The findings showed that there was a significant impact of added hydrocolloids (inulin and resistant starch) and their concentrations on the meltabilty, stretchability, hardness and yield of low fat mozzarella cheese. Hence, it was concluded that the addition of inulin @ 0.4% and/or resistant starch @ 1.0% as fat replacers revealed the exceptional prospects to produce low fat Mozzarella cheese without much compromising the quality and functionalitOn the basis of functional parameters, cheese samples with inulin @ 0.4% and resistant starch @ 1.0% exhibited the best results. Two hydrocolloids i.e. inulin (0.2, 0.4 and 0.6%) and resistant starch (0.5, 1.0 and 1.5) were added in Mozzarella cheese making from low fat milk (2% fat). The Mozzarella cheese samples were analyzed for physico–chemical composition, functional properties, cheese yield and textural profile.