

# Like mother, like daughter

## Do perceptions run in the family?

The effects of family environment and ethnicity on body image should be considered when designing health interventions to prevent the development of obesity, suggest the findings of a study by **ZANDILE MCHIZA, JULIA GOEDECKE** and **ESTELLE LAMBERT**.

In South Africa, as in many other developing countries, more and more adult women tend to be obese, a condition which is an important risk factor for chronic non-communicable diseases globally. International studies suggest that ethnic differences in the prevalence of obesity may be due, in part, to differences between groups in body image and dissatisfaction with their body size.

On evidence of a family resemblance in body image, the aim of this study was to identify the extent to which family status (presented as mother-daughter resemblance) and ethnicity explains differences or similarities in the body image and perceptions of South African mothers and their pre-adolescent daughters.

Internationally, there is substantial evidence associating body image to women's responses to weight changes and attitudes towards weight control. In South Africa, women are less likely to see themselves as overweight, irrespective of body size. In their survey of the demographics of obesity, T Puaone et al. found that only 22.1% of South African women of all races perceived themselves as being overweight, when in fact 56.6% of women interviewed were classified as overweight or obese.

### BODY SIZE DISSATISFACTION

These findings were influenced by ethnicity in that only 27% of overweight or obese black

women correctly perceived themselves as overweight, compared with 65% of women of mixed ancestry and 100% of white overweight or obese women. Similar results have previously been observed in urban South African adolescent girls in that black girls were less dissatisfied with their body size and shape, and were less likely to desire a smaller body size than mixed ancestry and white girls.

Similar results have been observed in the USA where low-income African-American women of different ages tend to have fewer weight-related body image concerns than their white counterparts. Similarly, KJ Flynn and M Fitzgibbon showed that black adolescent girls of normal weight have a preference for a larger body size compared with white adolescent American girls.

In a study comparing overweight white and black adult American women, J Stevens et al found that black women were 40% less likely to feel guilty after eating, were two and a half times more likely to be satisfied with their weight, and 2.7 times more likely to consider themselves attractive than white women.

There is, however, little research directed at exploring the sociocultural factors influencing body-size perceptions and attitudes between mothers and daughters in relation to obesity in countries undergoing epidemiological transition, such as South Africa.

This may be considered in the context of

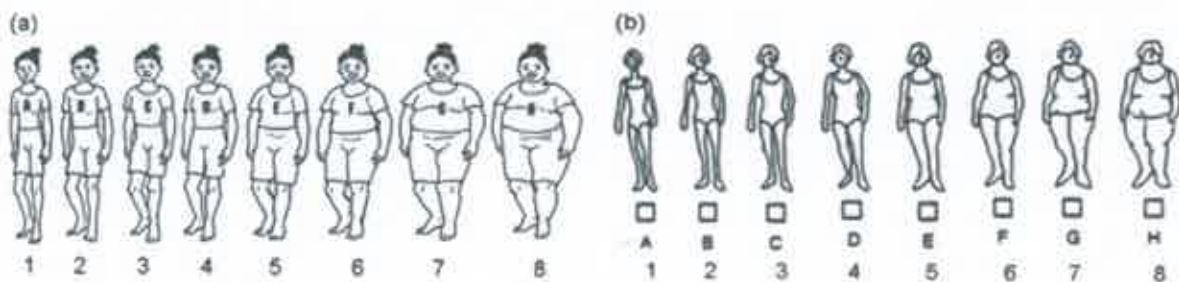
the coexistence of maternal over-nutrition and childhood under-nutrition, which has been described in Africa.

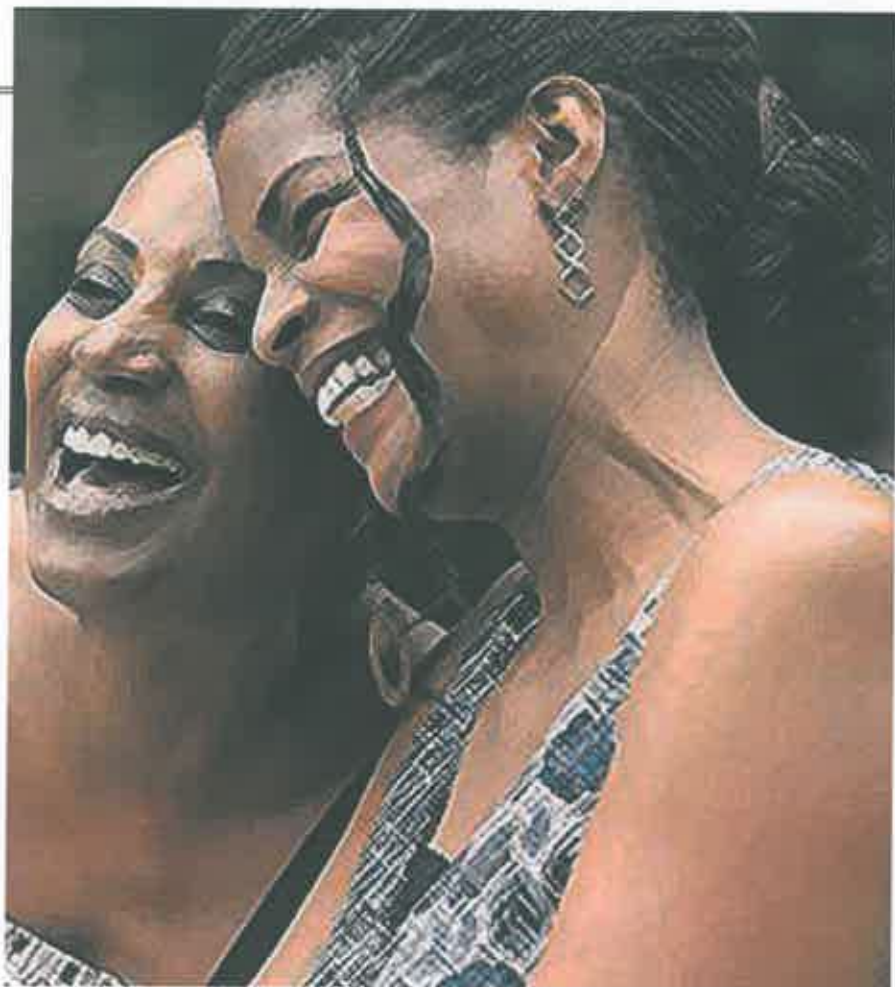
### WOMEN'S SILHOUETTES

In our previous study of 204 South African women and 333 pre-adolescent girls from different ethnic groups we showed that, overall, participants had appropriate perceptual body size. Positive correlations were found between the silhouettes chosen by the participants to represent their 'feel' and their actual body size and body fat percentage. However, these relationships were altered by ethnicity in that black girls did not display the same degree of unhappiness with a bigger body size than white and mixed ancestry girls.

The women and girls had to choose from the silhouettes below ▼

This study provides novel insight into the important and respective roles of family membership, maternal modelling and ethnicity on different dimensions of body image, such as body size perception, and body size dissatisfaction in South African women and their daughters. What emerged was that mothers and daughters from black families demonstrated an overall greater body size tolerance than their white and mixed ancestry counter-





parts. To our knowledge, this is the first time in South Africa that these two constructs – family membership and ethnicity – have been compared in the same population with respect to different dimensions of body image in relation to obesity. These results corroborate those of international studies.

Striking findings from this study were that black girls seemed to differ from their mothers in terms of body size preference. In this study, black girls were leaner, yet they preferred a larger silhouette.

On the other hand, most black mothers were obese, yet they preferred leaner silhouettes. What is of concern is that South African studies suggest that overweight black women are resistant to adopt healthier behaviours despite knowing that they are at an increased risk for non-communicable diseases.

This resistance may be partly endorsed by the weight-loss stigma associated with the HIV/AIDS wasting syndrome, as well as the fact that being overweight in the black culture is a symbol of wealth, autonomy, attractiveness and happiness.

Based on these beliefs, black South African women may be more reluctant to lose weight than women of different ethnic origin. White and mixed ancestry families participating in

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this research associated a leaner body size with beauty, health and happiness.

This study shows that, despite South African pre-adolescent girls being significantly less dissatisfied about their body size compared to their mothers, intra-familial resemblances of body size dissatisfaction existed when the potential confounding differences in maternal body size were removed. Further, this study highlights that society and culture influences body size dissatisfaction.

#### DEVELOPMENT OF OBESITY

These results have important implications for the development of obesity in South Africa,

given the high prevalence of obesity in women, which also differs between ethnic groups. This strongly suggests that in South Africa health promotion needs to be ethnic-specific and should always involve families.

Strategies and interventions should be directed at increasing the awareness of a healthy body size status and maintaining it to prevent obesity. This is highly important for those populations that are at the highest risk of becoming overweight and obese but may not be concerned that they are overweight – black South African women in particular.

It must be noted that eating and exercising behaviours and attitudes were not analysed. This is relevant, since international studies have shown that family environment and parental modelling influence a child's diet and exercise. Second, the study surveyed only pre-adolescent girls.

The inclusion of adolescents may have provided further insight regarding children's attitudes and perceptions towards body image, which has been shown to be influenced by children's sexual maturity.

The study suggests that South African researchers, educators and health promoters should consider the effects of family environment and ethnicity on body image when developing intra-personal and targeted interventions for the prevention and management of obesity.

Most particularly, health education should not only be directed at the overweight or obese, but include the whole family so as to help dispel the myth and stereotype suggesting "big" to be beautiful, healthy and respected.

More focus is to be directed to under-served and vulnerable communities, and young black South African pre-adolescent children in particular, who are at risk of becoming overweight adults. ◀

This synopsis is based on an article, *intra-familial and ethnic effects on attitudinal and perceptual body image: a cohort of South African mother-daughter dyads*, published in *BMC Public Health*, 11:433-440.

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