Obesity May Lead to a Decline in Lung Function in Premenopausal and Postmenopausal Women

New study evaluates effect of body mass index and waist circumference on chronic obstructive pulmonary disease and asthma

CLEVELAND, Ohio (Feb 23, 2022)—Obesity has been linked to a wide array of health problems. A new study suggests that abdominal obesity as measured by body mass index (BMI) and waist circumference, may result in a greater risk of chronic obstructive pulmonary disease (COPD) and asthma. Study results are published online today in Menopause, the journal of The North American Menopause Society (NAMS).

Previous studies have shown that women experience greater lung function impairment and have a higher risk of developing COPD than men, despite less exposure to smoke. In addition, female smokers, compared with male smokers, experience a more rapid decline in lung function between 45 and 50 years of age. The asthma incidence and hospitalization rate because of asthma are also higher in women than in men. It is believed that female hormones contribute to the greater incidence of asthma in women.

Obesity has been shown to affect the risk of these airway obstructive diseases and can lead to a decline in lung function. The incidence of COPD in people who are obese is significantly higher than in those of normal weight. In addition, women who are obese are more likely to experience asthma than men who are obese.

Until now, little has been known about the effects of obesity on COPD and asthma in women before and after menopause. This new study, based on data collected from more than one million women, aimed to determine the effect of BMI and waist circumference on COPD and asthma development in premenopausal and postmenopausal women.

The researchers concluded that, regardless of menopause status, high BMI and waist circumference were found to significantly increase the risk of COPD and asthma. Moreover, the higher the BMI and waist circumference, the greater the risk. In addition, being underweight was also identified as a risk factor for COPD in postmenopausal women, suggesting that controlling weight and maintaining a healthy body shape are key to helping prevent COPD and asthma in women.

Study results are published in the article “Obesity and abdominal obesity are risk factors for airway obstructive diseases in Korean women: nationwide population-based cohort study.”

“This study highlights yet another detrimental effect of obesity and abdominal adiposity in women and specifically identified that women with a high BMI and/or waist circumference had a greater risk of developing COPD and asthma. In addition to avoiding tobacco use, maintaining a healthy body weight
and composition may help reduce the incidence of COPD and asthma in women,” says Dr. Stephanie Faubion, NAMS medical director.

For more information about menopause and healthy aging, visit 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.