

## Cholesterol Contents of Restaurant and Home Meals in Korea

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Cholesterol is an essential component of cell membranes and a precursor of several bioactive compounds. However, high dietary cholesterol has been known to increase the risk of diseases such as obesity and hypertension. Recently, in Korea, eating-out-population has been increasing. In this study, the cholesterol contents of restaurant and home meals for 22 Korean key menu were analyzed and compared. First, Korea was geographically divided into six regions (capital city, east, west, southeast, southwest, and middle) and restaurant menu (10 rice dishes and 12 soup/stew) were collected nationwide (total 1584 = 22 menu\*12 restaurants/region\*6 regions). Next, home meals were prepared according to the national standard recipes for the 22 menu. Each sample was homogenized and analyzed for cholesterol by saponification, derivatization, and GC. The applied analytical method for cholesterol showed excellent accuracy (99.7% recovery) and precision (cvs: 1.22% repeatability and 1.93% reproducibility). The cholesterol content highly varied depending on menu and sampling regions. Home meal showed the cholesterol levels of 2.8~46.0 mg/100 g for rice dishes and 2.5~31.5 mg/100 g for soup/stew. The mean cholesterol contents of restaurant foods representing six regions ranged from 1.4 to 40.3 and 4.1 to 39.4 mg/100 g for rice dishes and soup/stew, respectively. The overall mean of cholesterol content was higher in home meal than restaurant food for rice dishes while it was lower in home meal than restaurant food for soup/stew. Results show that dietary cholesterol intake from 22 Korean key foods is much less than the daily reference intake of cholesterol (300 mg).

### Biography:

Su-Jin Park completed her bachelor and masters degree at the department of food science and technology. And she worked as a researcher at Gurye Wildflower Institute in Korea. At present she is working as a researcher in the department of food science and technology at Sunchon National University, Korea.