

# Associations between body mass index and health conditions: do they change across generations?

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# Australian Longitudinal Study on Women's Health

1989-95



18-23  
Now 27-33

Recruited in 2012/13  
via social media

1973-78



18-23  
Now 44-49

1946-51



45-50  
Now 71-76

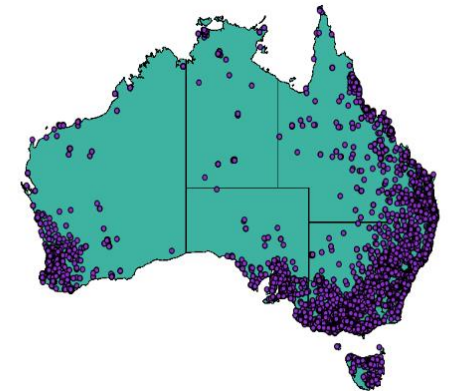
1921-26



70-75  
Now 96-101

Recruited in 1996 through Medicare  
Surveys ~ 3 yearly for >25 years

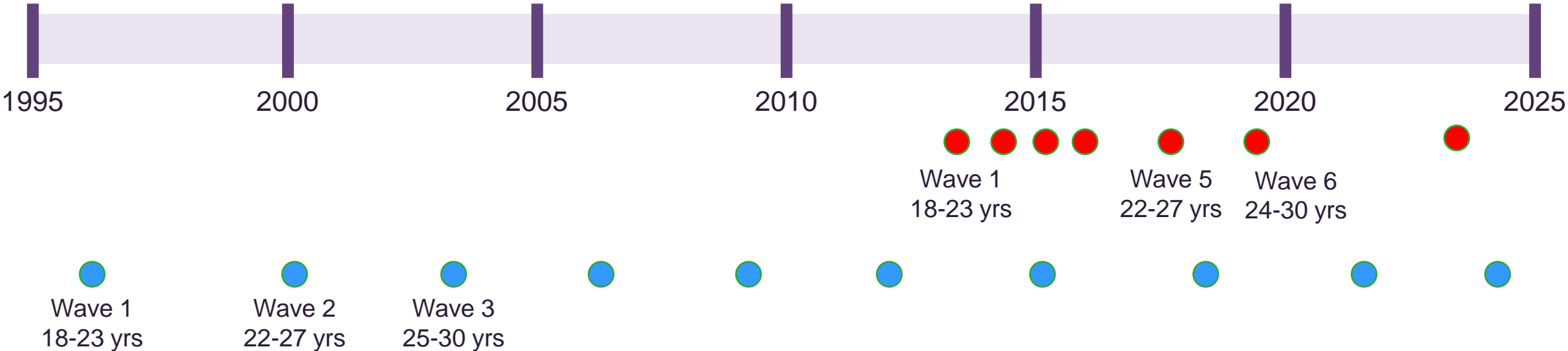
National samples



41% Major Cities  
39% Inner Regional  
18% Outer Regional  
2% Very Remote

Number of participants in each cohort at baseline 12,000 – 15,000

# Comparing two younger cohorts at the same ages

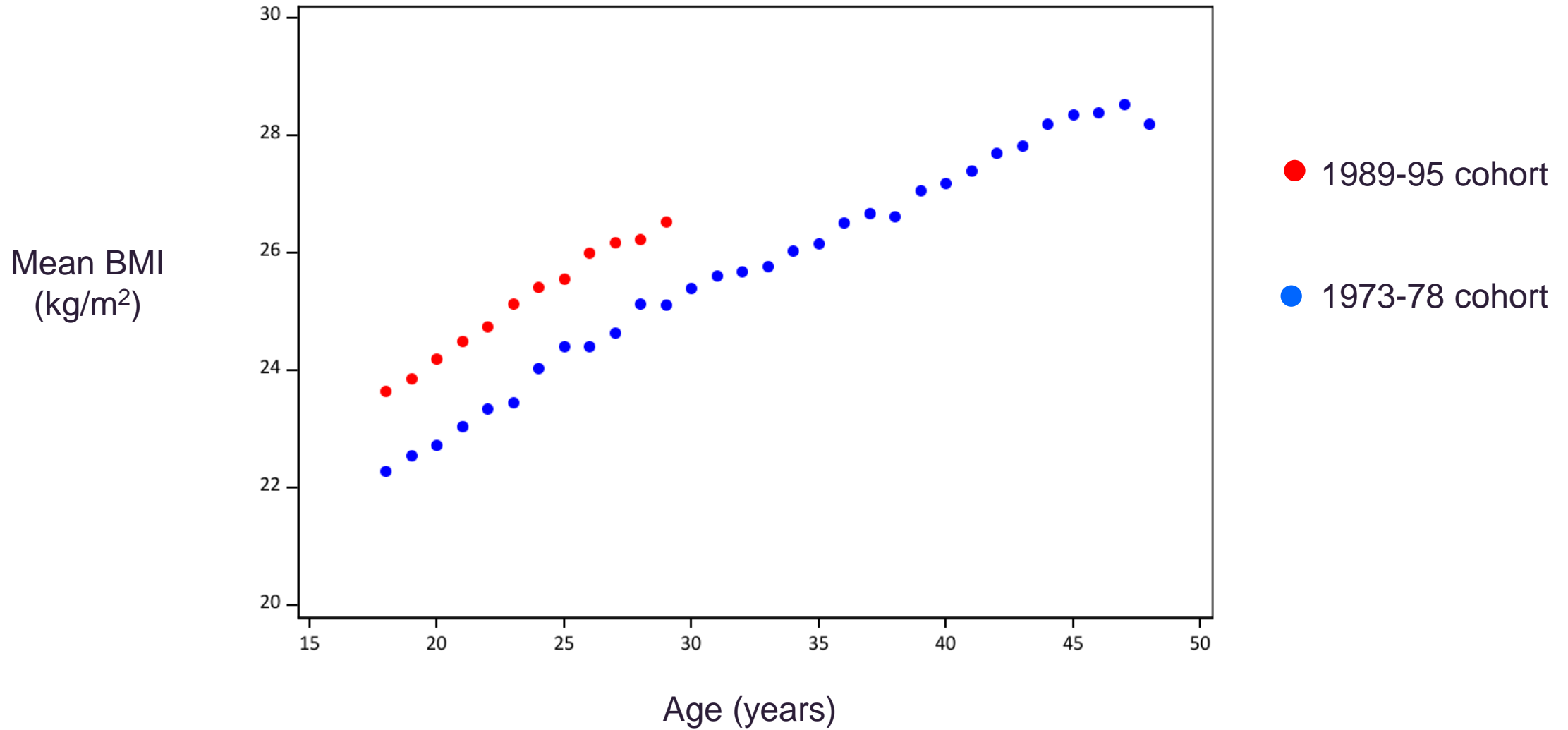


1989-95 cohort			1973-78 cohort		
wave	year	age	wave	year	age
1	2013	18-23	1	1996	18-23
5	2017	22-27	2	2000	22-27
6	2019	25-30	3	2003	25-30

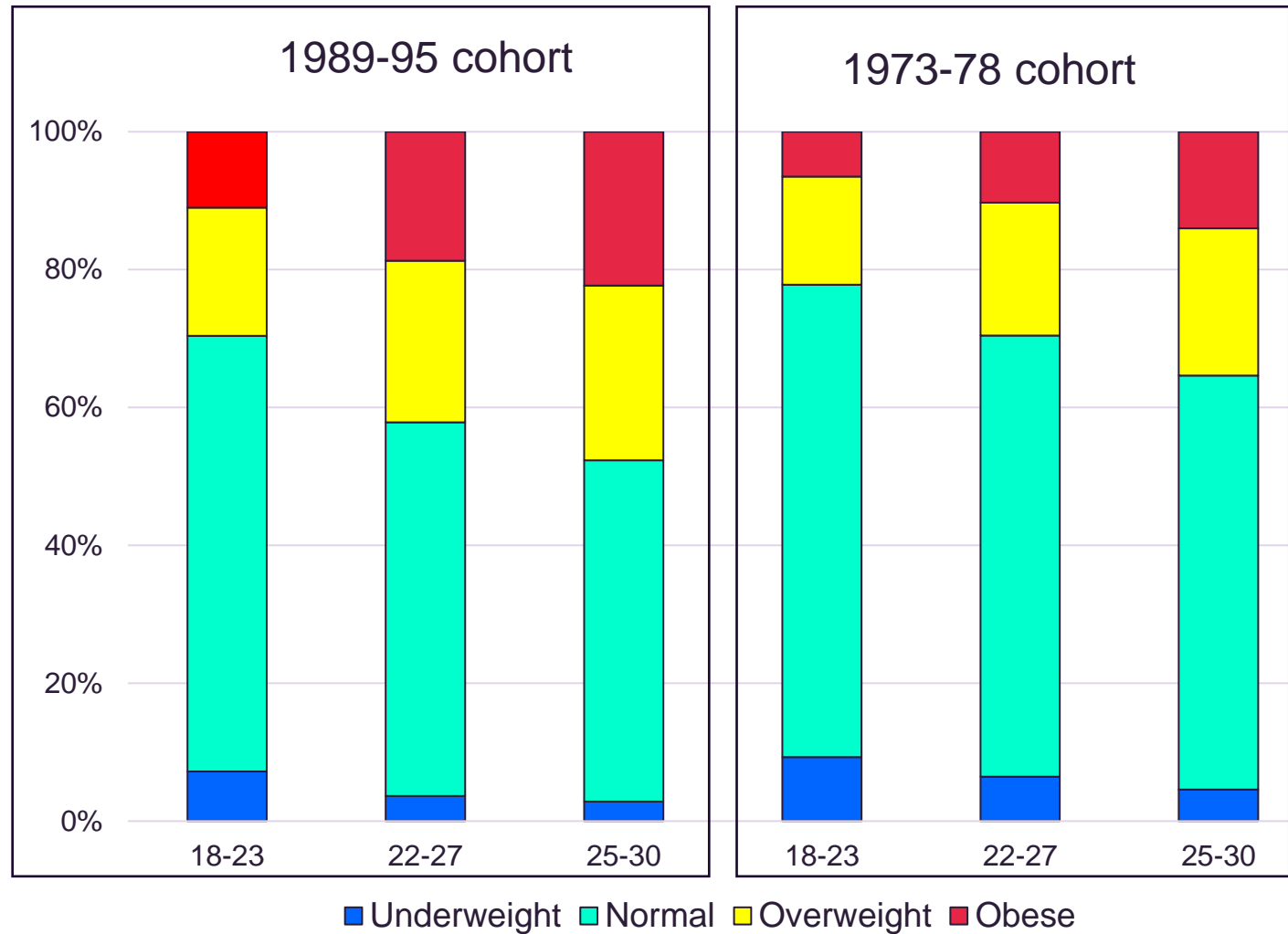
~ 6000 women in each cohort repeated data at each wave

Same ages 16-17 years apart

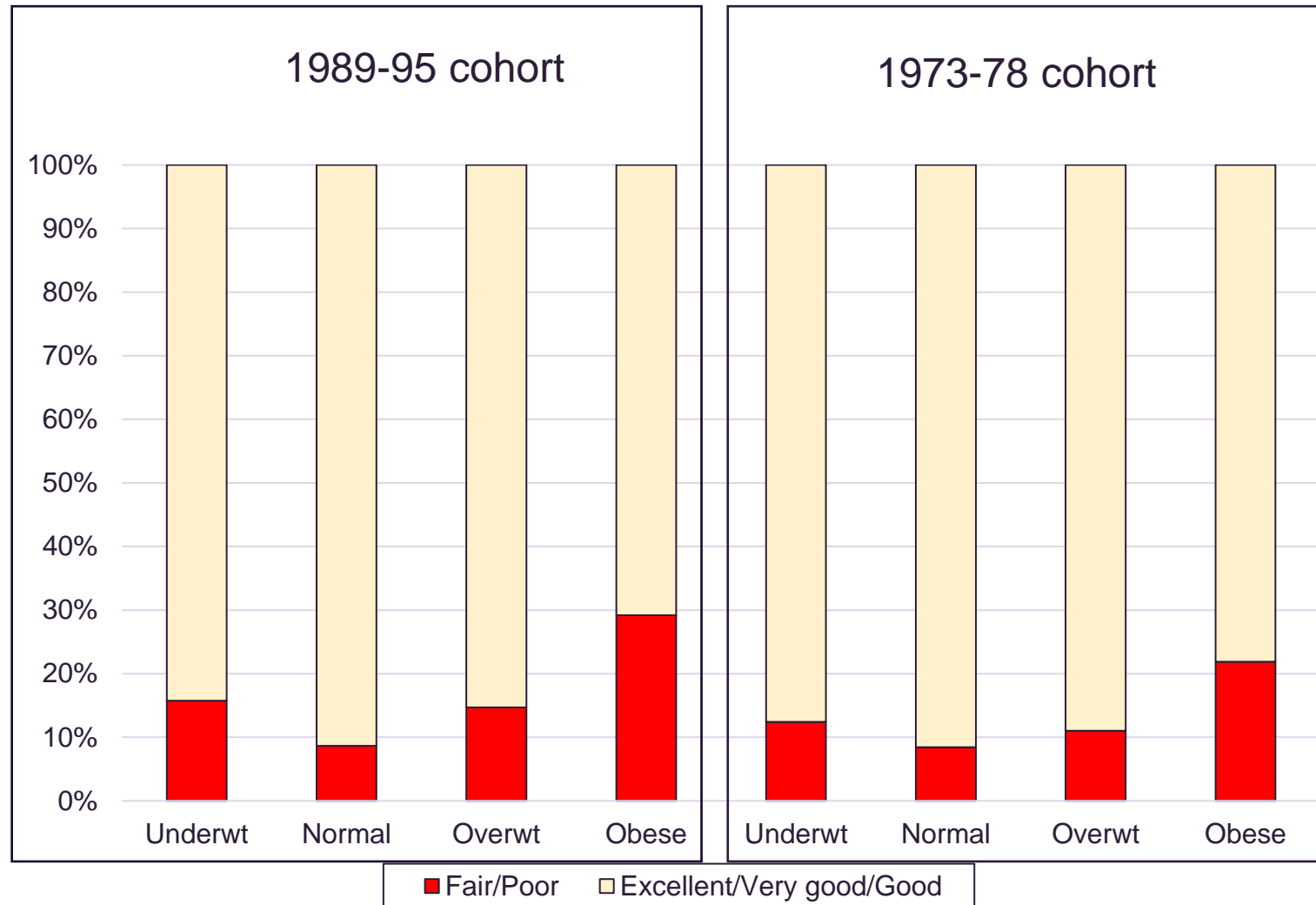
# Mean BMI increased with age and was higher in 1989-95 cohort



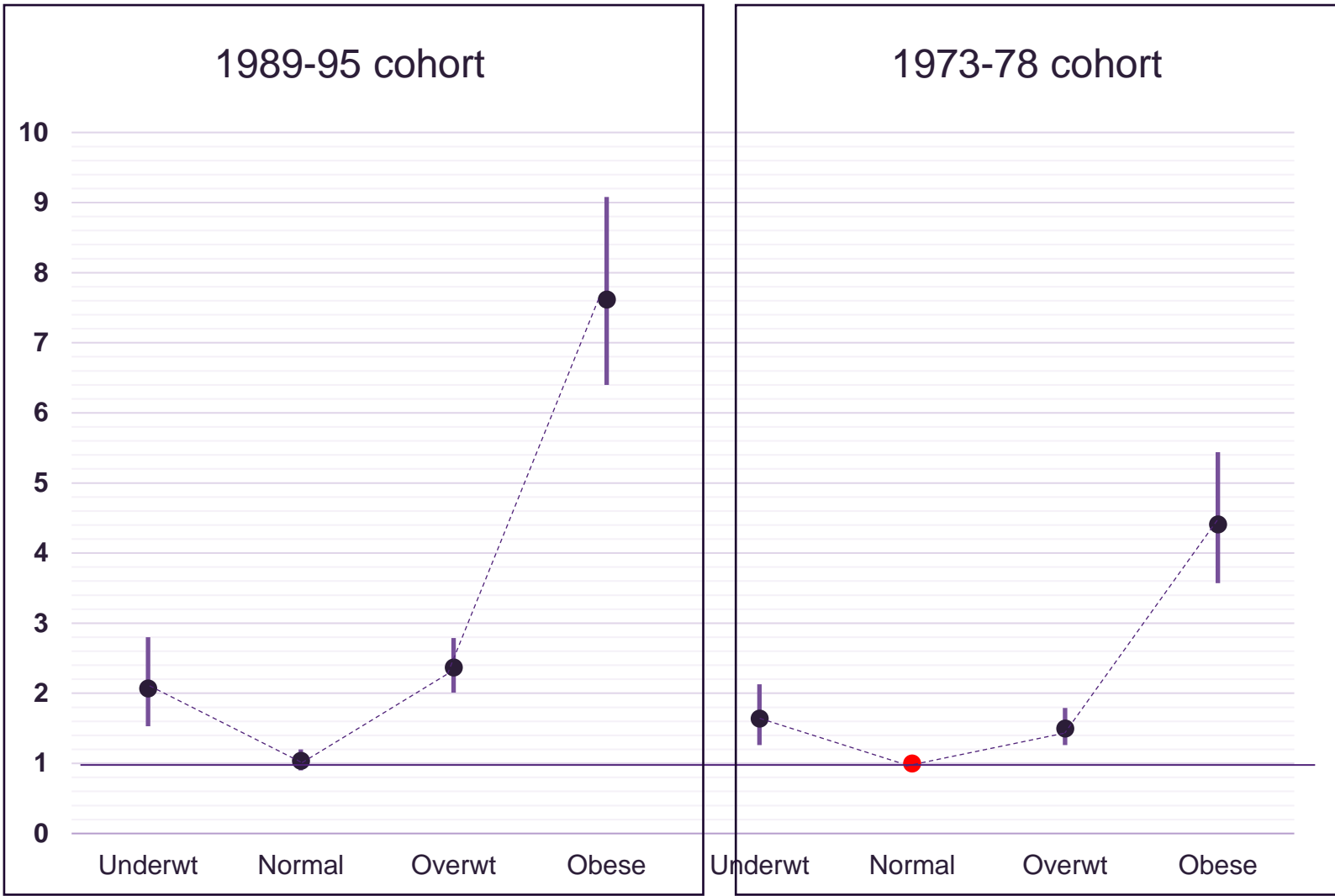
# Body Mass Index (categories) by cohort and age



# Fair/poor self-rated health by BMI category and cohort



# Odds ratios for fair/poor self-rated health by BMI category



Condition	1989-95 cohort		1973-78 cohort	Age effect
Self-rated health - fair/poor	U	>	U	none
Back pain - often	U	>	U	decrease
Depression – often	U		J	little
Leaking urine – often	U		J	slight increase
Period pain – often	J		U	decrease
Premenstrual tension – often	/		—	decrease
Irregular periods	U	>	U	slight decrease
Heavy menstrual bleeding	J		J	decrease



- Women in the more recent cohort were more likely to be overweight or obese
- They experienced conditions common in this age group at the same or higher levels than the earlier cohort at the same age and BMI category
- The results provide strong evidence that they are fatter but not fitter

*Thank you*