Introduction
Pumpkin is mainly produced by small farmers. Nowadays, muffin is a tendency in bakery products, consumed as a snack. This research aimed to develop a wholemeal pumpkin flour (WPF) with conventional drying method for replace wheat flour in muffin.

Results and Discussion
For obtain WPF, the pulp and the skin of pumpkin were used. Pumpkins were sanitized, cut, blanched, dried in a tray dryer with forced air for 6h at 50°C, crushed and sieved. The chemical composition of the WPF resulted in the following values, according to the methodology: 7.17 ± 0.09% moisture; 4.02 ± 0.36% fat; 13.0 ± 0.07% protein; 6.56 ± 0.09% ash; 32.56 ± 3.89% of dietary fiber; and 36.56 ± 3.89% digestible carbohydrates, calculated by difference.

The texture of the muffins, analyzed with texturemeter TA-XT2i, the specific volume of muffins and crumb color can be seen in Table 1. The purchase intention are expressed in Figure 3 (a), where 1 is “Definitely wouldn’t buy” and 5 “Definitely would buy”. The sensory evaluation is expressed in Figure 3 (b) where 1 is “Dislike extremely” and 9 is “Like extremely”.

Conclusion
This research proved be possible to use WPF as partial substitute of wheat flour in muffins. The muffin with 5% of WPF (F2) had better sensory acceptance.

Acknowledgments
The authors thank PIBIC / Unicamp for undergraduate research scholarships, CAPES by the master’s scholarships, the FAEPEX-Unicamp for research assistance and EUROGERM by wheat flour supply.

Bibliography

ID: 10.19146/pibic-2016-51584

Figure 1 – Flowchart of production of the muffins

Figure 2 – Flowchart: from the wholemeal pumpkin flour to the muffins

Figure 3 – Sensory Evaluation of muffins: (a) Purchase intention; (b) Acceptance test