Excel – Practice

Example:

Effect of 2 veterinary preparations (No.1, No.2) on AST activity in blood serum of horses was tested in an experiment.

In 10 horses (control), to which the preparation was not applied, the following AST activities in blood serum have been found (in $\mu moll^{-1}$):

0.337, 0.302, 0.405, 0.400, 0.381, 0.398, 0.377, 0.392, 0.345, 0.409.

In 10 horses (test group 1), to which the preparation No.1 was applied, the following AST activities in blood serum have been found (in $\mu moll^{-1}$):

0.341, 0.302, 0.504, 0.452, 0.309, 0.375, 0.479, 0.423, 0.311, 0.333.

In 10 horses (test group 2), to which the preparation No.2 was applied, the following AST activities in blood serum have been found (in $\mu moll^{-1}$):

0.401, 0.359, 0.462, 0.428, 0.386, 0.475, 0.384, 0.420, 0.415, 0.365.

Evaluate the effects of these two preparations on changes in AST activity in blood serum of horses – what preparation influences AST activity in blood serum in horses and how great is this influence?

Type a protocol in Excel (or Word) that will contain:

- **Table** of primary data in the samples
- Calculated basic statistical characteristics: **average, SD, SEM** of each sample
- Calculated probability of ***F*-test** and ***t*-test** for every preparation (i.e.compare mean value of data for each preparation against the mean value of the Control sample)
- **Conclusion** (answer)
- **A graph** figuring the evaluated data (i.e. a column chart for mean values of all samples analyzed in the experiment)