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Cystic Fibrosis Research News

Title:

DIETARY INTAKE AND LIPID PROFILE IN CHILDREN AND ADOLESCENTS WITH CYSTIC FIBROSIS

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What was your research question?

Does a high dietary fat intake as recommended for people with cystic fibrosis (CF) result in abnormal fat levels in blood?

Why is this important?

International CF-guidelines advocate a high-caloric and a high fat intake. A risk with high fat intake is also having a very high saturated fat intake, which in the general population is associated with an increased risk of heart disease. In patients with CF, it is unknown whether these risks are present. This knowledge has become highly relevant as life expectancy has dramatically improved over the last few decades.

What did you do?

Included were 110 adolescents with CF of which we had data on blood fats (lipid profiles). Further, we had also data on dietary fat intake of 86 of these adolescents. We studied whether adolescents who had a higher fat and saturated fat intake had a different lipid profile compared to adolescents with a lower fat and saturated fat intake.

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What did you find?

In these 110 adolescents with CF, we found abnormal blood lipid profiles along with high fat and saturated fat intakes. The fat intake was not related to an abnormal blood lipid profile. However, this study lacks variation in dietary intake as almost all adolescents had high fat intakes. Therefore, we could not distinguish between blood lipid profiles of adolescents with a higher fat intake and blood lipid profiles of adolescents with a lower fat intake.

What does this mean and reasons for caution?

The abnormal blood lipid profile suggests an increased risk of cardiovascular disease in patients with CF. Any negative consequences of a high dietary fat intake on the overall lipid profile later in life cannot be excluded. This is especially relevant with the increasing life expectancy.

What's next?

There is no follow-up study planned but future long term studies may want to include assessments of risk on heart disease.

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