levels increased 19.0 mg/dl and 28.0 mg/dl in men and women, respectively.

2. During the 15 years, in age-group 1, the mean levels of TC increased 29.7 mg/dl, and LDL-C levels increased 29.4 mg/dl; in age-group 2, the levels increased 19.1 mg/dl and 21.8 mg/dl, separately; in age-group 3, the levels increased 10.9 mg/dl and 14.0 mg/dl, separately. The lipids levels change in age-groups was statistically significant ($p < 0.01$).
3. Baseline lipids quintile was a stratification standard, except for the fifth quintile group, the changes of lipids levels in other groups were increased during the 15 years. For example, the first quintile of TC levels increased 36.4 mg/dl and 56.3 mg/dl in men and women, respectively; the third quintile of TC levels increased 14.1 mg/dl and 34.0 mg/dl, separately; but the fifth quintile had no increased, the changes were -14.2 mg/dl in men and 0.0 mg/dl in women. During the 15 years, the first quintile of LDL-C levels increased 46.7 mg/dl and 52.9 mg/dl in men and women, respectively; the third quintile of LDL-C levels increased 19.2 mg/dl and 32.6 mg/dl, separately; but the fifth quintile showed decreasing changes, the changes were -9.6 mg/dl in men and -6.0 mg/dl in women.

Conclusions From 1992 to 2007, the levels of TC and LDL-C were increased rapidly in multi-provincial cohort population. The increased rate of lipids was women more than men, and young group more than the older group. During the 15 years, the increased rate of lipids was the low levels group more than high levels group. To control the increase of TC levels in populations, especially in the young group individuals, was an important measure of early prevention of risk factors of cardiovascular disease.

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THE CHANGES OF SERUM LIPIDS IN CHINESE MULTI-PROVINCIAL COHORT STUDY

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Objectives To explore the changes in serum total cholesterol (TC) and low-density lipoprotein cholesterol (LDL-C) levels from 1992 to 2007, and analyse the characteristics of the changes in different subgroup of subjects.

Methods A total of 11 387 subjects aged 35–64 years were recruited from six provinces in China in the baseline survey in 1992, and were followed-up for cardiovascular disease till 2007. In 2007, 9184 subjects were successfully followed-up and 5966 subjects participated in the second examination. Totally 5740 participants, who had complete blood lipids information for both surveys, were included in this analysis. Baselines age were categorised into three groups: 1=35~44 years, 2=45~54 years and 3=55~64 years.

Results

1. In 1992, the mean level of TC was 179.5 mg/dl in men and 178.9 mg/dl in women, and LDL-C was 102.8 mg/dl in men and 101.8 mg/dl in women. In 2007, TC levels increased 12.6 mg/dl and 31.4 mg/dl in men and women, and LDL-C