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Elif Demirci* (edemirci@ankara.edu.tr), Ankara University Faculty of Sciences, Department of Mathematics, Besevler, Ankara, 06100 Ankara, Turkey. *A Mathematical Model For Obesity Epidemic in a Non-Constant Population.*

In this paper, we give an epidemic model for obesity contagion. The population size is assumed to be nonconstant which is more realistic. The model considers vertical transmission of obesity and also obesity related death rate. We give local stability analysis of the model. Finally, some numerical examples are presented. (Received September 16, 2014)