ANTIMICROBIAL COMPOSITE MATERIAL
ORIGIN OF CONTAMINATION IN WHEAT
MILLS FIGHT AGAINST MICROORGANISM
Material selection:

- Food grade
- GOOD antimicrobial activity
- NO effects on wheat flour
- GOOD mechanical properties
**Human pathogen (Modified AATCC 100 method)**

- *Staphylococcus aureus*
- *Escherichia coli*
- *Salmonella*

**Mycotoxins fungi mix (ISO 16869/08 & 846/97)**

- *Aspergillus flavus* (aflatoxins B1 and G1)
- *Fusarium graminearum* (DON and ZEN)
- *Penicilium verrucosum* (ochratoxin A)
RESULTS & COMPARISON

COMPOSITE MATERIAL

WOOD MULTILAYER

WOOD TULPIER
100 g wheat flour kept for 3 hours in contact with the material

RESULTS & COMPARISON: NO EFFECTS ON FLOUR
RESULTS & COMPARISON: BREAD MAKING TEST
MILLS FIGHT AGAINST MICROORGANISMS
THANK YOU