

# More Widespread Pediatric Lipid Screening Advised

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New recommendations from the American Heart Association call for more targeted screening and treatment of lipid disorders in children, according to a statement released in March.

Though the guidelines currently used for managing lipid disorders in children were released by the National Cholesterol Expert Program (NCEP) in 1992 and focused on children with a family history of lipid disorders, the current statement suggests that other at-risk children should also be screened for lipid disorders and that treatment with statins is appropriate if lifestyle management is not adequate. The statement reflects research showing that the pathogenesis of cardiovascular disease begins many years before it is manifested in adulthood.

"It has become clear that atherosclerotic cardiovascular disease begins in childhood and is progressive," stated Dr. Brian W. McCrindle, of the Hospital for Sick Children in Toronto, and his colleagues (*Circulation*. 2007; 115: DOI: 10.1161/CIRCULATIONAHA.107.181946).

The AHA panel recommends more widespread lipid testing in children, testing for other parameters of the metabolic syndrome in overweight and obese children with lipid abnormalities, and a major change in recommended drug therapy for children with lipid disorders (*Circulation* 2007 April 10 [Epub doi:10.1161/CIRCULATIONAHA.107.181946]).

Guidelines released by the NCEP in 1992 recommended that healthy children older than age 2 years follow a low-fat diet and eat a variety of foods to promote good cardiovascular health. They also stated that only children from high-risk families required lipid screening, and that children with lipid abnormalities should be placed on a low-fat diet and encouraged to exercise for 6-12 months. After this period, if repeat screening revealed elevated LDL cholesterol levels, children should be treated, with LDL cholesterol cutoffs similar to those in adults, the NCEP said.

The current guidelines target mostly children with a family history of hyperlipidemia, and researchers are concerned that inadequate numbers of children are being screened.

The AHA panel recommends that children with a strong family history as well as overweight and obese children should undergo testing for lipid abnormalities. Overweight and obese children with lipid disorders should also be screened for hypertension, diabetes, and other metabolic abnormalities, such as central adiposity.

Given the increasing complexity of caring for children with certain chronic diseases, the statement also expounded on certain situations in which treating physicians should consider screening and close monitoring of children with lipid disorders.

The panelists recommended that early screening should be considered in male children, those with hypertension, obesity, and those with chronic conditions such as lupus, HIV, and a history of organ

transplantation that can increase their risk for atherosclerotic disease. The LDL cholesterol goal of 190 mg/dL or less for children with no additional cardiovascular disease risk factors remains the same. But the new statement emphasizes that the LDL cholesterol goal of 160 mg/dL or less should be considered in children with additional risk factors.

The AHA statement also recommends changes in the treatment of lipid disorders in children. Past guidelines recommended

that children with lipid disorders be treated with bile-acid-binding resins. But the statement released today says that statins should be the first-line therapy in these children.

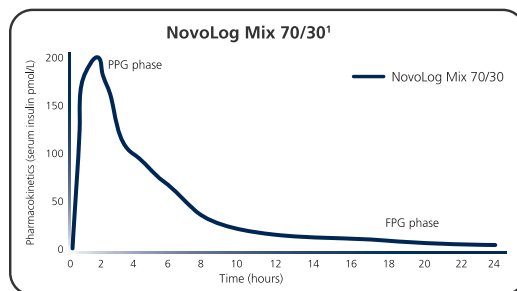
"Bile-acid-binding resins are associated with very poor compliance in kids, and are incompletely effective," Dr. McCrindle said in an interview. He added that studies show that statins have similar safety and efficacy in the treatment of lipid disorders in children as in adults.

Despite the modifications that the panel recommended, the emphasis will remain on lifestyle modification rather than drug therapy. Dr. McCrindle pointed out that lipid abnormalities in most children result from obesity, and not from familial hypercholesterolemia. Physicians caring for overweight and obese children who have lipid disorders should emphasize the importance of diet and exercise rather than drug therapy for most of their patients. ■

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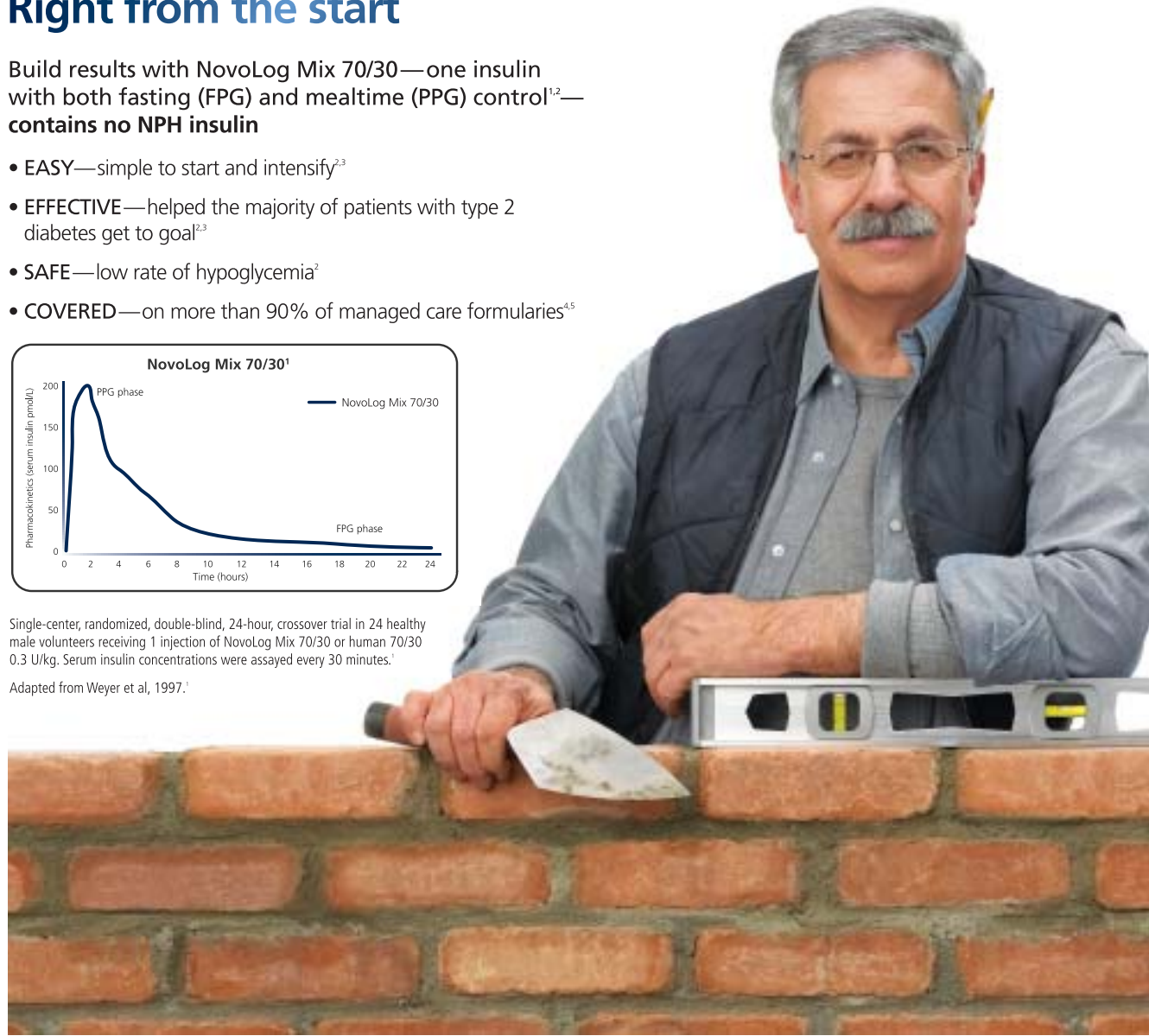
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Adapted from Weyer et al, 1997.<sup>1</sup>



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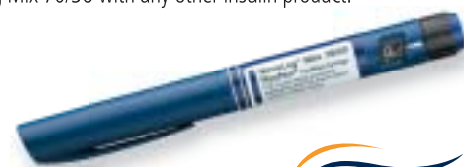
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