According to the journal of Occupational Health Management the annual cost of obesity related absenteeism in the United States is $4.3 billion per year and 9% of total absenteeism costs. Of that amount it is impossible to know how much is absorbed by companies and how much is borne by workers in the form of lower wages, but absenteeism losses are only the beginning of the story when it comes to economic penalties from unhealthy body composition.

It is fairly clear that the health effects alone of obesity do not fully account for all the associated wage, employment, and economic status penalties. Exploring the issue leads to some striking conclusions. First is the immense difference in basic obesity effects between men and women.

- Women who were obese at 16 suffered a 7% hourly wage penalty at 24 even if they were no longer obese.
- Women who become obese later in life only a slightly smaller wage than non-obese women.
- Obese women are more likely to report gender based discrimination.
- Men face little or no wage penalty for obesity regardless of age.

Second is the scope of penalties considered when you look at economic compositions for the households of obese people. Men are somewhat less likely to be married at ages 21-31 if they were obese at ages 16-24.

- Obese women are much less likely to be married, only 37.4% compared to 51.7% of women overall. Obese women are also more likely to be divorced or separated.
- Obese men who are married show significantly lower spousal earnings by about 30%.

Clearly this disadvantage in the marriage market for women is much more significant to overall economic status than differences in wages and accounts for the majority of the economic effect of obesity. Men however face a different problem. While they do not appear to have significant penalties associated with mild and medium obesity they do face large penalties for being underweight with a BMI of less than 20.

- Underweight men have a 12% lower wage.
- They are only 38.6% likely to be married versus an average 44.2%.

### Economic Penalties for Underweight Men

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<thead>
<tr>
<th>Economic Penalties for Underweight Men</th>
<th>Economic Penalties for Obesity</th>
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<tr>
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### Conclusion

The act of smoking carries with it a number of effects beyond physical ailments and a potentially shortened life. On the average smokers make significantly less money than their non-smoking peers. This gap appears for a number of reasons many of which are quite surprising:

Demographics: Estimations of the actual wage differences among smokers vary wildly with some studies suggesting wage gaps as small as 2-4% and others suggesting that mid-career smokers make 29% less than non-smokers. Several theories exist for why smokers face a lower wage and why estimates of that wage gap vary so wildly. One hypothesis is that smoking has a reverse-causal effect to lower wages rather than a causal relationship. That is to say that rather than smoking being the cause of lower wages, lower wages lead to smoking, and indeed when controlling for demographic, family, and personal variables the smoking wage gap falls from 29% to 4.2%. This highlights that the gap but also provides strong evidence that other factors are at play.

Discount rate: A second hypothesis is that an unobservable factor called the discount rate is higher in smokers. In economics an individual discount rate measures the value a person places on the present versus the future. A person with a high discount rate would have to offer a large incentive in the future to forgo an opportunity today of lesser value. If true then smokers will invest less in human capital, a measure of job ability that comes from education and training. Trends suggest that this is likely true in that smokers are half as likely to earn a college degree, average less than 12 years of education, and know less about their future health by smoking today. A second and more intensive test of this hypothesis comes from a longitudinal sample of the same respondents over time to determine if persistent smokers have a different earnings potential than those who quit some time or stop smoking sporadically. Results show an increase in the wage gap for those responding as smokers over time from 17% in 1986 to 29% in 2001. While consistent with a slower earnings growth rate though the growth is not statistically significant due to the small sample size.

When creating multiple comparison categories for smokers, never-smokers, smokers who eventually quit, and sometimes smokers there is no statistical difference in the wages or education of never-smokers and quitters while smokers who are consistent smokers do have a wage gap.

This shows the wage gap is a result of smokers' personal preferences because coworkers and supervisors cannot distinguish between persistent smokers and future quitters. The massive wage difference over time is explained by future quitters leaving the smoking variable.

Job risk: Smokers may also face a flatter wage to risk curve meaning that smokers are paid less to take on additional risk in their jobs than non-smokers. Comparisons show that smokers receive only an extra $1,089 per expected day of injury compared to $2,109 for non-smokers. That smokers might place less value on good health or under-perceive health risks would explain why smokers would choose riskier jobs and a 7% higher likelihood of job injury but not why they would be paid less for that risk. Personal preference then does not explain why smokers make less for a given amount of extra risk in their jobs but an unexplained higher incidence of injury at home might, implying that smokers are simply less safe and less efficient than non-smokers at producing workplace safety.