stage, it was found a better food conversion with a 100% potato flour substitution in the period from 61 to 75 days with an average of 10.83. The 75% potato flour substitution during the period between 76 to 90 days had an average of 15.81. An economic analysis was done and it was found that the lowest cost, 0.32 UDD/kg, is obtained with the 100% potato flour substitution. The Freedman test did not detect any significant differences in the meat. During the whole research, it was detected a mortality of 2.5 %, which is considered acceptable.

It is recommendable for the Guinea pig raising and production the use of 100% of potato flour during the period from 30 to 45 days. In the period between 46 and 60 days, it can be used either potato flour or corn mill because it was no detected any response differences between them. In the weight gaining stage, it is recommended to use 100% of potato flour in the period from 61 to 75 days. During the period from 76 to 90 days it should be used a 75% of potato flour.

It is recommended the use of the 100% potato flour substitution because it has the lowest cost. It is also recommended to slaughter the animals when they are 75 days old because it is when they reach the commercial weight.