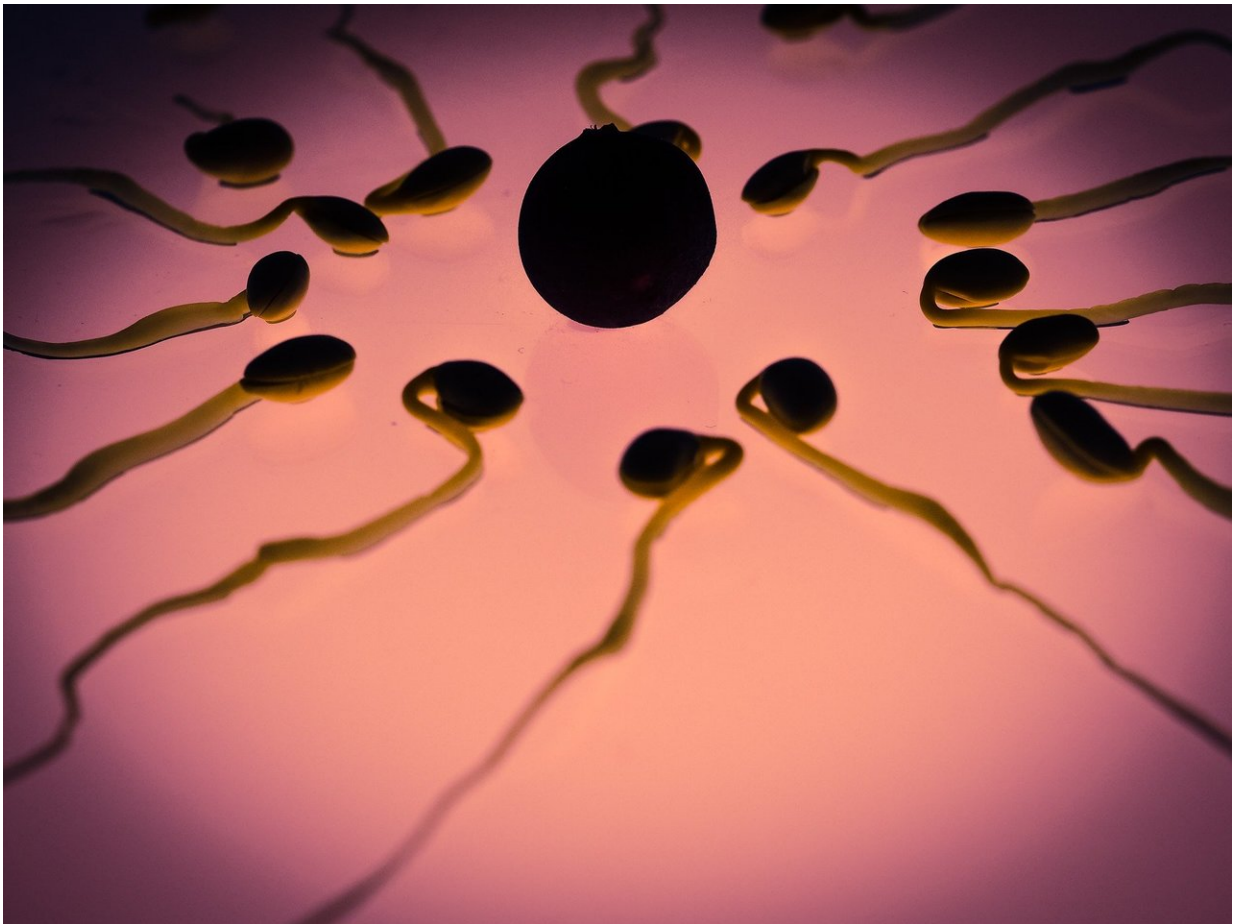


# Maintaining normal weight early in life may help prevent male infertility

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New research suggests that more careful control of body weight in

childhood and adolescence could help prevent male infertility later in life. The researchers will present their findings on Saturday, June 11 at ENDO 2022, the Endocrine Society's annual meeting in Atlanta, Ga.

The study finds that children and adolescents with overweight or [obesity](#), or those who have high levels of insulin or insulin resistance tend to have smaller testicles compared with their peers with normal weight and [insulin levels](#).

"More careful control of body weight in childhood and adolescence may help to maintain testicular function later in life," said lead researcher Rossella Cannarella, M.D., of the University of Catania in Italy.

The prevalence of male infertility is increasing, and average sperm count has been reduced by half in the past 40 years worldwide for no apparent reason, she said.

Testicular volume (a measure of testicle size) is directly related to sperm count. This means smaller testicles tend to produce less sperm. Up to one-quarter of young men aged 18-19 have low testicular volume, or smaller-than-normal testicles. This puts their future fertility at risk, Cannarella said. At the same time, the prevalence of [childhood obesity](#) has increased.

"This evidence suggests a possible link between [childhood obesity](#) and the high prevalence of low testicular volume in youngsters," she said.

To look for a possible link between low testicular volume and obesity, the researchers assessed testicular volume in 53 children and teens with overweight and 150 with obesity. Their results were compared to 61 age-matched healthy peers. The boys and teens with [normal weight](#) had a significantly higher testicular volume compared to their peers with obesity or overweight.

The study also looked at the relationship between obesity-related metabolic abnormalities, such as insulin resistance and hyperinsulinemia, on testicular volume. Insulin resistance is an impaired response of the body to insulin, resulting in elevated levels of glucose in the blood. Hyperinsulinemia is abnormally high levels of insulin in the body. Children and teens with normal insulin levels had significantly higher testicular volume compared to those with hyperinsulinemia. Post-puberty teens with insulin resistance had lower testicular volume compared to those without [insulin resistance](#).

"These findings help to explain the reason for the high prevalence of decreased testicular size in young men," Cannarella said.

Provided by The Endocrine Society

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