Title: Quality Rice Flour Production for Extruded Products through Wet-Milling

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Abstract: Rice (Oryza sativa L.) is one of the leading cereal crops in the developing world. Rice grain is a major source of carbohydrates, protein and other essential nutrients. The Degree of Milling (DOM) is a term used to describe the milling process. With an increase in DOM, the preservation of bran decreases. This, in turn, has an influence on the level of head rice yield and the related economics. Sri Lanka has two types of raw rice varieties based on pericarp color. Those were white rice and red rice which contained polished red rice and unpolished red rice. This study was aimed to investigate the quality of extruder processed rice flour from raw rice at different intervals of soaking as it is a significant factor in determining the quality of rice products. The weight of 100 grains, length, width and whiteness value of raw rice samples were tested. Rice grinding has been used to minimize particle size and to obtain rice flour. Rice flour yield of white rice, polished rice and unpolished rice with 256 microns sieved were 96%, 92% and 90% respectively. Based on this outcome of extruded products, it can be concluded that soaking for two hours is needed for white rice and polished rice to get optimum yield through wet-milling and unpolished red rice requires 4 hours of soaking to give optimum yield. The quality of the flour products depends on the soaking time and the type of milling. All the raw rice can be used for the wet-milling after 2 to 4 hours of cold water soaking to yield more than 90% of 256-micron particle size granules.