

hypertension.”<sup>1</sup> The authors specifically note, “The only patient with proteinuria . . . had a glomerular disease before her pregnancy.” Thus, Benigni et al do not provide any information on eicosanoid change in preeclamptic women. In fact, only 3 of the 33 women in their “at risk for pregnancy-induced hypertension” group actually developed pregnancy-induced hypertension.

The Italian Study of Aspirin in Pregnancy<sup>2</sup> is one of several well-executed trials showing that aspirin does not prevent pregnancy-induced hypertension. Space limitations did not permit us to reference all the published trials.

Drs van der Weiden and Helmerhorst make the interesting point that PGI<sub>2</sub> metabolites increase as early as 40 days after embryo transfer in normal pregnancies, increasing the ratio of PGI<sub>2</sub> to TxA<sub>2</sub>. In contrast, women who developed preeclampsia in our study showed significantly decreased levels of PGI<sub>2</sub> and had significantly decreased ratios of PGI<sub>2</sub> to TxA<sub>2</sub> virtually throughout the second and third trimesters of pregnancy. We agree with van der Weiden and Helmerhorst that PGI<sub>2</sub> production is an important factor in preeclampsia. We hope that future investigations will explore the therapeutic potential of correcting PGI<sub>2</sub> deficiency.

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## RESEARCH LETTER

### Is Miss America an Undernourished Role Model?

**To the Editor:** The obsession with thinness in contemporary society has been cited as a contributing factor for the increase in eating disorders, particularly in young women.<sup>1</sup> Recent studies have found that as many as 50% to 75% of adolescent girls are dissatisfied with their weight and their body image.<sup>2</sup> Professions in which there are strong pressures to control body weight, such as athletics and dance, exhibit higher rates of eating disorders.<sup>3</sup> Beauty pageants are another tradition through which society defines its ideal of beauty, including body weight and shape.

**Methods.** We compiled data on weight and height of winners of the Miss America Pageant, from 1922 to 1999, obtained from the Miss America Archives.<sup>4</sup> The pageant was not held from 1927-1933, and data from a few other years are unavailable. We determined the body mass index (BMI), calculated as weight in kilograms divided by the square of height in meters, for each winner, and fit the BMI data to a linear regression model.

**Results.** We found a significant time-dependent decline in BMI ( $P < .0001$ ), as shown in the FIGURE. In the 1920s, con-

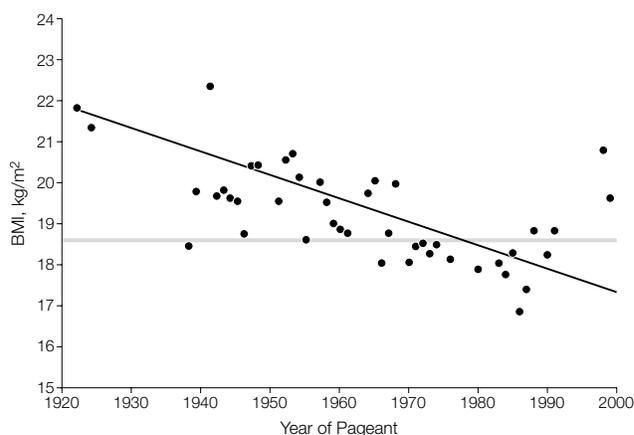
testants had BMIs within the range that is now considered normal (between 20 and 25).<sup>5</sup> But the decline in BMI over the years has put an increasing number of winners in the range of undernutrition (defined by the World Health Organization as BMI < 18.5),<sup>5</sup> with some having a BMI as low as 16.9.

**Comment.** Our finding cannot be explained simply by the secular upward trend in stature that occurred in the US population during this time. Pageant winners' height increased less than 2%, whereas body weight decreased by 12%. The actual influence of pageant competitions on young women's decisions about diet and lifestyle is not well documented, but it is likely to have a strong, if indirect, effect. Although considered politically incorrect by some, the 1999 Miss America pageant had an audience of more than 10 million, placing it 11th among prime-time programs according to the Nielsen Research service.<sup>6</sup> We chose the Miss America pageant for this analysis because of the completeness of its database. Its contestants, however, are chosen from local pageants, which are likely to promote a similar ideal of female undernutrition.

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Trend in Body Mass Index (BMI) of Miss America Pageant Winners, 1922 to 1999



The horizontal line represents the World Health Organization's BMI cutoff point for undernutrition (18.5).<sup>5</sup>