## PREPARATION OF WHITE SALTED NOODLES WITH STARCHES OBTAINED FROM RICE, TAPIOCA AND CHUFA TUBERS

Salama, Manal F.; A.S. Nadir and Wafaa M.M Abozeid

\* Food Science and Technology Dept., National Res. Centre, Cairo, Egypt.

## **ABSTRACT**

A study was conducted to determine the suitability of substituting portions of wheat flours with Rice, Tapioca and Chufa tubers (*Cyperus esculentus*) starches for white salted noodles. The levels of substitution were 10, 20 and 30%. Ten formulas were prepared and compared with white salted noodle made from wheat flour only. Analytical methods, viscoelastic properties, cooking quality, colour attributes, Scanning of electron microscopy and sensory evaluation were determined.

Scanning electron micrographs showed that Rice starch was smaller than Tapioca and Chufa starches.

Pasting properties of starches like maximum viscosity was higher for Tapioca and Chufa tubers starches compared to wheat flour and Rice starch. When up to 20% of wheat flour was replaced by Rice and Tapioca starches, the cooking quality of white salted noodles decreased. The sensory evaluation indicated that panelists preferred the noodles made from wheat flour substituted with 10 and 20% Rice, Tapioca and Chufa starches.

Keywords: White salted noodle, Rice starch, Tapioca starch, Chufa tubers starch, Scanning electron microscopy.