Internal impacts

We got the weight that changed the most and try to figure out the specific impact on the food system, so we proceed to analyze the impact of the transformation of the food model on the yields of vegetables, eggs, and wheat in a country. Because there are not many variables, We simply establish four linear regression models which use four indicators respectively as dependent variable and the yields of three main products as Independent variable.

Yi = α + β1 vegetables + β1 meat + β1 wheat

Overall, all four regression models passed the F-test, indicating that the fitted equations were statistically significant.

Four linear regression models also pass the significance test of regression coefficients since the significance test of regression coefficients can determine whether the effect of the independent variable on the dependent variable is significant. Therefore, all three variables passed the significance test and did not need to be excluded.