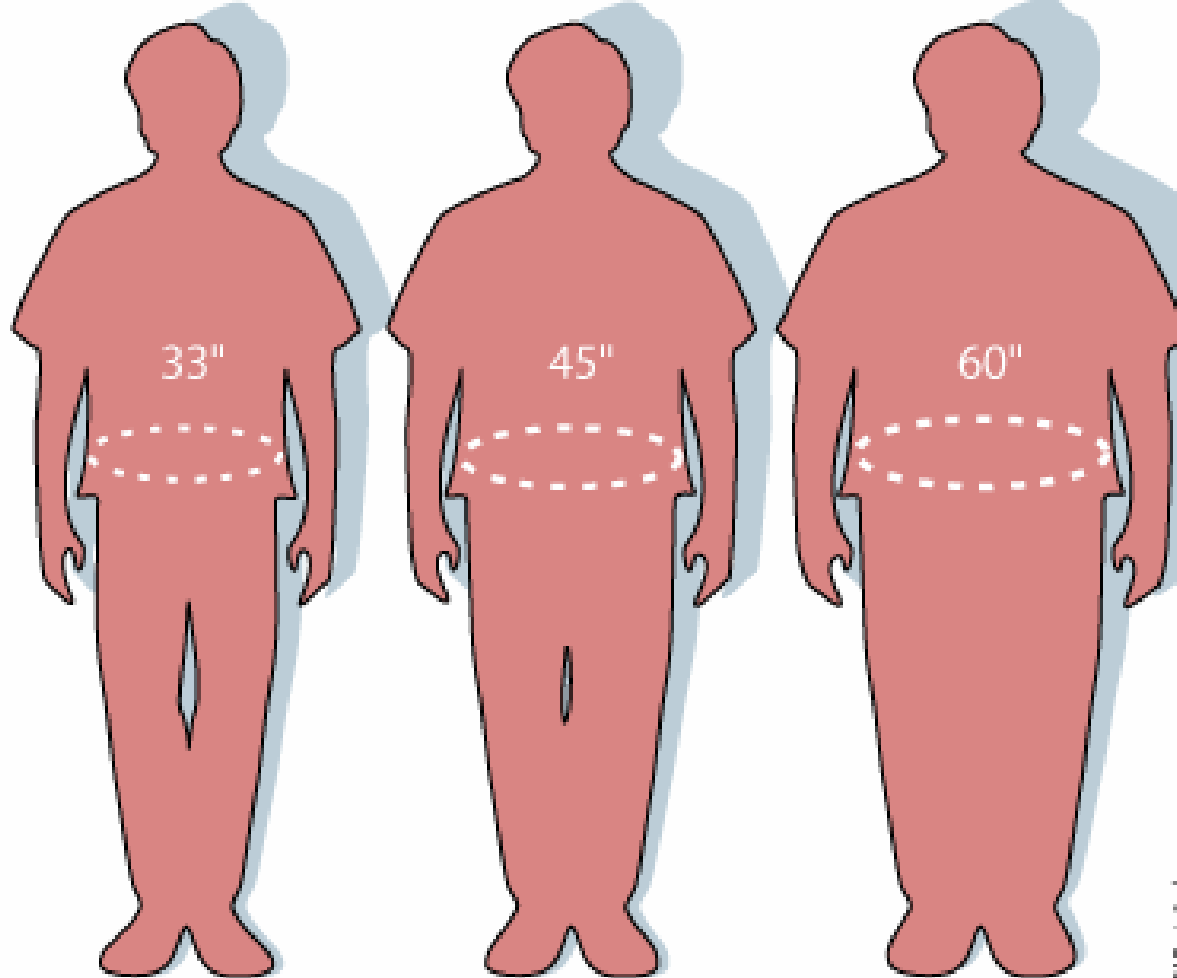
17.5%

Waist Circumference Matters

Healthy

Overweight

Obese



Source: Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2000.

Infographic: Du, Denise Gordon

BMI, WAIST/HIP RATIO OR WAIST CIRCUMFERENCE ?

DOES BEING

OVERWEIGHT (BMI 25-29.9)

BUT NOT OBESE (BMI > 30)

MATTER ?

CONFOUNDING

SMOKING REDUCES BMI

ILLNESS REDUCES BMI

RELATIVE MORTALITY RISKS ASSOCIATED WITH BODY MASS INDEX

Mortality	Normal 18.5 – 24.9 kg/m ²	Overweight 25.0 – 29.9 kg/m ²	Obese 30 + kg/m ²
All men (n = 7017)	1.00	0.90	1.08
Healthy non-smoking men (n = 1112)	1.00	1.38	2.10
All women (n = 8327)	1.00	0.97	1.28
Healthy non-smoking women (n = 3684)	1.00	1.12	1.57

RELATIVE MORTALITY RISKS ASSOCIATED WITH BODY MASS INDEX

Mortality		Normal 18.5 – 24.9 kg/m ²	Overweight 25.0 – 29.9 kg/m ²	Obese 30 + kg/m ²
All causes	M	1.00	1.38	2.10
	W	1.00	1.12	1.57
CHD	M	1.00	1.73	2.84
	W	1.00	1.23	1.93
Cancer	M	1.00	1.68	1.98
	W	1.00	1.17	1.26

RISKS OF DEVELOPING DIABETES BY BODY MASS INDEX

	Normal 18.5 – 24.9 kg/m ²	Overweight 25.0 – 29.9 kg/m ²	Obese 30 + kg/m ²
Renfrew/Paisley men	2.3%	6.0%	14.4%
	1.00	2.65	7.05
Renfrew/Paisley women	2.3%	5.5%	11.8%
	1.00	2.65	6.03
Collaborative men	2.0%	6.3%	16.8%
	1.00	3.32	10.01

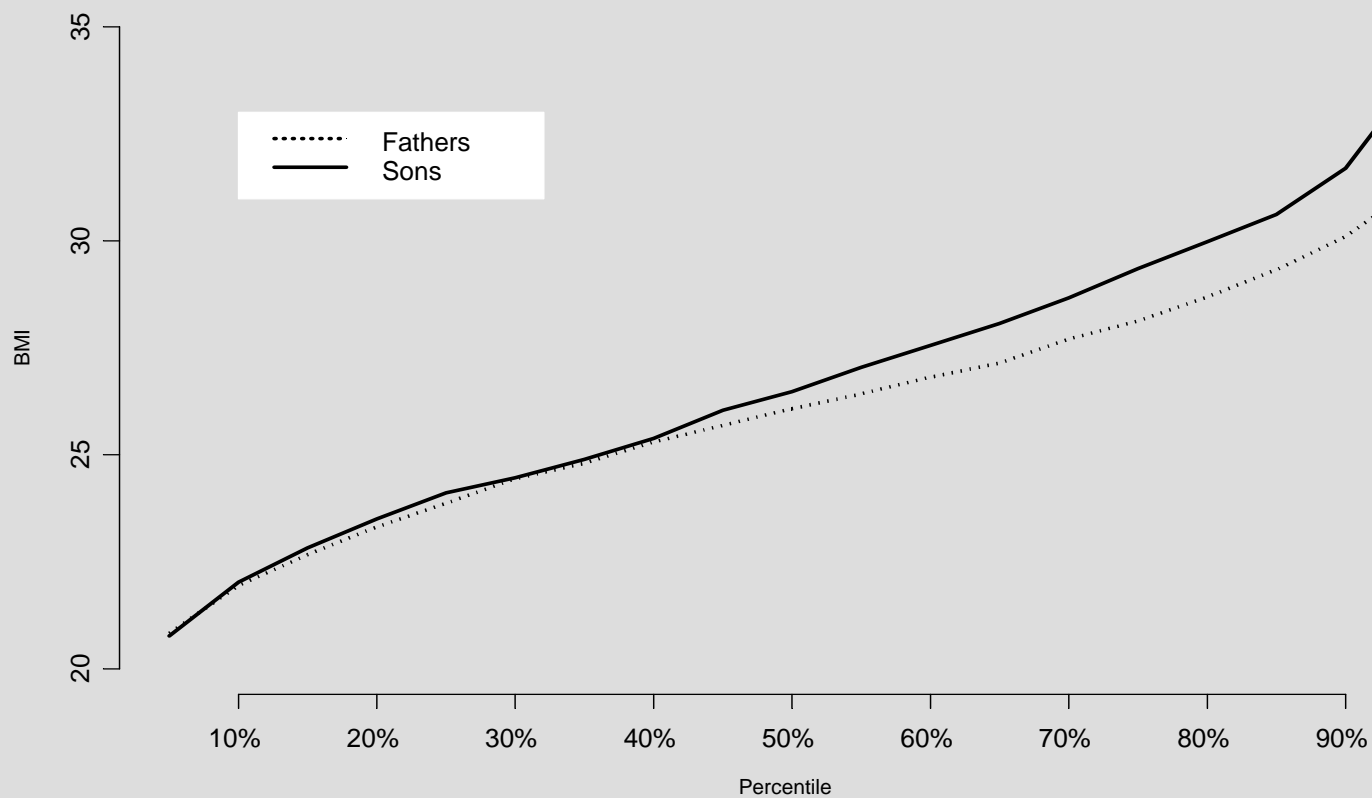
Odds ratios adjusted for age, social class and smoking

TRENDS IN BMI AND OBESITY

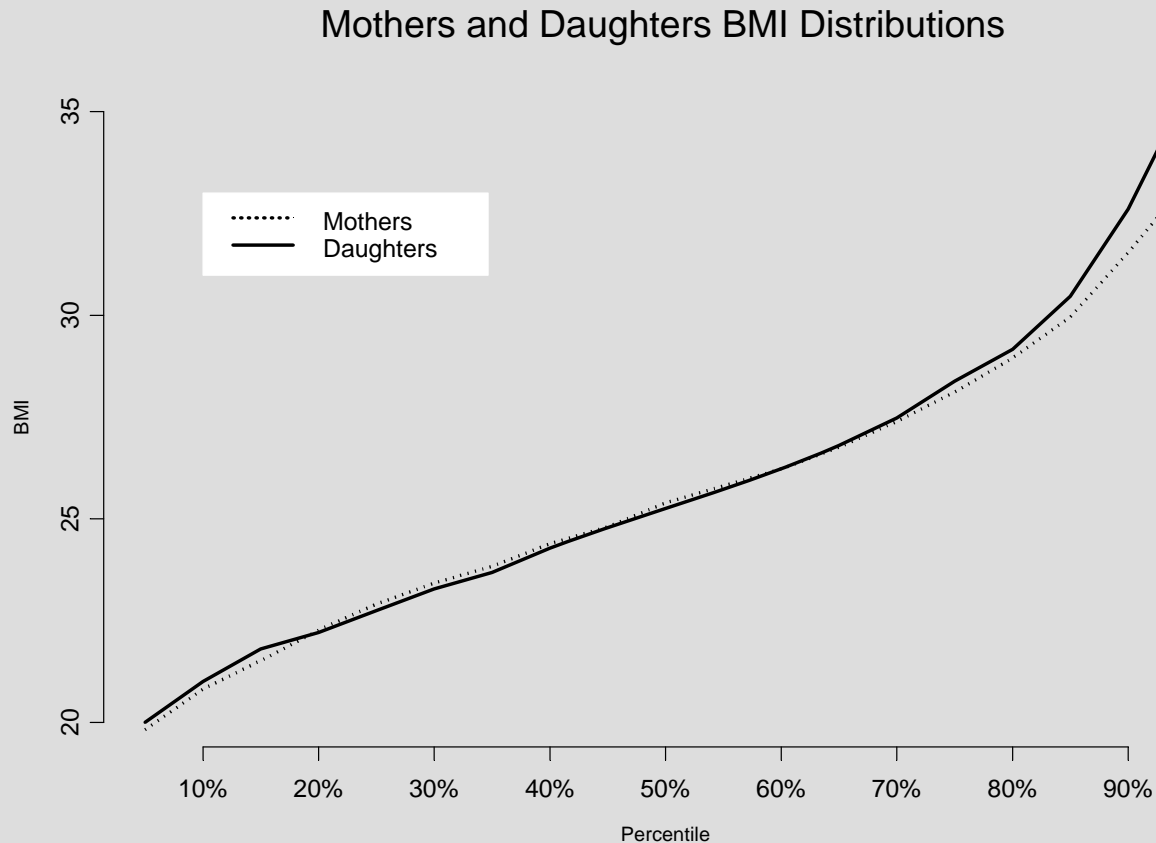
	Prevalence of obesity (BMI>30)	Mean BMI (kg/m ²)
Fathers 1972-76	9.1%	26.0
Sons 1996	18.4%	26.7
Mothers 1972-76	15.4%	25.8
Daughters 1996	17.5%	26.2

INTER-GENERATIONAL TRENDS IN DISTRIBUTION OF BODY MASS INDEX

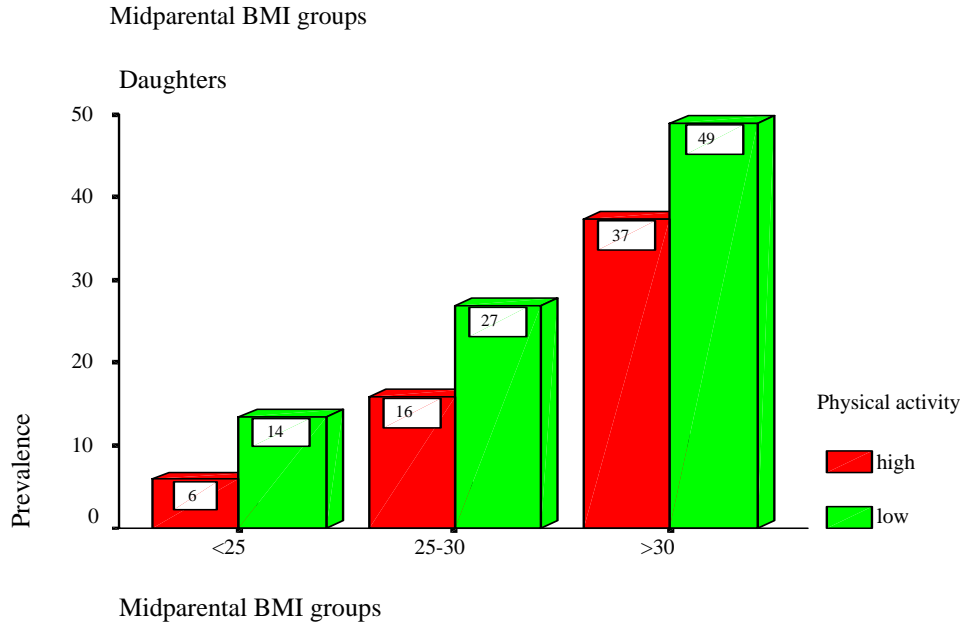
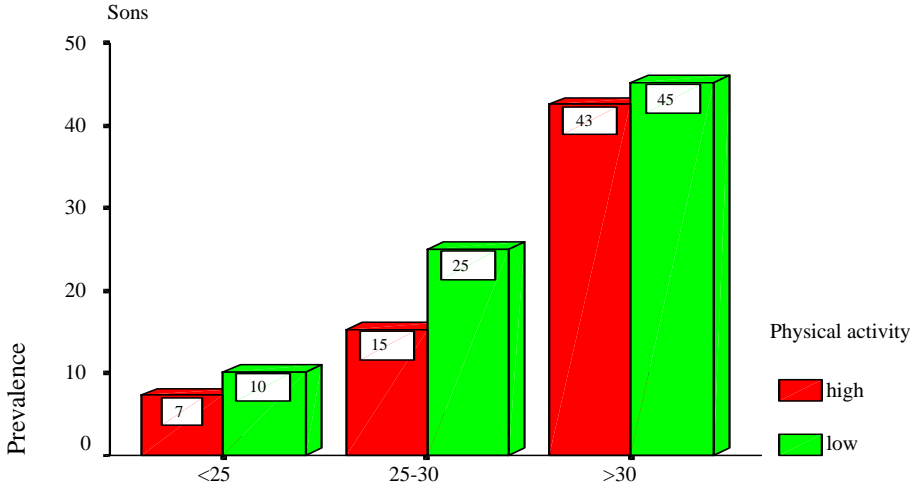
Fathers and Sons BMI Distributions



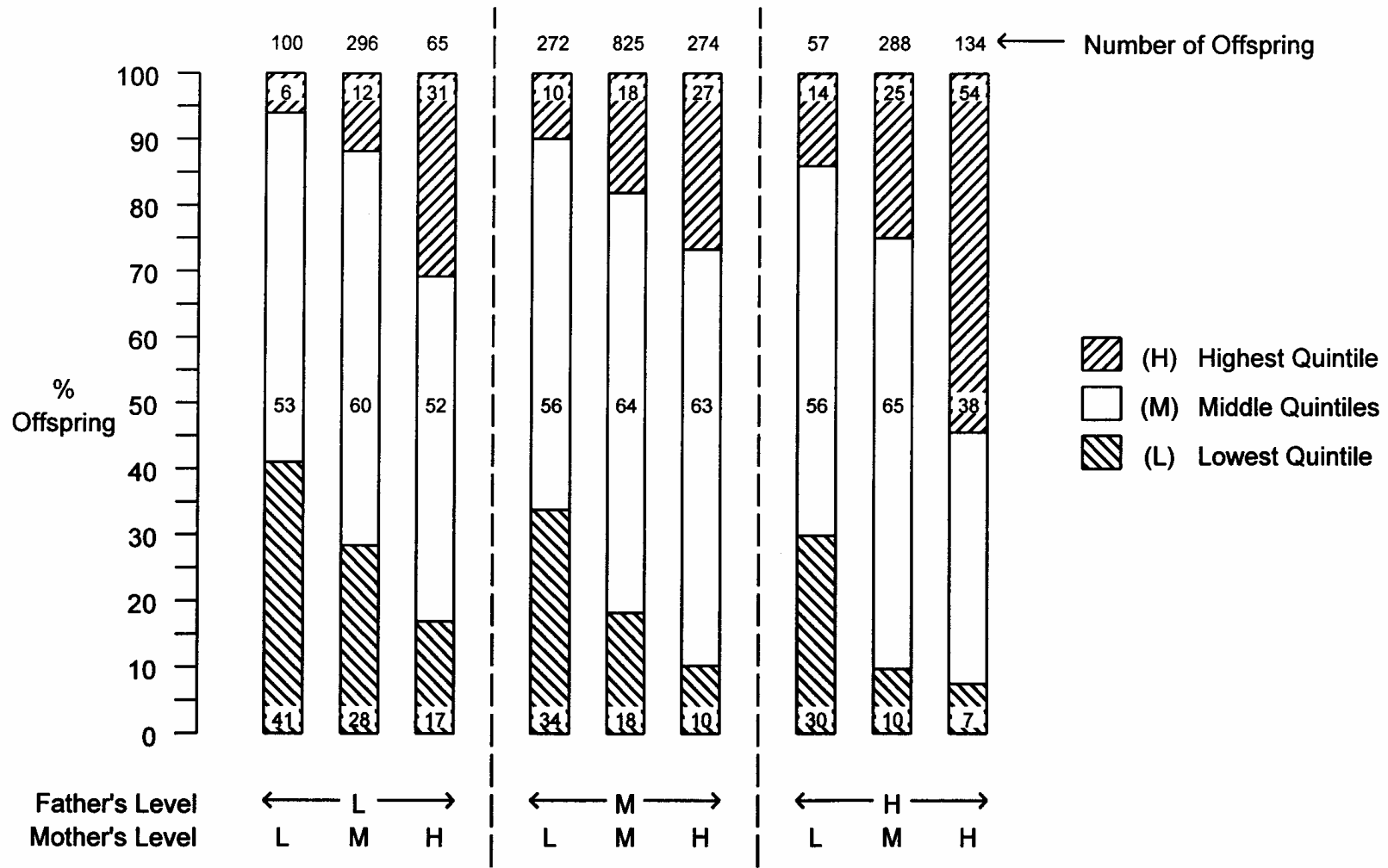
INTER-GENERATIONAL TRENDS IN DISTRIBUTION OF BODY MASS INDEX



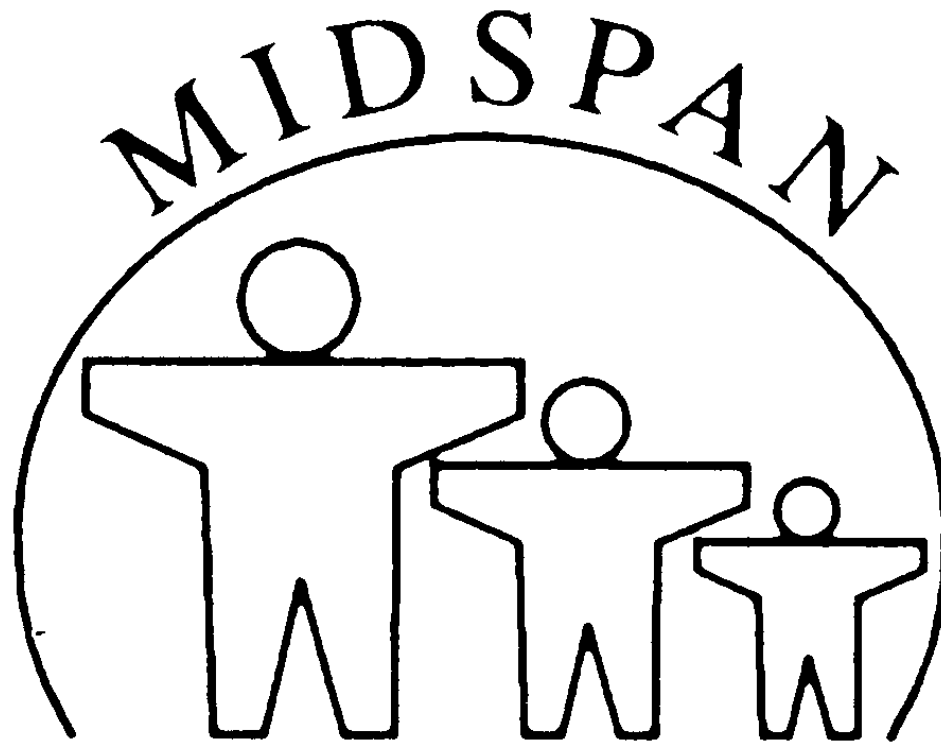
Prevalence of BMI>30kg/m² in sons and daughters reporting high and low level of physical activity, by mid-parental BMI groups



BODY MASS INDEX



FAMILIAL AGGREGATION OF BODY MASS INDEX



THE FUTURE : UNRAVELLING HEALTH AND DISEASE IN FAMILIES

