In recent decades, the growing consumer concern with issues related to health has driven the development of foods with functional properties, which are those that contain compounds with the potential to retard the establishment of disease and thereby improve the quality and life expectancy. The aim was to determine the in vitro antioxidant activity and quantify the phenolic compounds and vitamin C in "shake" based on green acerola (Malpighia emarginata D.C.) powder. The determination of phenolic compounds total was performed by the method of Folin-Denis reagent, using a standard curve of gallic acid as a reference by a spectrophotometer at 700nm. The vitamin C content of the fruit extracts was determined by the 2,6-dichloroindophenol titrimetric method (AOAC). The antioxidant activity was performed by the method of radical free DPPH. Statistical analysis was performed by the average and standard deviations. The content of phenolics in "shake" was 520.00 mg GAE.100 g⁻¹. The vitamin C content of the "shake" was 699.24 mg/100 ml. The EC₅₀, amount of extract required to reduce by 50% the initial concentration of DPPH was 474.52 µg/mL. Given the above, it can be concluded that the "shake" developed in this study has a high content of bioactive compounds such as phenolic compounds and vitamin C, giving this product a high antioxidant activity.