

# Menopausal symptoms

## How Korean Red Ginseng could act as a supplement for relieving menopausal symptoms



### Background



### Theory

#### The effect of red ginseng (RG) on menopausal symptoms:

Red Ginseng has been widely used to treat diseases such as cancer and cardiovascular disease (CVD) in East Asian countries. Previous studies have shown that Red Ginseng is effective against the psychological and emotional symptoms that are common in postmenopausal women. The aim of this study was to evaluate the effects of Red Ginseng on menopausal symptoms and cardiovascular risk factors in postmenopausal women.



### Method

#### A randomized, placebo-controlled, double-blind clinical trial:

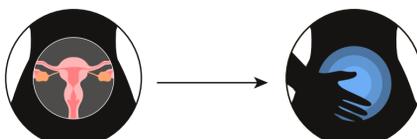
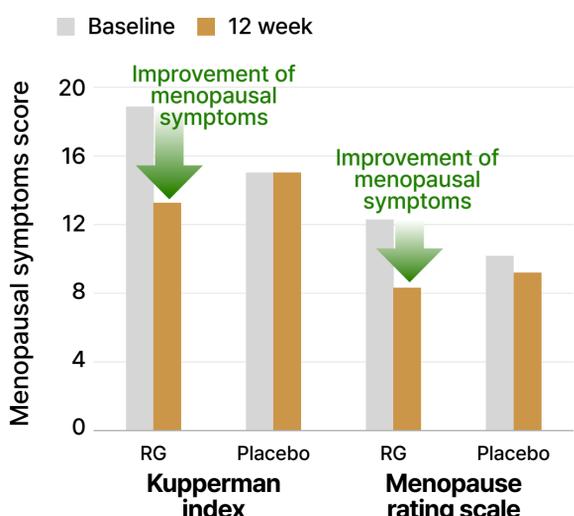
72 postmenopausal women were randomly assigned to either RG group (3 g RG/day, including 60 mg of ginsenosides) or placebo group for 12 weeks. We analyzed changes in menopausal symptoms (Kupperman index, menopause rating scale), cardiovascular risk factors (lipid profile, high sensitivity C reactive protein, carotid intima-media thickness), and serum estradiol levels from baseline to 12 weeks.



### Outcome

With 72 postmenopausal women (36 receiving RG, 36 receiving placebo) over 12 weeks

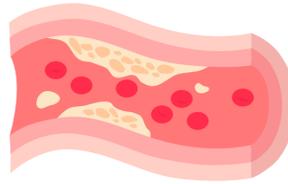
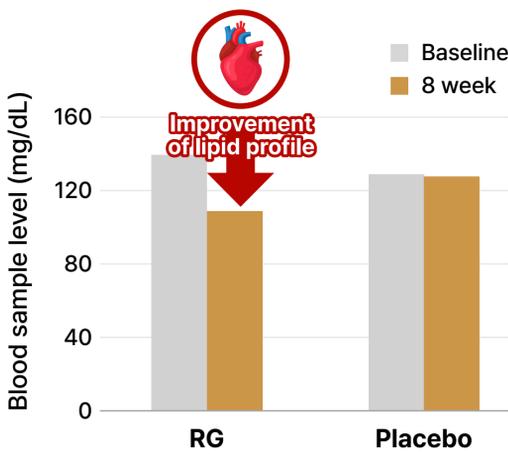
#### The evaluation index for women's menopause: Kupperman index & MRS



After 12 weeks, Kupperman index and MRS score significantly dropped in RG group compared with the placebo group.

\*Kupperman index & MRS (menopause rating scale): An index of menopausal symptom changes – higher scores indicate severe menopausal symptoms

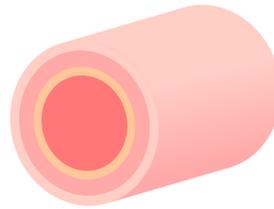
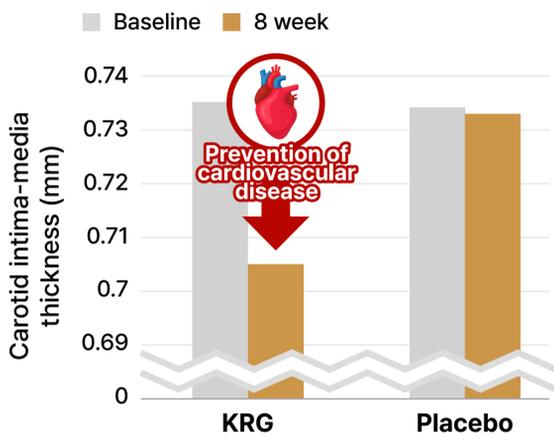
#### The evaluation of cardiovascular risk factor (1): Total cholesterol



Total cholesterol declined significantly after 12 weeks in RG group.

\*With high cholesterol, fatty deposits could be developed in the blood vessels, which could eventually grow and make it difficult for enough blood to flow through the arteries.

#### The evaluation of cardiovascular risk factor (2): Carotid intima-media thickness



CIMT was significantly reduced in RG group compared with the placebo group.

\*Carotid intima-media thickness: A surrogate marker in the development of cardiovascular disease

### Impact



#### Relief of menopausal symptoms and cardiovascular disease

The significantly increased T cell, B cell and WBC levels confirmed that KRG increases immunity not only for cancer patients but also for healthy subjects with reduced immunity.

### Conclusion

#### The favorable effects of Korean Red Ginseng on postmenopausal women

The Red Ginseng could be an attractive herbal dietary supplement for **relieving menopausal symptoms and conferring favorable effects on markers of cardiovascular disease** in postmenopausal women.