

FH podcast #3 FH and Children Transcript
American Heart Association & The FH Foundation

Recording:	00:02	Welcome. You're listening to a series of four familial hypocholesterolemia podcasts, brought to you by the American Heart Association, and the FH Foundation. This series is focused on educating patients, caregivers, and health care providers on ways to improve awareness, detection of FH, and management of high cholesterol.
Katherine Wilemon:	00:23	Hi everyone. My name is Katherine Wilemon, I'm the founder and CEO of the FH Foundation. I also have familial hypocholesterolemia. Today, in our third podcast, it'll be all about children and familial hypocholesterolemia. Joining me is Dr. Samuel Gidding, who is a pediatric cardiologist and the Chief Medical Officer of the FH Foundation. Thank you Dr. Gidding for joining us for this discussion on children and FH.
Dr. S. Gidding:	00:54	It's a pleasure to be here, Katherine.
Katherine Wilemon:	00:58	Before we get started, could you briefly tell our listeners what familial hypocholesterolemia is?
Dr. S. Gidding:	01:07	Familial hypocholesterolemia is a genetic condition where the gene for FH causes very high cholesterol. Cholesterol that is so high and it's not related old old old hypocholesterolemia is present in about one and individuals in the United States, and it's underdiagnosed, was underdiagnosed and undertreated.
Katherine Wilemon:	01:37	One in 250 people, that's quite a bit. Is it considered a rare condition?
Dr. S. Gidding:	01:46	Historically, it's been considered rare because it was thought to be other genetic conditions, like marfan or sickle cell, or cystic fibrosis. They're not easily recognizable, FH is not easily recognizable based on symptoms.
Katherine Wilemon:	02:25	Are there other causes, Dr. Gidding, for high cholesterol in children?
Dr. S. Gidding:	02:33	Genetic causes at the level of FH are far and away the most common. The second most common is diet. People always associate obesity with high cholesterol, but in fact, obesity does not cause as severe elevation in cholesterol that FH does. The

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lipid problems in FH relate to other fats in the blood, as well as cholesterol.

- Katherine Wilemon: 02:58 When we're talking about these high levels of cholesterol in children that don't have anything to do with being overweight, what kinds of levels are we talking about? What does high cholesterol in children look like?
- Dr. S. Gidding: 03:11 Typically, the cholesterol, the LDL cholesterol, the bad cholesterol would be over 190, where total cholesterol over 250. To put this in perspective, the average cholesterol in a child in the United States is about 90 to 100, so it's about twice as high. Children with familial hypocholesterolemia also can have cholesterol levels over 160. The current guidelines for pediatricians, is that a high cholesterol level is over 130 for LDL, or 200 for cholesterol. The current guidelines will capture children in the United States with familial hypocholesterolemia.
- Katherine Wilemon: 03:52 I have two children and one of them has FH, but I actually had to ask for my children to have their cholesterol levels tested. As a pediatric cardiologist, do you think that most children are being screened as the guidelines recommend for high cholesterol?
- Dr. S. Gidding: 04:15 The universal screening guideline was published in 2011, and at that point less than 10% of pediatricians were screening all

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tested to look for FH. Hopefully, the pediatrician will be doing it at the recommended age, which is nine to 11. However, just as you did, parents who know they have FH should insist that their children have their cholesterol checked.

Katherine Wilemon:

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randomized trials of statins in children and what's been observed is actually the side effect profiles are much lower than the side effect profiles in adults, particularly those over age 55 or 60 years.

Katherine Wilemon: 09:07 There is data from other countries showing that, in fact, it is safe to give children with this genetic condition statins from an early age, you said eight to 10 years old? And that it does reduce significantly their chances of having an early heart attack or very aggressive heart disease?

Dr. S. Gidding: 09:32 Sure. Now we have data from over 20 years of follow up in children who've started on statins in adolescents, back in the 90s. There's now emerging data from large United States registries and other case series, that there's very little toxicity of statins. In fact, it's unclear if a case of diabetes has ever been reported, for example, in a child on statins and they don't have the muscle pain or other side effects typically experienced by adults.

Katherine Wilemon: 10:07 What kind of doctor, if someone's child has FH, should they be seeing to manage this genetic condition?

Dr. S. Gidding:	10:16	Most importantly it's a doctor who has an interest in cholesterol or blood lipids. In the United States, right now, cardiologists, or some cardiologists with reasonable experience, some endocrinologists, some gastroenterologists, and there are some primary care physicians, actually, who have taken an interest in this disorder. I think the most important thing to consider is whether your doctor has experience managing FH, understands the condition and knows the treatment recommendations.
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Katherine Wilemon: 10:50 The FH Found 10:52 14Tj-0.78 (b) 2D1.7 (TJ0.0-.526 Sst,g (h) 0.8 (d) 0.75.761TJ-0.00

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take it every day for the remainder of their lives, how have you done that successfully as a pediatric cardiologist?

Dr. S. Gidding:

11:54

I think the important thing to remember about FH is it's really a

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through Cascade screening and genetic screening, to identify everyone in the US, or most everyone with FH, and if those individuals start on early treatment, people with FH may end up having less heart attacks than the rest of the population. We're in, I think a 20 to 30 year window of opportunity to go forward.

Dr. S. Gidding: 15:15 Another key thing that I've realized that we haven't discussed, and what's very common in my practice, is a pediatrician will

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