

## English summary

Rakenteiden Mekaniikka (Journal of Structural Mechanics)  
Vol. 46, No 2, 2013, pp. 45-55

### A model of getting and losing weight

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**Summary.** In the athletics the competitors are divided into different weight groups. Very often a sportsman or a sportswoman has difficulties to keep the dead load within the fixed limits. In most cases one has to slim down before the competition. In order to avoid the emergency measures it would be worthwhile to know how the body weight is progressing with time. With the simple mathematical model presented here it is possible to predict the behavior of personal body weight either when losing or getting it. In addition it is possible by this model to estimate the time after which the desired body weight is attainable.

*Key words:* energy balance, system parameters, initial weight and theoretical weight limit, fitting to statistics