**Flavors Of Cacao: Chocolate Bar Ratings**

**Introduction:**

Chocolate is a gift from nature and a multisensorial product. It appeals to all five senses [Sight, Touch, Hearing, Smell, Taste] thanks to its attributes: color, snap, mouthfeel and complexity of flavors and aromas. People all around the globe love it. It’s one of the favorites - if not THE favorite - sweet product around.

But what makes people rate one chocolate bar above another? Is it the Cacao bean origin? Or is it the percentage of Cocoa in the bar?

We will the insights from this analysis to figure it all out.

**The Data**

The data used for this analysis was gotten from Kaggle under this [license.](http://opendatacommons.org/licenses/dbcl/1.0/) It contains expert ratings of over 1,700 individual chocolate bars, along with information on their regional origin, percentage of cocoa, the variety of chocolate bean used and where the beans were grown.

### Flavors of Cacao Rating System:

* 5= Elite (Transcending beyond the ordinary limits)
* 4= Premium (Superior flavor development, character and style)
* 3= Satisfactory (3.0) to praiseworthy(3.75) (well made with special qualities)
* 2= Disappointing (Passable but contains at least one significant flaw)
* 1= Unpleasant (mostly unpalatable)

**Analysis Questions**

* Where are the best cocoa beans grown?
* Which countries produce the highest-rated bars?
* What’s the relationship between cocoa solids percentage and rating?

**Project Tool Used: Excel**

**Data Cleaning/Manipulation**

* The data was outdated, so I went to [Brady Brelinski’s website](http://flavorsofcacao.com/chocolate_database.html) for up-to-date information.
* I removed duplicate data.
* I added the rating labels (Elite, Premium, Satisfactory, Disappointing, Unpleasant) in a new column for easier analysis and visualization using a Nested IF function: [=IF(F2<2,"Unpleasant",IF(F2<3,"Dissapointing",IF(F2<3.75,"Satisfactory",IF(F2<4,"Praiseworthy","Premium"))))]
* I removed unnecessary columns (REF)

**Analysis and Insights**

I created a pivot table to analyze the data, these were the insights the data showed:

1. The countries where the best cocoa beans are grown include —but are not limited to— Peru, Dominican Republic, and Tanzania.
2. U.S.A was the leading producer of the highest rated chocolate, far ahead of Canada and the U.K.
3. The visualization shows that there was no correlation between the Cocoa percentage and the ratings.