INTRODUCTION: Microbial contamination of food is a major public health problem since it affects millions of people worldwide. Unproved hygiene practices within the food processing environment can cause the contamination with pathogenic particles, turning food into a risk for the safety of the consumers. For the assessment of the hygienic conditions related to food handling is essential to know the sanitary conditions of the establishments since that can reduce the risks of food contamination. Those food contaminations can cause severe problems to the consumer’s health.

OBJECTIVES: Assessment of microbial contamination in the materials and hands of food handlers in different restoration units in the district of Bragança.

MATERIALS AND METHODS: Microbiological assessment of the following microorganisms: Staphylococcus aureus, total and fecal coliforms and Escherichia coli in the hands of food handlers, and analysis of total germs, total and fecal coliforms and Escherichia coli in handling utensils in different restoration units in the district of Bragança, analyzed in the Public Health Laboratory of Bragança, in the period between January and December 2013. For the statistical analysis plan the program of Microsoft Office Excel 2007 was used.

RESULTS AND DISCUSSION: Regarding the hands of manipulators, 53.67% of the cases showed contamination. Data analysis of hands samples showed 28.74% of total coliform, 14.96% of fecal coliforms, 3.23% of Staphylococcus aureus and 6.74% of Escherichia coli. The contamination of crockery, cutlery and other kitchen utensils, was confirmed in 28.80% of the samples, with unsatisfactory results and 10.87% with bad results. Those contaminations stand out 91.67% of the samples with the presence of total germs, 53.47% with total coliforms, 27.78% with fecal coliforms and 15.28% with E. coli. It was also found that 60.33% of the samples had satisfactory results (Graph 1).

Regarding the hands of manipulators, the data analysis showed that the highest “satisfactory” results were from governamental establishments (100%), the highest “unsatisfactory” results were from dairies (88.9%). As for the contamination of crockery and kitchen utensils, the highest “satisfactory” results were from fishmongers (81.8%), and the highest “unsatisfactory” results were from fishmongers (81.8%), and the highest “unsatisfactory” results were from fishmongers (81.8%), and the highest “bad” results were from fishmongers (81.8%) (Graph 2).

Regarding the hands of manipulators, the city of the district with the highest “satisfactory” results was Bragança (73%) and the city with the highest “unsatisfactory” results was Vimioso (83%). As for the contamination of crockery and kitchen utensils, the highest “satisfactory” results were from Vimioso and Macedo de Cavaleiros (100% for both), the highest “unsatisfactory” results were from Bragança (46.9%) as for the highest “bad” results (31.25%), (Graph 3).

CONCLUSION: We conclude that food handler contamination is the main cause of bad hygiene in the food manipulation. The hygiene of the crockery, cutlery and other kitchen utensils used in food manipulation was better, however it have some levels of contamination.

REFERENCES: