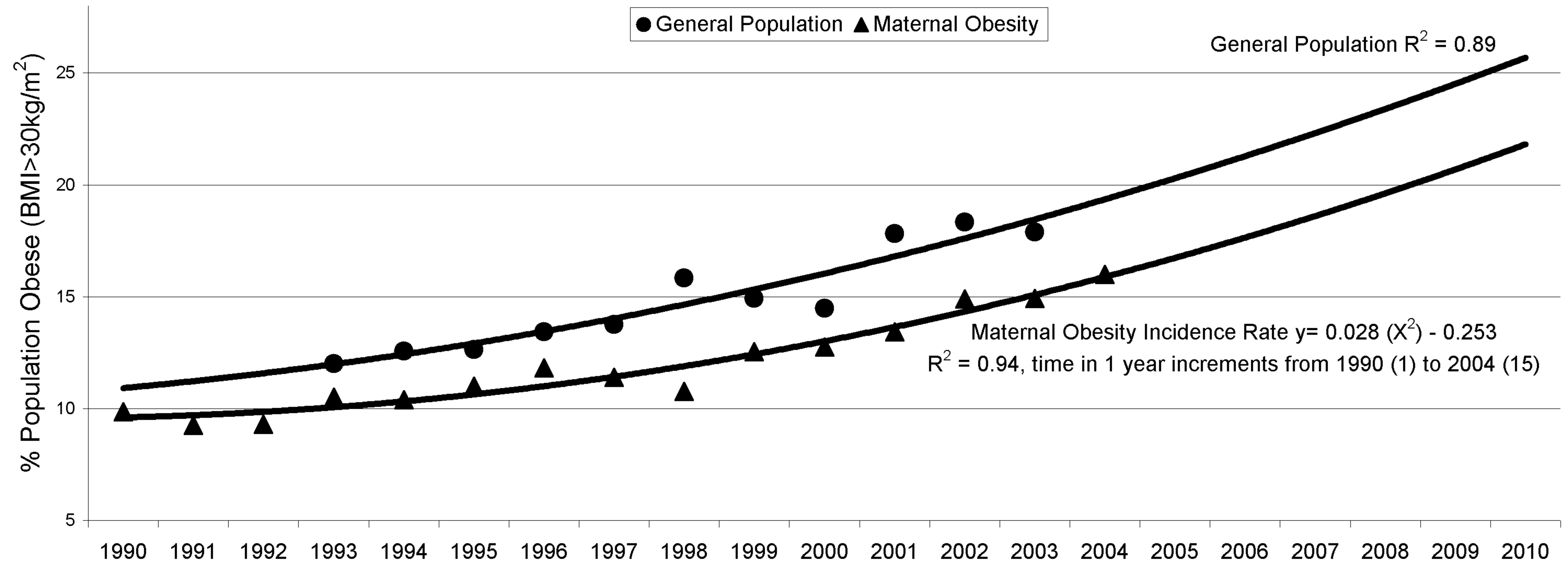


Figure 1. Incidence of Maternal Obesity in 36,821 Women Over a 15-year Period, the Projected Incidence of maternal Obesity by 2010, and the Prevalence of Obesity in Women of Childbearing Age (16-44 years) in Englands General Population[^]



% Study Population Lean BMI = 3.8% in 1990, 4.0% in 2004*
 % Study Population Ideal BMI = 64.8% in 1990, 54.8% in 2004, projected 47% in 2010
 % Study Population Overweight BMI = 21.5% in 1990, 25.3% in 2004*
 % Study Population Obese BMI = 9.9% in 1990, 16.0% in 2004, projected 22% in 2010

* Can not extrapolate this data for projected incidence rates: Significant fit for linear model, however R²=0.4 for both BMI categories, therefore not a strong relationship

[^] General Population Data Source, Health Survey for England Data 1993-2003, <http://www.dh.gov.uk/assetRoot/04/09/89/15/04098915.xls>

Table 1. Cohort Characteristics	TOTAL COHORT n=36,821		LEAN n=1576		IDEAL n=22247		OVER WEIGHT n=8616		OBESE n=3922		p
Maternal BMI: mean SD	24.2	4.5	17.5	0.8	22.0	1.7	27.0	1.4	33.7	3.5	<0.01
Maternal Weight kg: mean SD	63.2	12.7	47.4	4.5	58.6	6.4	71.4	7.0	77.9	23.8	<0.01
Maternal Height metres: mean SD	1.6	0.1	1.6	0.1	1.6	0.1	1.6	0.1	1.6	0.1	NS
Maternal age at delivery: mean SD	27.1	5.8	24.0	5.4	26.8	5.7	27.9	5.7	28.1	5.5	<0.01
Parity: mean SD	1.1	1.1	1.0	1.0	1.0	1.0	1.2	1.1	1.4	1.2	<0.01
DEPRIVATION QUINTILE: n %											<0.01
MOST DEPRIVED 1	19174	54.6	1039	5.4	11293	58.9	4474	23.3	2368	12.4	
2	6386	18.2	220	3.4	3923	61.4	1557	24.4	686	10.7	
3	3944	11.2	104	2.6	2511	63.7	962	24.4	367	9.3	
4	3717	10.6	101	2.7	2426	65.3	903	24.3	287	7.7	
LEAST DEPRIVED 5	1922	5.5	59	3.1	1270	66.1	459	23.9	134	7.0	
ETHNIC GROUP: n %											<0.01
CAUCASIAN	33420	91.9	1356	4.1	20501	61.3	7939	23.8	3624	10.8	
MIXED RACE	187	0.5	11	5.9	121	64.7	34	18.2	21	11.2	
ASIAN / ASIAN BRITISH	1486	4.1	148	10.0	850	57.2	347	23.4	141	9.5	
BLACK / BLACK BRITISH	77	0.2	1	1.3	46	59.7	22	28.6	8	10.4	
CHINESE / OTHER ETHNIC GROUP	133	0.4	14	10.5	91	68.4	19	14.3	9	6.8	
NOT KNOWN	1058	2.9	46	4.3	638	60.3	255	24.1	119	11.2	
EMPLOYMENT STATUS: n %											<0.01
PAID EMPLOYMENT	19942	54.8	522	33.1	12456	56.0	4903	56.9	2061	52.5	
NO PAID EMPLOYMENT	15497	42.6	981	62.2	9162	41.2	3547	41.2	1807	46.1	
EDUCATION / TRAINING	620	1.7	47	3.0	448	2.0	99	1.1	26	0.7	
NOT KNOWN	302	0.8	26	1.6	181	0.8	67	0.8	28	0.7	
MARITAL STATUS: n %											<0.01
MARRIED	19298	53.1	592	3.1	11663	60.4	4890	25.3	2153	11.2	
SINGLE	15433	42.4	931	6.0	9591	62.1	3314	21.5	1597	10.3	
SEPERATED/DIVORCED/WIDOWED	1113	3.1	29	2.6	667	59.9	284	25.5	133	11.9	
NOT KNOWN	517	1.4	24	4.6	326	63.1	128	24.8	39	7.5	

Table 2: Adjusted Logistic Regression*	LEAN V'S IDEAL BMI					OVERWEIGHT V'S IDEAL BMI					OBESE V'S IDEAL BMI				
	Ideal BMI n=22247	Lean BMI n=1576	OR	95.0% C.I.	p	Over weight BMI n=8616	OR	95.0% C.I.	p	Obese BMI n=3922	OR	95.0% C.I.	p		
MATERNAL AGE	22247	1576	0.95	0.94 0.96	<0.01	8616	1.03	1.03 1.04	<0.01	3922	1.04	1.04 1.05	<0.01		
PARITY	22247	1576	0.99	0.93 1.07	0.89	8616	1.10	1.06 1.13	<0.01	3922	1.17	1.13 1.22	<0.01		
DEPRIVATION QUINTILE:															
Least Deprived 5	1270	59	Baseline Data		0.22	459	Baseline Data		<0.01	134	Baseline Data		<0.01		
4	2426	101	0.82	0.56 1.20	0.31	903	1.05	0.91 1.22	0.50	287	1.13	0.89 1.44	0.33		
3	2511	104	0.76	0.52 1.11	0.16	962	1.12	0.97 1.29	0.14	367	1.39	1.10 1.75	0.01		
2	3923	220	0.80	0.56 1.13	0.20	1557	1.18	1.03 1.35	0.02	686	1.79	1.44 2.23	<0.01		
Most Deprived 1	11293	1039	0.95	0.68 1.32	0.76	4474	1.33	1.16 1.51	<0.01	2368	2.42	1.96 2.98	<0.01		
Unknown Quintile	824	53	0.86	0.56 1.33	0.50	261	1.00	0.83 1.21	1.00	80	1.14	0.84 1.56	0.39		
ETHNIC GROUP:															
Caucasian	20501	1356	Baseline Data		<0.01	7939	Baseline Data		0.09	3624	Baseline Data		0.27		
Mixed Race	121	11	0.84	0.36 1.93	0.67	34	0.83	0.55 1.27	0.39	21	0.86	0.49 1.53	0.61		
Asian or Asian British	850	148	2.34	1.85 2.96	<0.01	347	1.04	0.90 1.20	0.58	141	0.83	0.68 1.02	0.07		
Black or Black British	46	1	0.00	0.00 .	1.00	22	1.27	0.71 2.26	0.43	8	1.08	0.49 2.39	0.85		
Chinese or Other	91	14	2.57	1.31 5.03	0.01	19	0.45	0.26 0.79	0.01	9	0.55	0.27 1.16	0.12		
Ethnic Group Unknown	638	46	1.16	0.80 1.69	0.44	255	0.99	0.83 1.18	0.95	119	1.08	0.85 1.36	0.53		
EMPLOYMENT STATUS:															
Paid Employment	12456	522	Baseline Data		<0.01	4903	Baseline Data		0.03	2061	Baseline Data		0.01		
No Paid Employment	9162	981	1.92	1.66 2.23	<0.01	3547	1.00	0.94 1.07	0.94	1807	1.08	0.99 1.18	0.10		
Education or Training	448	47	1.53	1.06 2.22	0.02	99	0.72	0.56 0.93	0.01	26	0.53	0.34 0.83	0.01		
Employment Status Unknown	181	26	2.77	1.58 4.84	<0.01	67	1.31	0.94 1.82	0.11	28	1.16	0.72 1.86	0.55		
MARITAL STATUS:															
Married	11663	592	Baseline Data		0.01	4890	Baseline Data		0.08	2153	Baseline Data		<0.01		
Single	9591	931	1.34	1.15 1.56	<0.01	3314	0.93	0.87 1.00	0.04	1597	0.94	0.86 1.03	0.16		
Separated, Divorced, Widowed	667	29	1.01	0.68 1.49	0.96	284	0.87	0.75 1.01	0.08	133	0.74	0.61 0.91	0.00		
Marital Status Unknown	326	24	1.23	0.77 1.96	0.39	128	1.01	0.80 1.27	0.95	39	0.67	0.46 0.98	0.04		

*Variable(s): Deprivation Quintile, Maternal Age, Ethnic Group, Parity, Employment Status, Marital Status.

Table 3: Characteristics of Women of Childbearing Age in Middlesbrough and England		Proportion in Middlesbrough	95% CONFIDENCE INTERVAL		Proportion in England	Different from England population
Ethnicity (women aged 15-44)*	White	0.929	0.926	0.932	0.884	p<0.05
	Mixed	0.010	0.009	0.011	0.014	p<0.05
	Asian or Asian British	0.053	0.050	0.055	0.056	p<0.05
	Black or Black British	0.004	0.003	0.005	0.032	p<0.05
	Chinese/Other Ethnic Group	0.005	0.004	0.006	0.014	p<0.05
Employment Status (women aged 16-44)*	Paid Employment	0.520	0.515	0.526	0.628	p<0.05
	No Paid Employment	0.327	0.322	0.333	0.241	p<0.05
	Education/Training	0.152	0.148	0.157	0.131	p<0.05
Number of dependent children 0-18 years (women aged <24-49)* "	0	0.231	0.225	0.237	0.297	p<0.05
	1	0.319	0.313	0.326	0.277	p<0.05
	2	0.296	0.29	0.302	0.292	NS
	3	0.153	0.149	0.158	0.134	p<0.05
	3 or more	0.153	0.149	0.158	0.134	p<0.05
Deprivation Quintile (women aged 15-44)^	Most Deprived 1	0.622	0.616	0.627	0.215	p<0.05
	2	0.100	0.097	0.103	0.210	p<0.05
	3	0.122	0.118	0.126	0.199	p<0.05
	4	0.139	0.135	0.143	0.190	p<0.05
	Least Deprived 5	0.017	0.016	0.019	0.185	p<0.05
Marital Status (women aged 16-44)*	Single	0.528	0.522	0.533	0.482	p<0.05
	Married	0.351	0.345	0.356	0.405	p<0.05
	Separated, divorced or widowed	0.122	0.118	0.126	0.113	p<0.05

* Census Data

^ IMD Data

" Parity is not recorded on the Census data therefore number of dependant children was used in its place