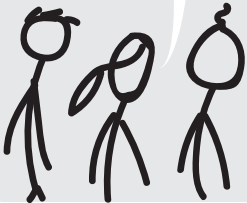


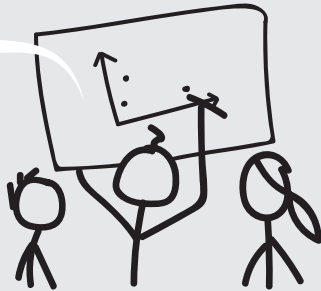
well done guys.  
Let's get you a  
balanced diet!



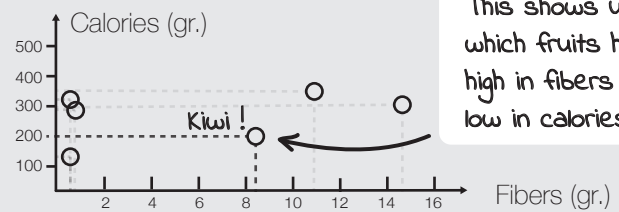
There are so many  
fruits. which ones  
should we chose?



Let us draw a scatterplot  
to show nutrition values  
for all fruits and chose  
some fruits with comple-  
mentary values.

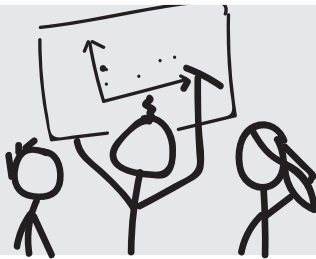


we map "Calories" on the vertical axis and "Fibers" on  
the horizontal axis.

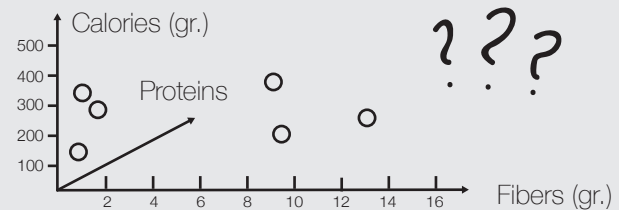


This shows us  
which fruits have  
high in fibers and  
low in calories.

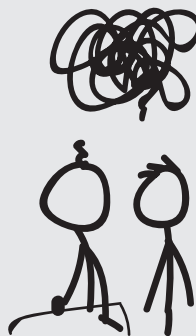
Now, what about proteins? we could add a 3rd  
spatial dimension, .. perhaps.



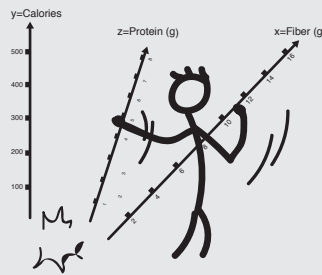
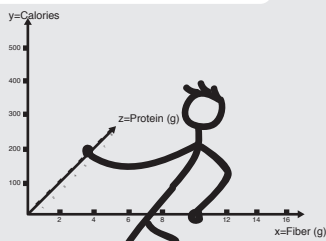
That does not look like a good solution ... can you  
spot which fruit has the most proteins?



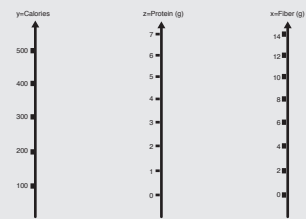
Guys, this is not going  
to work. How should  
we map all the other  
nutrients? water?  
Calcium? Carbohy-  
drates, Fat, etc..



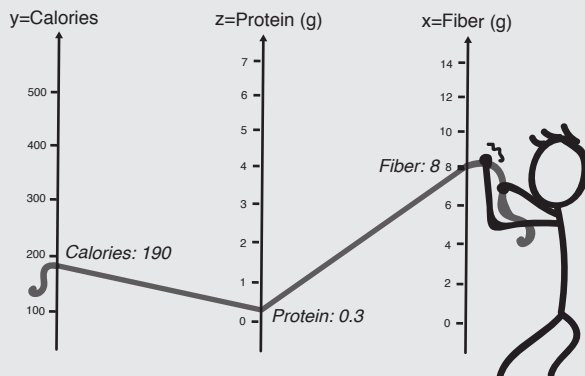
Let's change the arrangement of the axes...



...like so :



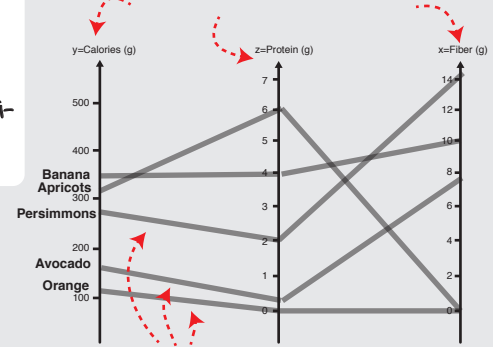
We now connect the values for each fruit with a line.



And obtain our Parallel Coordinates Plot (abbreviated: PCP).

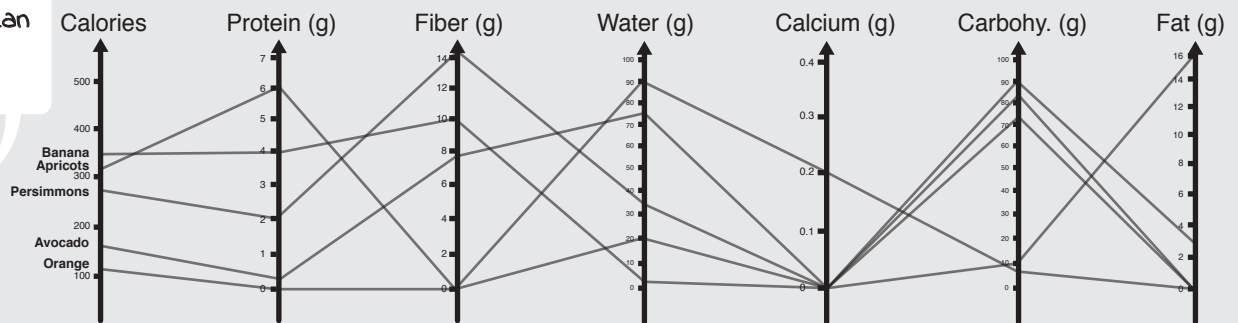


"Axes" = Dimensions

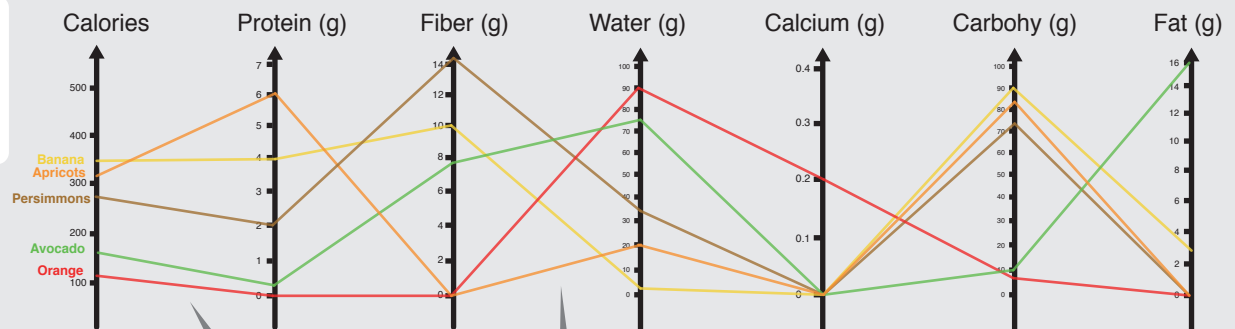


"Polylines" = data elements

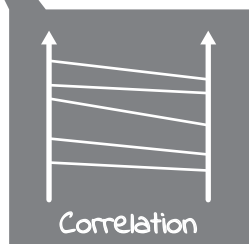
See how we can show many dimensions?



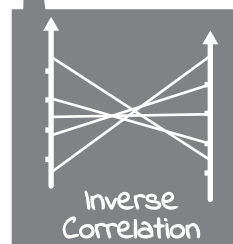
For better readability, let's add colors.



PCPs can show correlations between dimensions, depending on how the polylines cross and cluster.

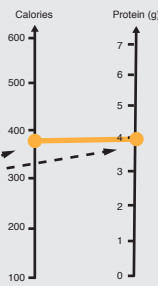


The polylines are rather parallel.

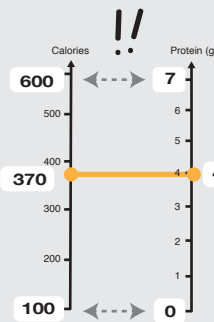


The polylines are rather crossing.

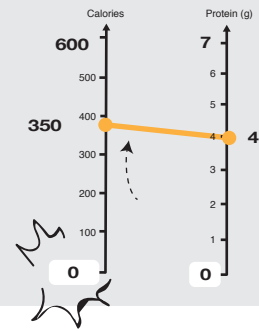
It looks like Bananas got the same amount of calories than they have proteins!



Not really! Look at the axis labels: the scales are different and one axis is not even starting at '0', but 100!

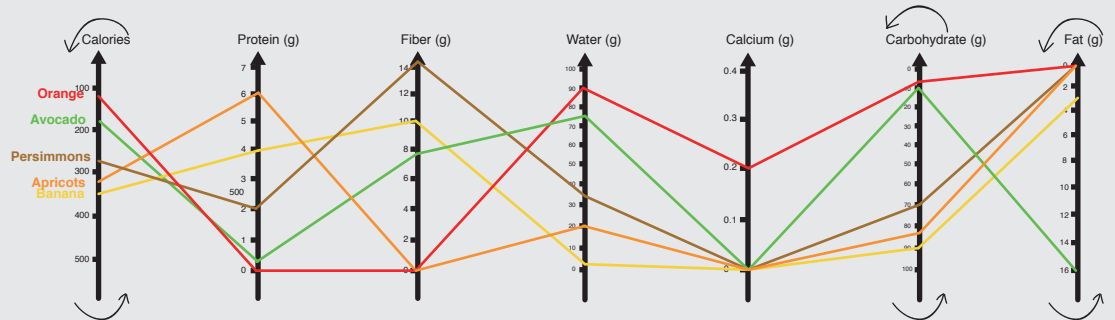
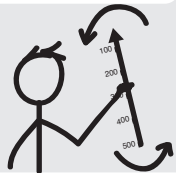


Let's correct at least the truncated axes to '0'.

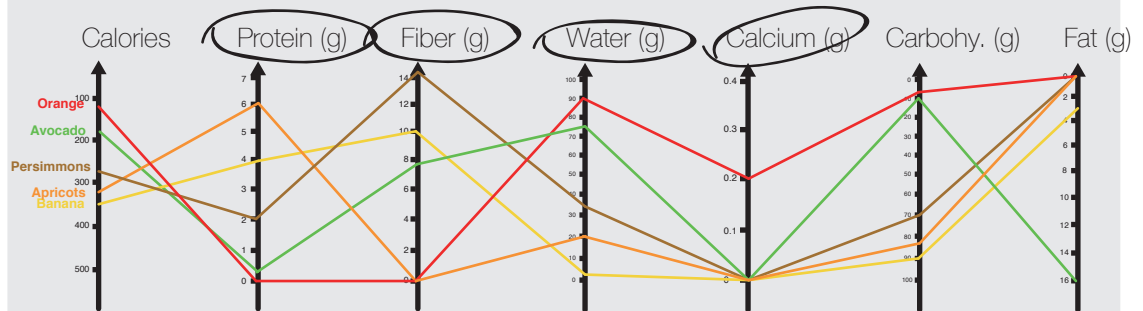


Also, make sure all axes are oriented so that high values can be compared in a meaningful way.

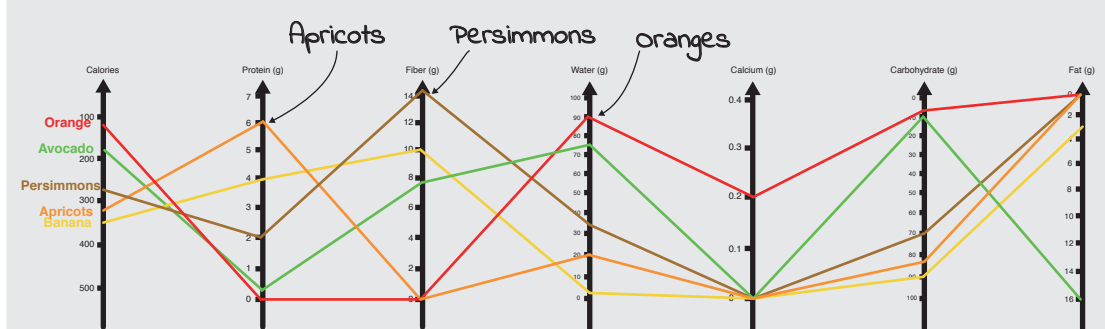
For example, this can mean that higher values are up or as in our example, 'desired' values are up, like low fat.



Try picking the three types with the highest in fiber, protein, water, and calcium!



Cool! I've got my decision! Let's buy some persimmons, apricots and oranges.



Sold out! we hesitated for too long!

