Fighting fat in families: The new "F word"

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Childhood obesity is increasing at an alarming rate worldwide, especially in developed countries. Between 1979 and 2004, the percentage of overweight and obese children in Canada rose from 15% to 26%.1 Obesity in children is associated with increased risk of adulthood obesity and multiple health problems including cancer, type 2 diabetes and atherosclerosis.² All of these diseases create additional costs for an already overburdened health care system. Multiple explanations for childhood obesity have been proposed, including decreased physical activity, energy-rich diets, socio-economic status, education, genetics, and poor community design.^{1,2} Many interventions targeting diet, physical activity and environment have been proposed, implemented, and proven mildly successful.³ However, the family and the home are integral factors in childhood obesity that are still being largely overlooked.

Interventions targeting prevention of childhood obesity should focus on the primary caregiver and the home environment.^{3,4} It is futile to remove soft drinks and sugary snacks from schools when those foods fill the cupboards at home. It is futile to make children engage in physical activity for an extra 30 minutes at school when they spend all their time at home sitting in front of screens. One family-based behavioural intervention showed a significant decrease in standardized body mass index in obese children after one year.⁵ The intervention included food diaries, diet and exercise information sessions, and weekly goal setting by the family.⁵ When parents participate in obesity reduction interventions, both the health of the child and the parent has been shown to improve.^{4,5} Unfortunately, many parents are afraid to talk about the new F-word (fat) or any topics relating to being fat with their children.

A report by Statistics Canada in 2009 showed that low selfesteem is more common in children who are overweight or obese when compared to normal weight children.⁶ Parents may think that they are protecting their children's selfesteem by avoiding the word fat. Unfortunately, children at school can be insensitive towards their peers. Obese children are more likely to be bullied than their normal weight counterparts.⁷ Avoiding the subject of obesity at home may potentially result in increased damage to selfesteem, because children do not feel they can talk to their parents about their weight or about how they are treated at school. Bullied children with moderate to high family support are less likely to have depressive symptoms than children with low family support.⁸ When parents choose to shy away from the word "fat", they are shutting down opportunities for open, honest and therapeutic communication.

One potential reason parents may hesitate to talk about being fat with their children is because they struggle with being overweight or obese themselves.³ There is strong evidence suggesting that parental behavior and elevated parental weight can influence obesity risk in children^{3,4} In contrast, one study found that the family environment per se did not play a significant role in weight status;⁹ however, this study was conducted in school-aged children and therefore could not assess the influence of family during the initial years of development. The early years of life are when children have the greatest susceptibility to environmental factors.4 Many risk factors associated with childhood obesity are related to the early life environment, like prepregnancy overweight mothers, high gestational weight gain, and not breastfeeding.³ Other risk factors, especially exercise and eating behaviors, continue to be influential throughout childhood. These include low vegetable and fruit intake, high fast food consumption, high screen time and low physical activity levels.⁴ Informing parents about the risk factors for childhood obesity and getting parents to engage their children on the topics of diet and exercise will greatly aid in obesity prevention.^{5,10}

In an ideal world, all potential parents would be informed

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about the factors contributing to childhood obesity prior to conception, but the large number of unplanned pregnancies makes this unrealistic. However, following conception, parents have multiple visits with physicians and other health care professionals. This is the perfect opportunity to educate parents about obesity prevention and encourage open dialogue about "fatness". A Finnish randomized control trial showed that infants whose mothers received individual diet and exercise counselling when the infant was between 2-10 months had significantly slower weight gain in the first year of life.¹⁰

In the past, the derogatory misuse of the word "fat" has led us to avoid its use entirely. Families should not avoid the word "fat" in their homes. Instead they should use the word fat constructively and respectfully to prevent the harmful physiological and psychological consequences of obesity. Families should discuss all aspects of fat: body fat, excessive fat, and healthy fat. Maybe once fat has been talked about, the conversation can progress to other important health topics like physical activity.

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References

- Statistics Canada. Nutrition: Findings for the Canadian community health survey – overweight Canadian children and adolescents. *Analytical Studies Reports*. 2005;1:82-620-MWE20050001.
- 2. Barton M. Childhood obesity: a life-long health risk. *Acta pharmacologica Sinica*. 2012;33:189-193.
- 3. Birch LL, Ventura AK. Preventing childhood obesity: what works? International Journal of Obesity. 2009;33:S74-S81.
- Anzman SL, Rollins BY, Birch LL. Parental influence on children's early eating environments and obesity risk: implications for prevention. *International Journal of Obesity*. 2010;34:1116-1124.
- Teder M, Morelius E, Bolme P, Nordwall M, Ekberg J, Timpka T. Family-based behavioral intervention programme for obese children: a feasibility study. *BMJ Open.* 2012;2:e000268.
- Statistics Canada. The influence of childhood obesity on the development of self-esteem. *Health reports*. 2009;20(2):82-003-x.
- Griffiths LJ, Wolke D, Page AS, Horwood JP. Obesity and bullying: different effects for boys and girls. Arch Dis Child. 2006;91:121-125.
- Rothon C, Head J, Klineberg E, Stansfeld S. Can social support protect bullied adolescents from adverse outcomes? A prospective study on the effects of bullying on the education achievement and mental health of adolescents at secondary schools in East London. J Adolesc. 2011;34(3):579-588.
- MacFarlane A, Cleland V, Crawford D, Campbell K, Timperio A. Longitudinal examination of the family food environment and weight status among children. *International Journal of Pediatric Obesity*. 2009;4:343-352.
- Mustila T, Raitanen J, Keskinen P, Saari A, Luoto R. Lifestyle counselling targeting infant's mother during the child's first year and offspring weight development until 4 years of age: a follow-up study of a cluster RCT. *BMJ Open*. 2012;2:e000624.



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