MICROSOFT EXCEL - BUILDING GRAPHS

Basic steps for creating graph in Microsoft Excel:

1. Input your data in an Excel file.
2. Choose a type of graph to create.
3. For Pie, Bar, Column charts your data sould be organized in a frequency table, if it is not then you sould make one.
4. Select data and labels (titles)
5. Insert the chart
6. Switch axes if necessary.
7. Adjust your labels on the axes and legends, if desired.
8. Change the axis measurement option, if desired.
9. Add data labels if necessary.
10. Reorder data, if needed.

Which chart do I use to represent my data???
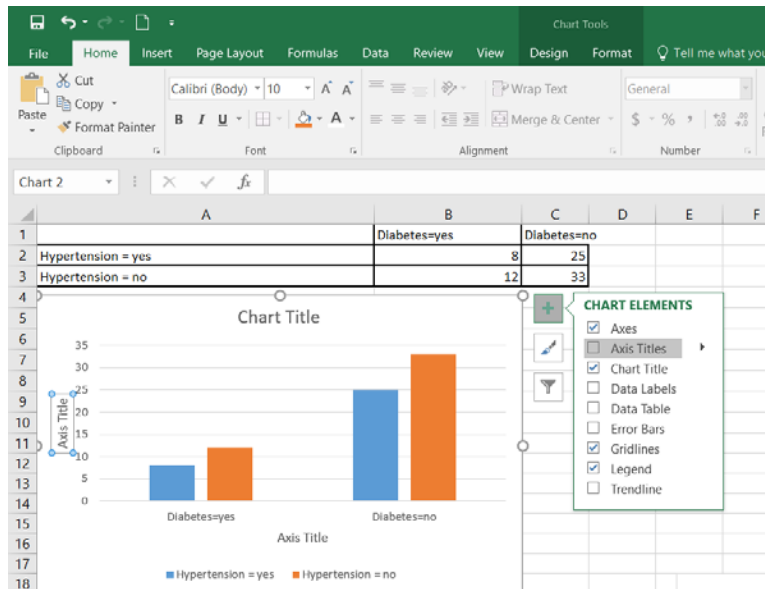We choose the type of the chart based on the type of the variable/variables we want to represent
One variable

- Qualitative variable:
    - o Dichotomial variable – use Pie chart
    - o Nominal variable with >2 categories – use Pie Chart or Column/Bar chart
    - o Ordinal (categorical) variable – use Pie Chart or Column/Bar chart, for scores use Box plot
- Quantitative variable
    - o Discret variable – use Column chart or Box plot
    - o Continuous variable – use Histograme or bell shape graph or Box plot

Relation between two variables

- One qualitative variable with another qualitative variable – use 100% Stacked Column or Column/Bar chart
- One qualitative variable with another quantitative variable – use box plot
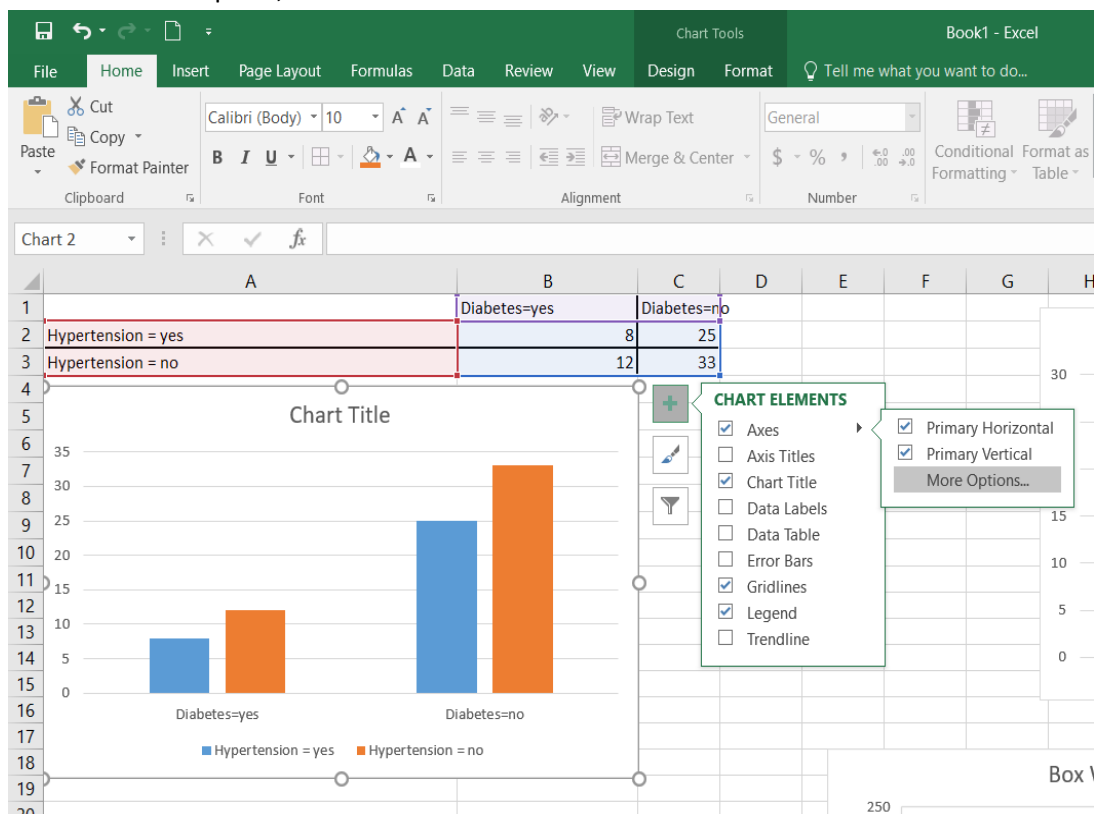- One quantitative variable with another quantitative variable – Scatter chart

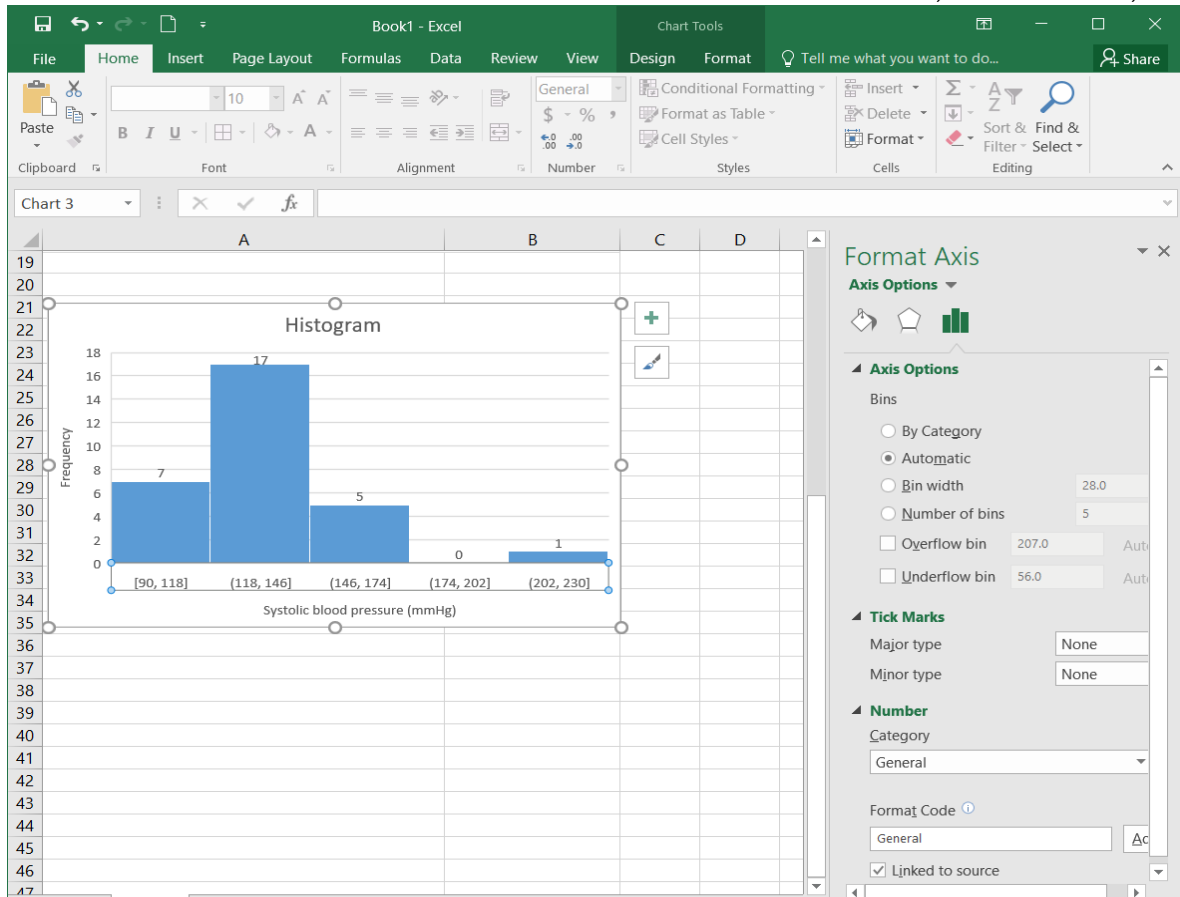Adjust your labels and legends, if desired.

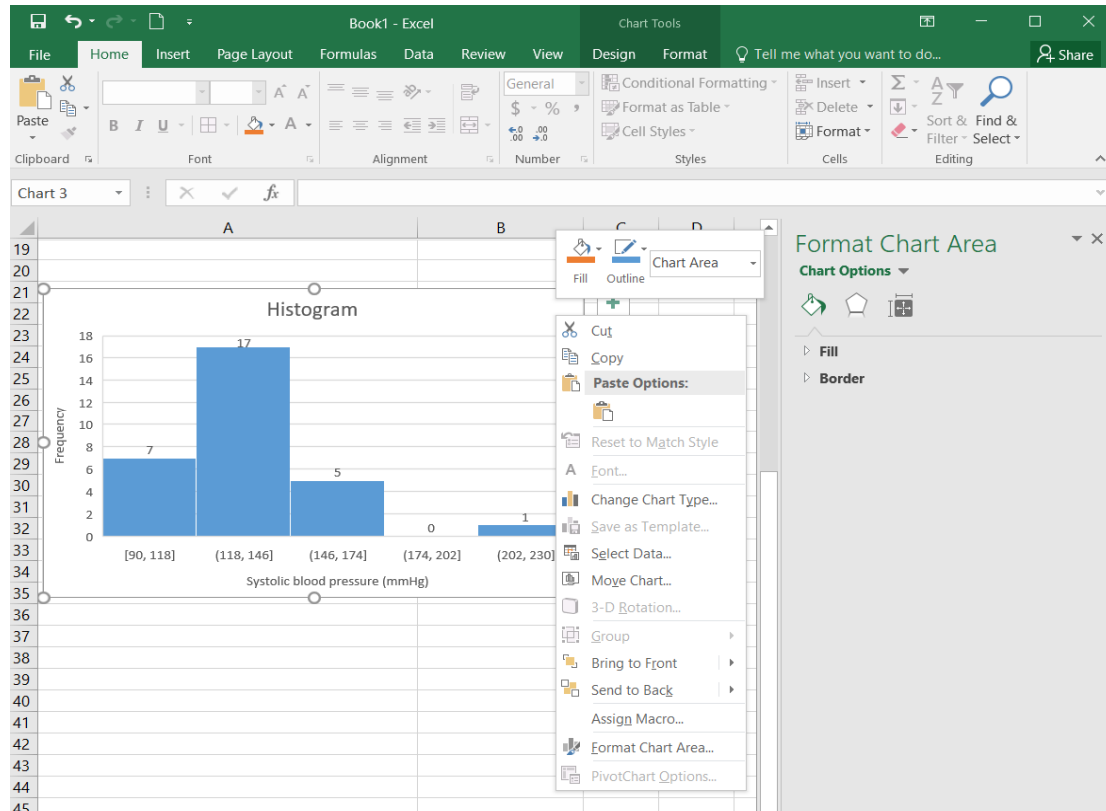To include a title select **Chart Title**.
To define axis select **Axis Titles**.

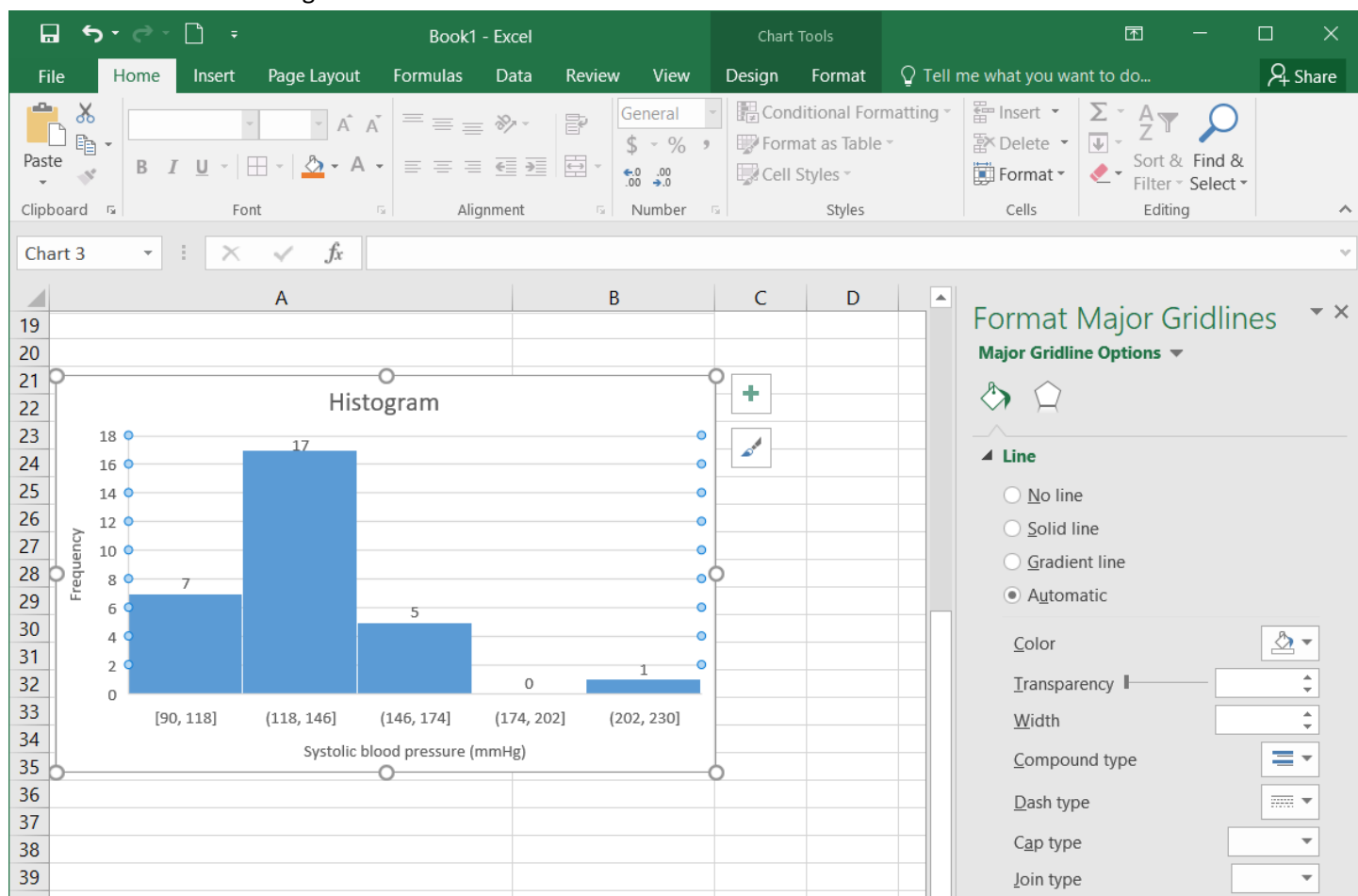Change the axis measurement option, if desired:

Filling with a solid color: right click on the Chart Area (white background) or from the right part of the screen:

Gridlines. Gridlines are horizontal and vertical lines that help us to see where precisely a particular data marker is in relation with the axes. The default for most chart types involves some gridlines but we can add or remove them as we wish: select the chart and go to Chart Tolls and choose Gridlines.

Data labels: can be attached to data points (such as series name, category name, or value). To add labels, select first the data point to which you want to add labels and right click and choose add data labels or: