156 studies identified through database searching (PubMed= 145 studies and Scielo= 11 studies)

149 studies after duplicates removed

149 potentially eligible studies identified and screened by title and abstract

107 studies excluded for not meeting inclusion or having exclusion criteria

42 full text articles assessed for eligibility

26 studies excluded for consisting of subjects with diseases:
- 2 climacteric/postmenopausal women
- 4 diabetic or hypertensive patients
- 3 polycystic ovary syndrome
- 1 after liver transplantation
- 1 chronic hepatitis C virus
- 3 immunologic diseases
- 3 psychiatric patients
- 5 clinical outpatients
- 1 dermatomyositis
- 2 HIV infected
- 1 breast cancer

3 studies excluded for consisting of specific population (employees, military service and truck drivers)

1 study excluded for consisting of pregnant women

2 studies excluded for consisting of elderly subjects

10 studies included in the present systematic review