

## Weights for the China Health and Nutrition Study

**One of the more frequently asked questions is: Are there weights to make these data representative of China or these nine provinces (8 provinces from 1989-1997)?**

The simplest answer is no. When the survey was planned and implemented, the State Statistical Office of China would not share their sample frame with the CHNS team. Furthermore, we could not have released the data sets for public distribution if we had worked with them. The design used extant census data as best as we could for a multi-level random sample. However it was determined by our sampling statistical colleagues that we could not create even cross-sectional sampling weights, let alone longitudinal ones.

### **How can researchers control for design effects:**

To control for multilevel multistage sampling and an array of multilevel modeling issues, we recommend that researcher utilize various levels of control. These include community level measures of the newly created urbanization index, or inclusion of each of the 12 components of this index which is now available with the CHNS Longitudinal Data. We also recommend that researcher adjust the standard errors and variance of their estimates by clustering at the community level if possible.

CHNS Year	Number of counties selected	Number of communities (PSUs) selected at random	Number of households selected per PSU)
1989	Total: 48	Total: 190 Urban neighborhoods: 31 Suburban neighborhoods: 31 Towns: 32 Rural villages: 96	Urban neighborhoods: 636 Suburban neighborhoods: 676 Towns: 672 Rural villages: 2138
1991	Total: 48	Total: 190 Urban neighborhoods: 31 Suburban neighborhoods: 31 Towns: 32 Rural villages: 96	Urban neighborhoods: 584 Suburban neighborhoods: 642 Towns: 641 Rural villages: 2073
1993	Total: 48	Total: 188 Urban neighborhoods: 30 Suburban neighborhoods: 31 Towns: 31 Rural villages: 96	Urban neighborhoods: 506 Suburban neighborhoods: 615 Towns: 600 Rural villages: 2014
1997	Total: 48	Total: 192 Urban neighborhoods: 32 Suburban neighborhoods: 32 Towns: 32 Rural villages: 96	Urban neighborhoods: 645 Suburban neighborhoods: 693 Towns: 666 Rural villages: 2092
2000	Total: 54	Total: 217 Urban neighborhoods: 36 Suburban neighborhoods: 37 Towns: 36 Rural villages: 108	Urban neighborhoods: 701 Suburban neighborhoods: 796 Towns: 751 Rural villages: 2346

2004	Total: 54	Total: 216 Urban neighborhoods: 36 Suburban neighborhoods: 37 Towns: 35 Rural villages: 108	Urban neighborhoods: 698 Suburban neighborhoods: 784 Towns: 713 Rural villages: 2288
2006	Total: 54	Total: 218 Urban neighborhoods: 36 Suburban neighborhoods: 37 Towns: 37 Rural villages: 108	Urban neighborhoods: 702 Suburban neighborhoods: 786 Towns: 763 Rural villages: 2323
2009	Total: 54	Total: 218 Urban neighborhoods: 36 Suburban neighborhoods: 37 Towns: 37 Rural villages: 108	Urban neighborhoods: 703 Suburban neighborhoods: 764 Towns: 759 Rural villages: 2293

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