

# Obesity and Union Status at First Birth among Women

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## Background

- Marked increase in girl's and women's prevalence of obesity in past 20 years
  - Among girls aged 12-19, obesity rates increased from 9.7% in 1994 (Fryar et al. 2012a) to 21.0% in 2014 (Ogden et al. 2015)
  - Among women aged 20+, obesity rates increased from 25.4% in 1994 (Fryar et al. 2012b) to 38.3% in 2014 (Ogden et al. 2015)
- Few studies have addressed obesity and the social consequences of childbearing outcomes
  - Relied on static obesity measure (Frisco & Weden 2013; Kane & Frisco 2013; Jacobsen et al. 2013)

## The Present Study

- Examines how obesity is associated with union status at first birth among a contemporary cohort of women, controlling for sociodemographic characteristics, weight perception, sexual and reproductive health risk factors, and economic resources

## Data and Sample

National Longitudinal Survey of Youth 1997 (NLSY97), 1997-2011

- Women who report: union status at first birth, height and weight prior to the round at first birth, and first birth after baseline (n=4,228; 39,750 person-years)

## Method

- Competing risk life tables
- Discrete-time multinomial logistic regression
- Outcome of first birth (0=no birth, 1=single, 2=cohabiting, 3=marital)
- BMI (lagged *one* round prior to round at first birth or round censored; Reference group=Normal weight)

## Results

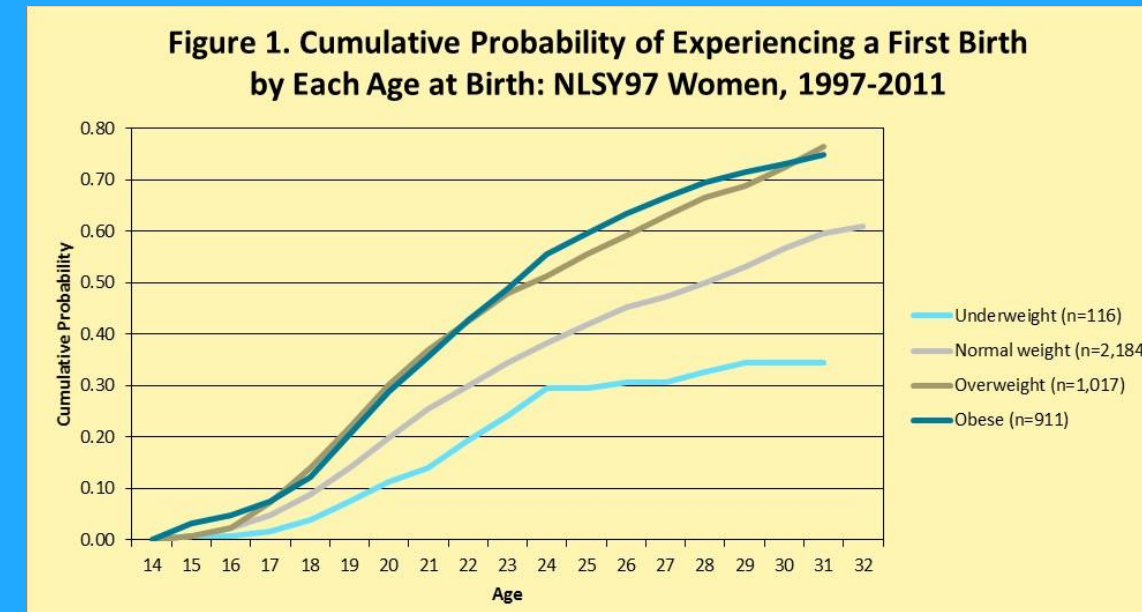


Figure 2: Cumulative Probability of Experiencing a First Birth While Being Single by Each Age at Birth: NLSY97 Women, 1997-2011

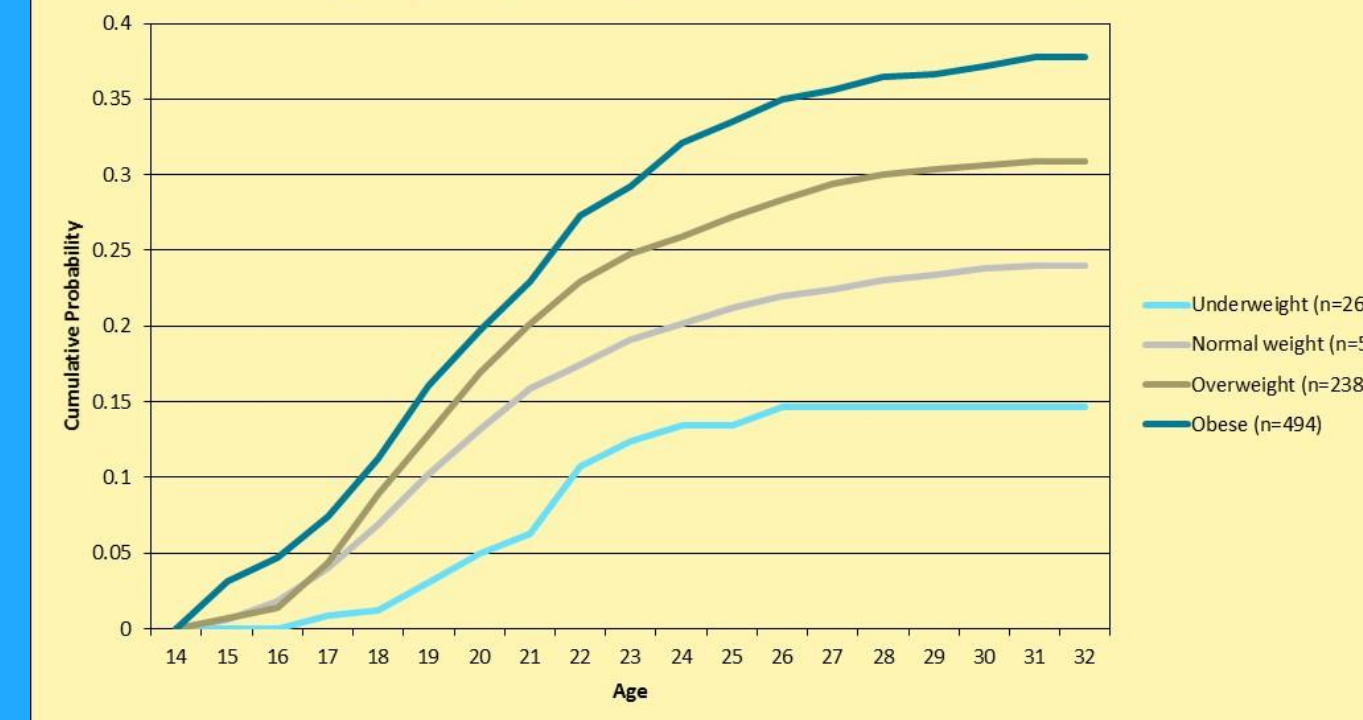


Figure 3: Cumulative Probability of Experiencing a First Birth in Cohabiting Union by Each Age at Birth: NLSY97 Women, 1997-2011

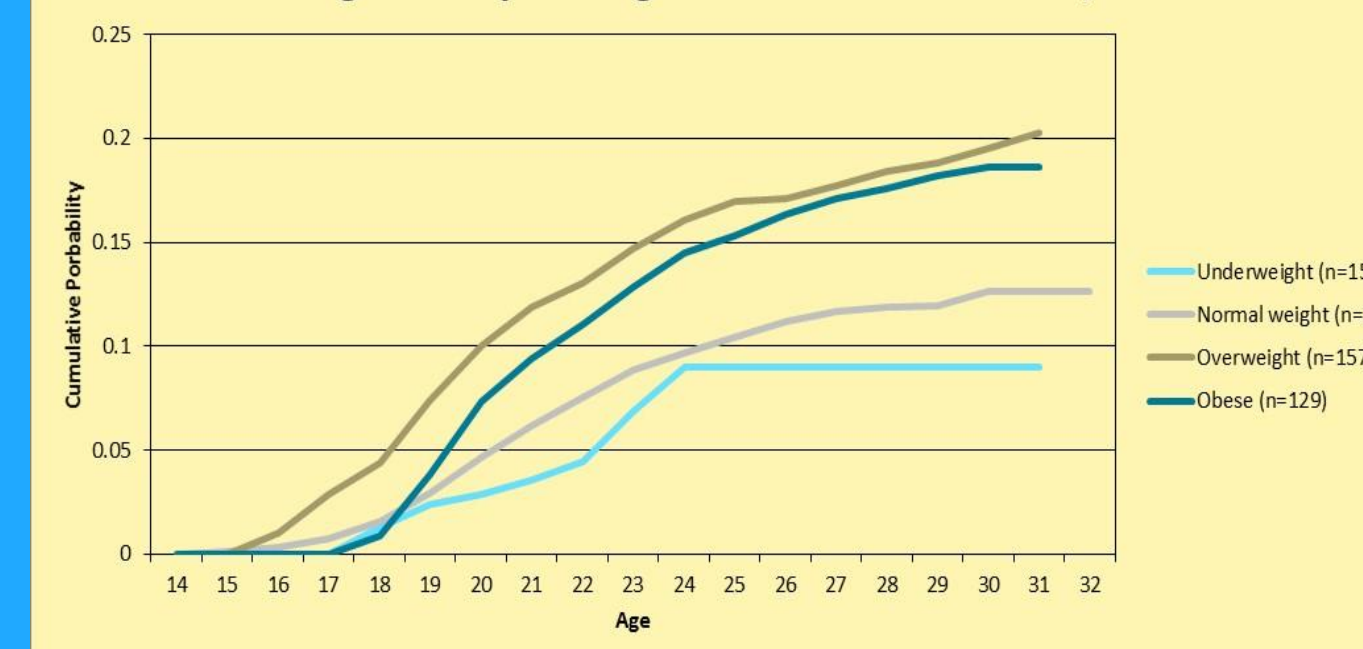


Figure 4: Cumulative Probability of Experiencing a First Birth in Marital Union by Each Age at Birth: NLSY97 Women, 1997-2011

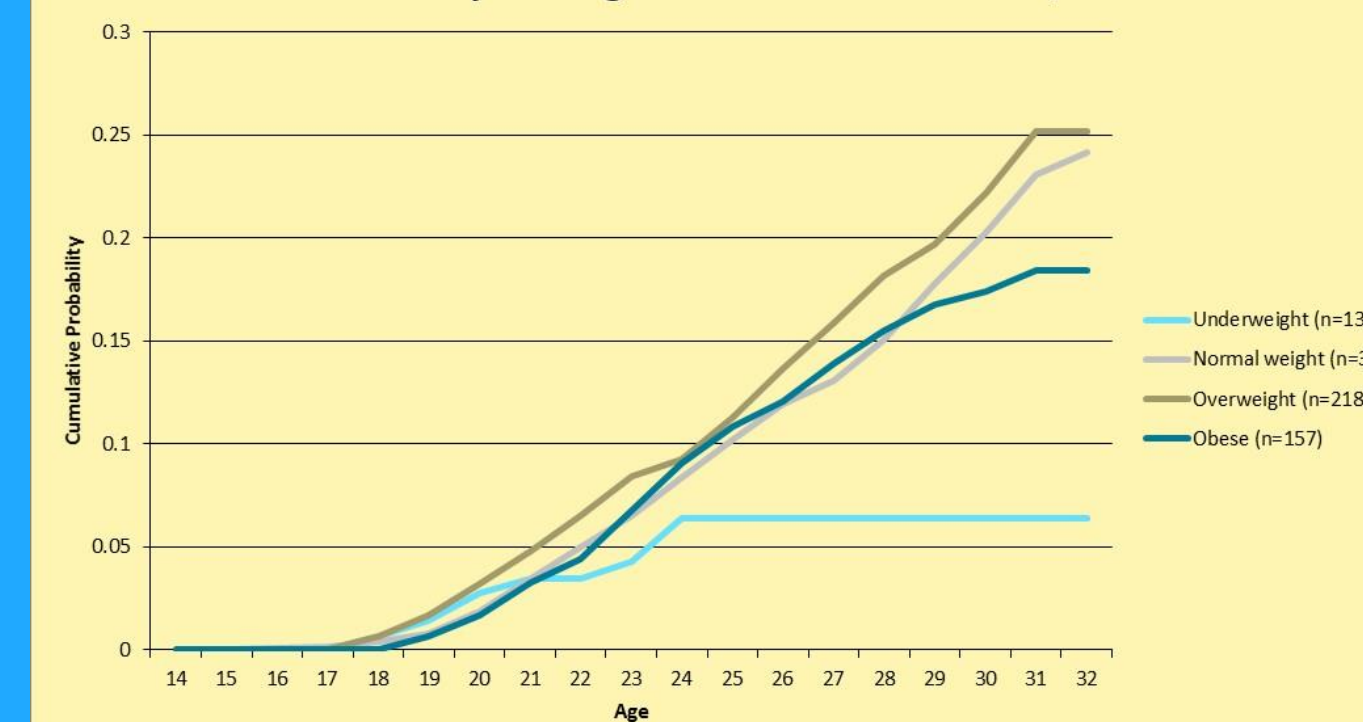


Table 1. Selected Results: Odds Ratios from Discrete-Time Multinomial Logistic Regression Predicting Union Status at First Birth for NLSY97 Women (N = 39,750 Person-Years)

Model	Body Mass Index (BMI) (Ref=Normal weight)	Cohabitation vs Single	Marriage vs Single	Marriage vs Cohabitation
1	Underweight	1.42	1.06	0.75
	Overweight	1.21	0.94	0.77
	Obese	1.07	<b>0.72*</b>	<b>0.67*</b>
2	Underweight	1.33	0.95	0.72
	Overweight	1.31	1.07	0.82
	Obese	1.33	1.06	0.80
3	Underweight	1.41	1.09	0.77
	Overweight	1.21	0.91	0.75
	Obese	1.08	0.70	<b>0.65*</b>
4	Underweight	1.37	1.12	0.81
	Overweight	1.18	0.96	0.81
	Obese	1.04	<b>0.75*</b>	<b>0.71*</b>
5	Underweight	1.40	1.18	0.84
	Overweight	1.14	0.96	0.84
	Obese	0.98	0.87	0.88
6	Underweight	1.14	0.94	0.82
	Overweight	1.29	1.19	0.92
	Obese	1.30	1.31	1.01

Source: National Longitudinal Survey of Youth 1997 (1997-2011). Notes: \*p<0.05; \*\*p<0.01; \*\*\*p<0.001. Results use custom sampling weights to adjust for complex sampling design and use of multiple rounds of data. In each regression, other variables include: age and age<sup>2</sup> (Model 1); age, age<sup>2</sup>, sociodemographic characteristics (Model 2); age, age<sup>2</sup>, and weight perception (Model 3); age, age<sup>2</sup>, sexual and reproductive health risk factors (Model 4); age, age<sup>2</sup>, economic resources (Model 5); full model (Model 6).

## Conclusions

- Overweight and obese women have greater odds of experiencing a birth than normal weight women
- Obese women more likely to experience a first birth in nonmarital than marital union compared to normal weight women
  - Sociodemographic characteristics, weight perception, and economic resources individually explain relation