

Tall, heavy one-year-olds may be at risk for obesity later, study finds

October 21 2014, by Steven Reinberg, Healthday Reporter



But experts say genes aren't destiny.

(HealthDay)—Infants who quickly add weight and length may be showing a genetic propensity for obesity as toddlers, a new study suggests.

In adults, certain <u>genes</u> have been linked to increased body fat, but the same genes in infants promote proportionate gains in fat and lean muscle, the researchers said.

At 1 year, kids with these genes may be heavier and taller. By ages 2 and 3, however, these genes were linked to <u>excessive weight gain</u>, the investigators found.

"Our findings contribute to the growing evidence that lifelong <u>obesity</u>



risk can be predicted at very young ages and hopefully modified by very early changes in lifestyle and diet," said lead researcher Ken Ong, head of the child growth and development program at the University of Cambridge's medical research council epidemiology unit in England.

The conclusions are based on a review of four European studies involving more than 3,000 infants in all.

The researchers zeroed in on 16 gene variations previously linked to obesity and found a connection between rapid growth in infants and <u>weight gain</u> in toddlers.

However, determining whether a given child will be obese based on these findings isn't in the cards, Ong said.

The association found in the study does not prove a cause-and-effect relationship.

"While we see robust effects when looking across the whole population, the effects in any individual are too small for these genes themselves to accurately predict future risks, so the risks are not 'fixed' and there is no point in testing kids to see if they have these variants in their genes," Ong said.

The risk of obesity in any individual is the result of both genes and lifestyle, Ong said. "We should recognize that some people—those at higher <u>genetic risk</u>—may have to work harder, but the risk is not just due to genes alone," he said.

The report was published in the Oct. 20 online edition of *JAMA Pediatrics*.

Dr. Luis Gonzalez-Mendoza, director of pediatric endocrinology at



Miami Children's Hospital in Florida, said these specific genes are important to spur growth during the baby's first year when weight and length almost double.

"It's very hard to use that as a predictor of who is going to become obese," he said. "The genetic risk probably doesn't show up until the age of 2 or 3."

Gonzalez-Mendoza added that to maintain normal weight, obese children need a healthy diet and exercise.

Dr. David Katz, director of the Yale University Prevention Research Center in New Haven, Conn., said these gene variations explained only a small amount of the variation in growth rates of the children.

"These same genes were part of our genomes 100 years ago when <u>childhood obesity</u> and <u>adult obesity</u>, for that matter, were quite rare," he said.

The genes may indicate varying degrees of vulnerability, but it's the environment that exploits that vulnerability, he said.

"Unlike our genes, the elements in our culture that encourage obesity can be changed," Katz said.

More information: For more on childhood obesity, visit the <u>U.S.</u> <u>National Library of Medicine</u>.

Copyright © 2014 <u>HealthDay</u>. All rights reserved.

Citation: Tall, heavy one-year-olds may be at risk for obesity later, study finds (2014, October 21) retrieved 3 May 2024 from <u>https://medicalxpress.com/news/2014-10-tall-heavy-one-year-</u>



olds-obesity.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.