Records identified through database searching  
(n = 282 )

**Identification**

Additional records identified through other sources  
(n =79 )

Records after duplicates removed  
(n =307)

Studies included in qualitative synthesis  
(n =7)

Studies included in quantitative synthesis (meta-analysis)  
(n = 7 )

**Included**

**Screening**

**Eligibility**

Records screened  
(n =307 )

Records excluded (n =295)

-Animal experimental(n=169)

-in vitro studies(n=48)

-other effects of ginger(n=19)

-other herbal plants(n=37)

-review articles(n=22)

Full-text articles assessed for eligibility  
(n =12 )

Full-text articles excluded, with reasons(n =5 )

-not related to Considered biomarkers (n=3)

-same article in different journals (n=2)

*Figure 1: Flow diagram of the literature search for the effect of Ginger on serume lipids (TC, TG, LDL, HDL).*