N—08

Healthy Mom, Healthy Baby

July 17, 2022

Welcome to Issue 8 of Science Says! Our weekly newsletter where you'll learn the latest healthy aging and C15:0 research news that our team of doctors, scientists, and experts are most excited about—without having to go search for it.

Eric and Steph
Co-Founders, Doctors, Nerds

What Dr. Stephanie Venn-Watson, our co-founder and author of over 80 peer-reviewed scientific publications, is reading.

HEALTHY AGING

C15:0, a foundational building block

While this newsletter typically focuses on improving health during our adult years, this week let's talk about the emerging importance of C15:0 at our earliest stages of life.

Multiple recent peer-reviewed publications support that C15:0 (also called pentadecanoic acid) is an important building block from oocyte, to embryo, to infant - and that a mother's baseline C15:0 levels determines how much C15:0 her baby has, too.

Oocyte-nurturing cells with higher C15:0 are healthier

As women reach 30 years old, their ability to become pregnant often declines. This condition is called diminished ovarian reserve (DOR). In a recent paper published in the *Journal of Assisted Reproduction and Genetics*, Zhao et al. showed that women with DOR had oocyte-nurturing cells (called granulosa cells) that were deficient in over a dozen fatty acids, including C15:0. The authors concluded that C15:0 and other fatty acids may help contribute to healthier oocytes and improved fertility.

Higher C15:0 is linked to healthier embryos

When we were embryos, we thrived in nutrient-rich follicular fluid. A recent study published in *Reproductive BioMedicine* showed that follicular fluid with higher C15:0 levels resulted in healthier embryos. In turn, these positive effects are known to improve outcomes of in vitro fertilization (also called IVF).

Mom's C15:0 body levels determine infant C15:0 levels

C15:0 has been newly discovered as an essential fatty acid that our bodies need to stay healthy. That is true for babies, too. Importantly, as published in the journal *Nutrients*, C15:0 levels in infants are driven by maternal C15:0 levels. That means, if mother is C15:0-deficient, her baby will have low C15:0 levels, too.

Infants with higher C15:0 have healthier growth & development

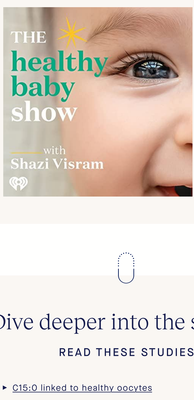
In a recent paper published in *Nutrients*, George et al. followed mom-infant pairs for six months and linked higher C15:0 intake by infants to healthier growth, including healthier body weight and head circumference. The authors conclude that a short list of fatty acids, including C15:0, may be most important to supporting both healthy body growth and brain development.

Your Pure & Safe C15:0 Source.

The science behind C15:0's essentiality, from oocyte to adulthood, is rapidly growing.

You and your family's health are our top priorities, and our promise is to provide fatty15 as the world's most trusted source of pure and science-backed C15:0. Importantly, our pure C15:0 ingredient (FA15) is Generally Recognized as Safe. This GRAS status means FA15 passed rigorous safety tests outlined by the FDA, which were reviewed by an independent panel of experts. Based on the GRAS status, fatty15 has been deemed safe for children 4 years old and up, as well as pregnant women and nursing moms.

Want more baby talk? Check out our discussion about C15:0 and fatty15 on the iHeartRadio - The Healthy Baby Show podcast, 'What I wish I had known about how we can shape your baby's brain & development'.



Dive deeper into the science

READ THESE STUDIES

- C15:0 linked to healthy oocytes
- C15:0's potential role in supporting successful IVF
- Maternal C15:0 levels drive infant C15:0 levels
- Higher C15:0 intake linked to better infant development