**OBJECTIVE**: To investigate whether nutritional factors and possible risk factors for cataract could influence the lens optical density. Age-related cataract (ARC) is the leading cause of blindness in the world, particularly in developing countries. The benefit of long-term nutrient intake to reduce the risk of age-related ocular disease such as cataract or macular degeneration is subject to controversy.

**METHODS**: This is a cross-sectional study where 150 cataract patients 60-80 years old that hospitalized in the Nikocary Hospital were chosen for evaluation. Cataract subjects were further divided into subgroups depending on the location of the cataract. All underwent routine eye examinations and blood samples were taken from each one for blood biochemistry analysis including serum levels of glucose, urea, cholesterol, triglycerides, complete blood cell count, and a questionnaire that include demographical factors and nutritional habitual used for data collection.

**RESULTS**: according the results of this study intake of vegetables and fruit was not ideal it can lead to lower levels of antioxidants that associated with ocular lens opacity. Other results presented in full text.

**Conclusion**: this study is suggestive of an association of nutritional deficiency and anemia with increased risk of cataract.