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## LETTERS

## CARDIOVASCULAR RISK IN CHILDREN

## Don't rush into testing and treating children

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Although Friedemann and colleagues' meta-analysis confirmed that obesity worsens risk factors for cardiovascular disease in children,<sup>1</sup> we do not entirely agree with their recommendations.

The authors mention targeting risk factors before they reach abnormal limits and defining cut offs for risk as a guide to treatment. This implies a link between obesity related cardiovascular risk factors in childhood, attenuation of these risk factors, and clinical benefit above current practice for adult cardiovascular disease, which has not been proved. The suggestion of performing blood tests and treating children and adolescents is premature because evidence of benefit is lacking and there are potential risks in a growing child.<sup>2</sup> Given that the obesity epidemic is the reason for interest in these risk factors in children, and obesity increases the likelihood of unfavourable risk factors, surely we should be preventing, monitoring, and treating obesity itself in this age group. Normalisation of body mass would have many health benefits beyond cardiovascular risk factors.

In addition, an overweight or obese child will not necessarily become an overweight or obese adolescent with abnormal cardiovascular risk factors. One study found that more than 45%

of children classified as overweight or obese at age 9-12 years were normal weight by 15-16 years. These children had more favourable cardiovascular risk factors than those who remained overweight or obese, and in the case of girls, equivalent to those who were persistently normal weight.<sup>3</sup> This highlights the complexity of childhood obesity and why it is unwise to recommend blood tests and treatments that have no evidence base for improved outcomes. Recommending participation in a family based intervention to improve diet (and increase activity) would fulfil the pledge to "first do no harm."

Competing interests: None declared.

- 1 Friedemann C, Heneghan C, Mahtani K, Thompson M, Perera R, Ward A. Cardiovascular disease risk in healthy children and its association with body mass index: systematic review and meta-analysis. *BMJ* 2012;345:e4759. (25 September.)
- 2 Logue J, Sattar N. Obesity in children and future cardiometabolic risk: are blood tests necessary? *Diabetes Care* 2010;33:2711-2.
- 3 Lawlor DA, Benfield L, Logue J, Tilling K, Howe L, Fraser A, et al. The association of general and central adiposity, and change in these through childhood, with cardiovascular risk factors in adolescence: a prospective cohort study. *BMJ* 2010;341:c6224.

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