

**EMBARGOED UNTIL 12:01 A.M.  
WEDNESDAY, MARCH 3, 2021**

**Contact:**

The North American Menopause Society  
Eileen Petridis (epetridis@wearefalls.com)  
Phone: (216) 696-0229



**Women With Type 1 Diabetes Experience a Shorter Reproductive Period**

*New study suggests insulin deficiency and hyperglycemia disrupt female reproductive system, delaying menarche and causing premature ovarian aging*

CLEVELAND, Ohio (March 3, 2021)—The length of the female reproductive period (the time from the onset of menses to the final menstrual period) has important health implications. A new study compared the length of reproductive periods for women with type 1 diabetes with women without diabetes to confirm the effect diabetes has on the female reproductive system. Study results are published online today in *Menopause*, the journal of The North American Menopause Society (NAMS).

Insulin plays a key role in regulating female reproductive function, and previous studies have shown the effect of insulin deficiency on a woman's reproductive system. Until now, however, little was known about the effect of type 1 diabetes on the age of natural menopause.

This new study involving nearly 300 women compared the length of reproductive periods for women with type 1 diabetes with women without diabetes. It concluded that women with type 1 diabetes have shorter reproductive periods, with delayed menarche and earlier natural menopause as a result of insulin deficiency and hyperglycemia disrupting their reproductive system's normal function. Of note, however, is the fact that these findings only relate to women who were diagnosed with type 1 diabetes *before* reaching the age of menarche.

Because menopause is associated with a number of physiologic and metabolic changes, and early natural menopause is linked to increased cardiovascular disease and mortality, there is ongoing interest in identifying factors that provide some indication of when a woman will enter menopause. The researchers suggest that more research is needed to help determine modifiable factors that contribute to early menopause to improve the reproductive health of women with diabetes.

Results are published in the article "Women with type 1 diabetes (T1D) experience a shorter reproductive period compared with nondiabetic women: The Pittsburgh Epidemiology of Diabetes Complications (EDC) study and the Study of Women's Health Across the Nation (SWAN)."

“This study found that women with the onset of type 1 diabetes before menarche were at increased risk for a shorter reproductive lifespan. Thus, these women are not only at risk for premature ovarian aging because of early onset type 1 diabetes, they are also at increased risk for cardiovascular disease, osteoporosis, and early mortality because of early natural menopause. Understanding these risks and targeting appropriate risk-reducing strategies are key to optimizing the health and quality of life of these women,” says Dr. Stephanie Faubion, NAMS medical director.

For more information about menopause and healthy aging, visit [www.menopause.org](http://www.menopause.org).

Founded in 1989, The North American Menopause Society (NAMS) is North America’s leading nonprofit organization dedicated to promoting the health and quality of life of all women during midlife and beyond through an understanding of menopause and healthy aging. Its multidisciplinary membership of 2,000 leaders in the field—including clinical and basic science experts from medicine, nursing, sociology, psychology, nutrition, anthropology, epidemiology, pharmacy, and education—makes NAMS uniquely qualified to serve as the definitive resource for health professionals and the public for accurate, unbiased information about menopause and healthy aging. To learn more about NAMS, visit [www.menopause.org](http://www.menopause.org).