

# The effect of the combination of adaptogens plant and synthetic origin on the physical efficiency

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## Materials and methods of research

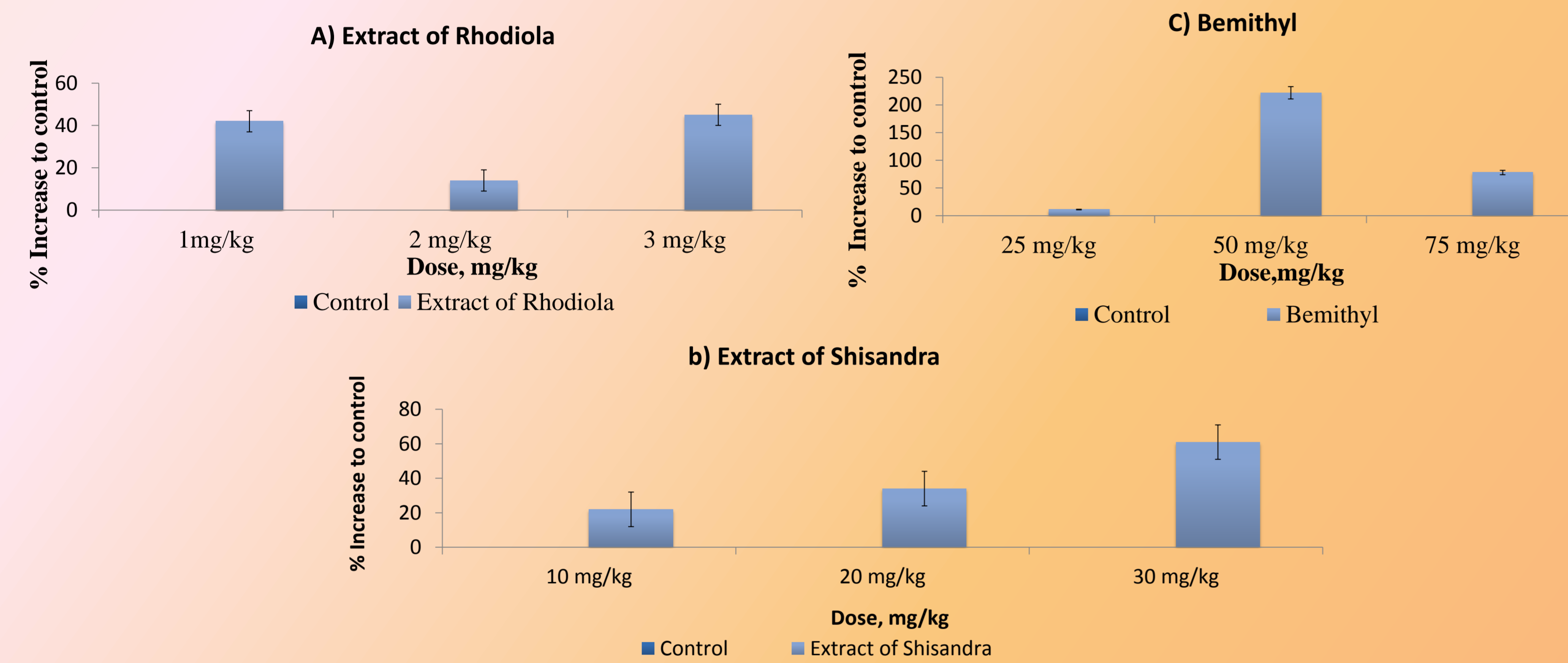
Laboratory animals -mouse males weighing 18-22 g  
 Objects of research: Bemithyl (doses of 25, 50 , 75 mg/kg)  
 Dry extract of Rhodiola rosea( dose 1 , 2, 3 mg / kg)  
 Dry extract of Schisandra chinensis (doses of 10, 20, 30 mg/kg )  
 The drug comparisons : Nooklerin ( 50 mg / kg)

## Methodology:

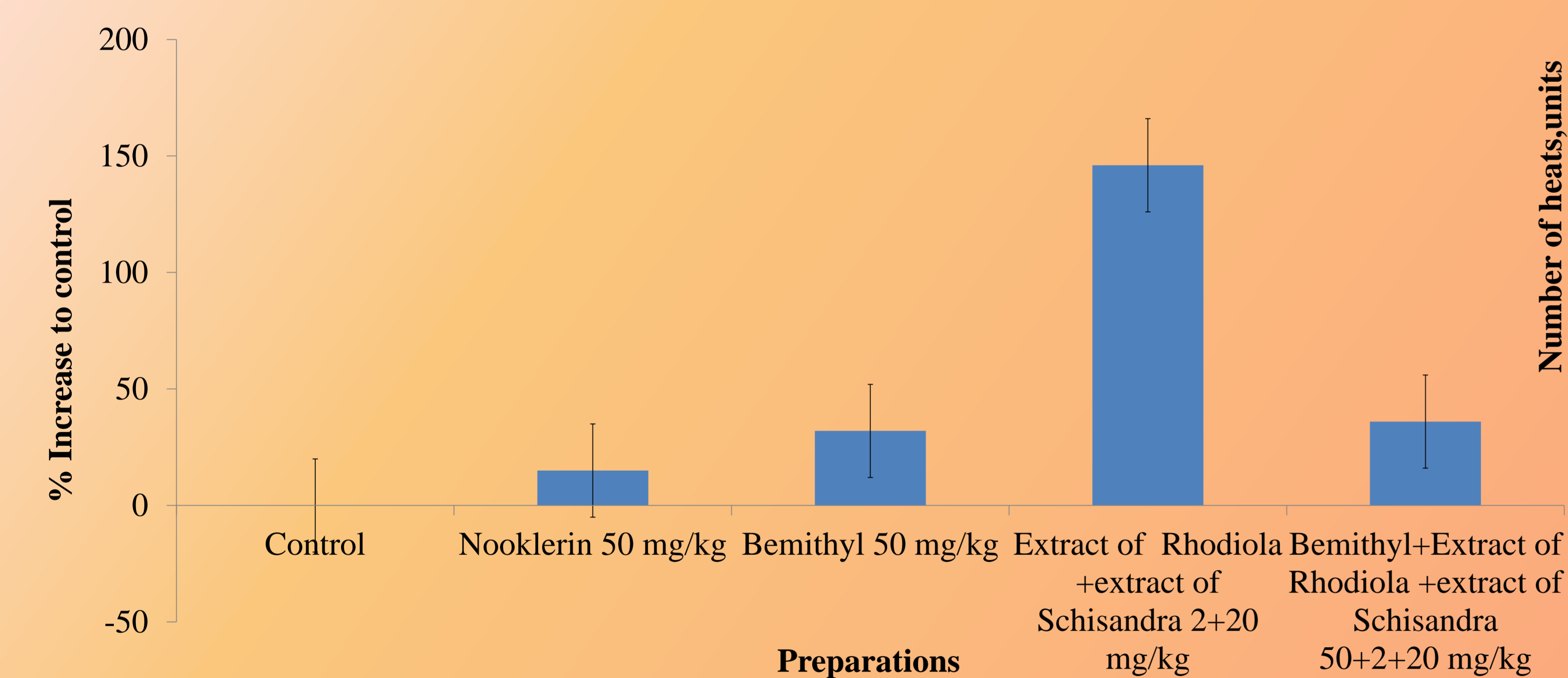
Test " Shuttle swimming "

Test " Forced swimming "

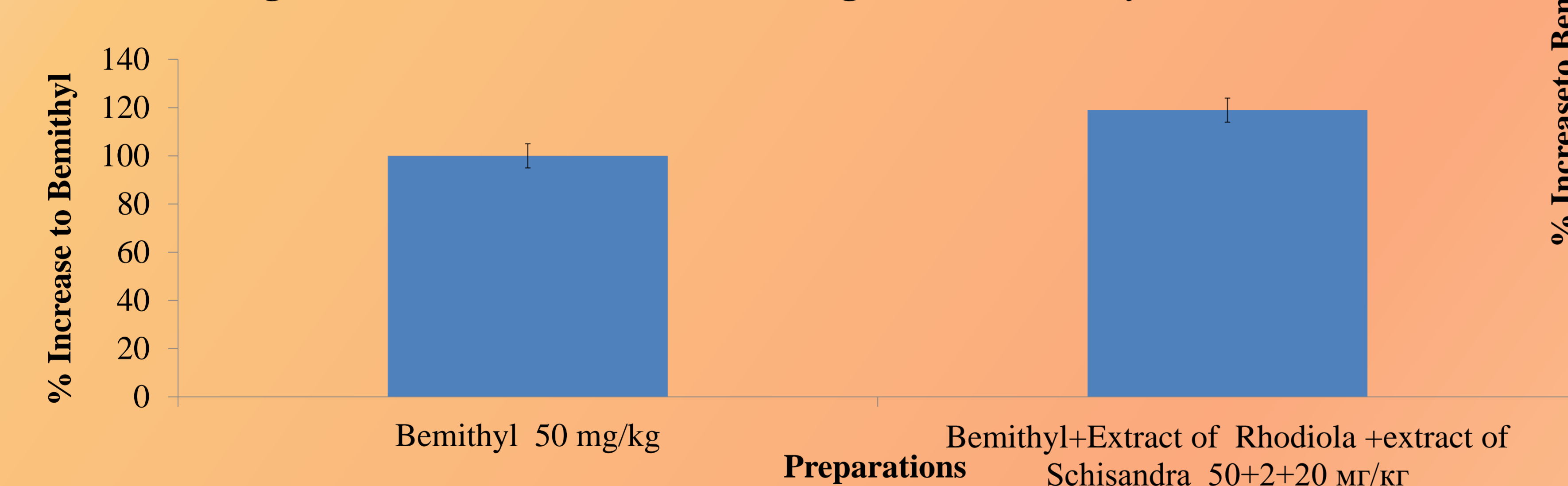
## Histogram of "dose-effect" for single administration of the a) Extract of Rhodiola b) Extract of Shisandra c) Bemithyl



## Influence oral administration of adaptogens synthetic and plant origin on time «Forced swimming» laboratory animals



## Influence oral administration of adaptogens synthetic and plant origin on «Forced swimming» laboratory animals

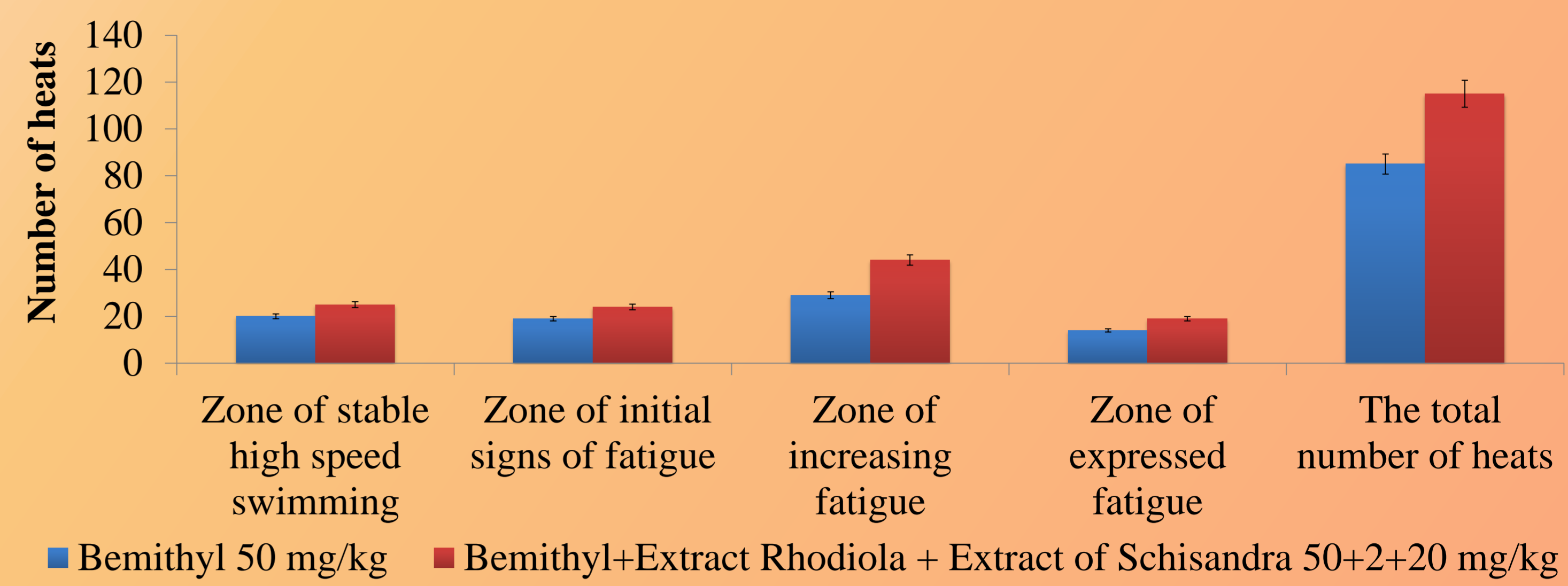


Shuttle swimming

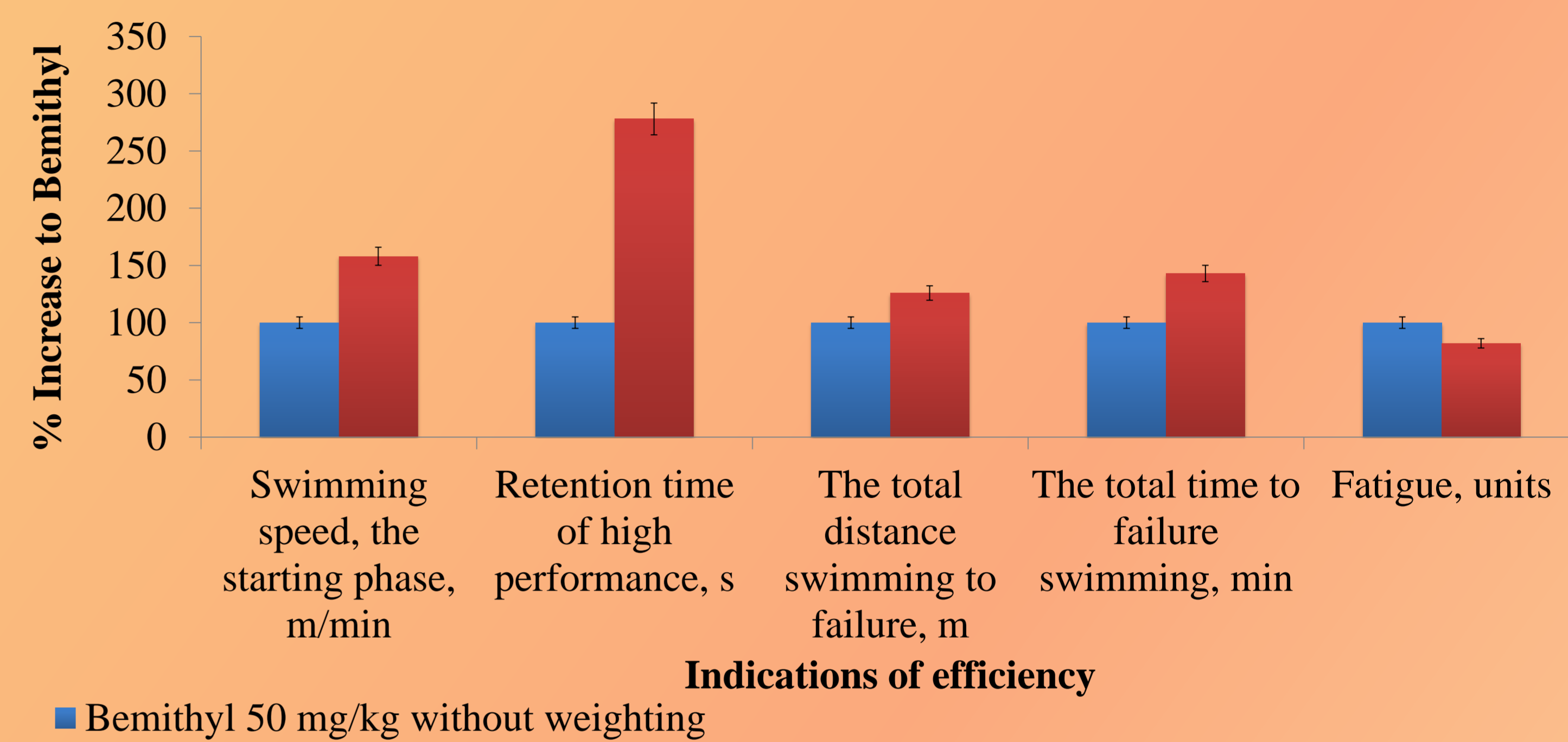
Forced swimming



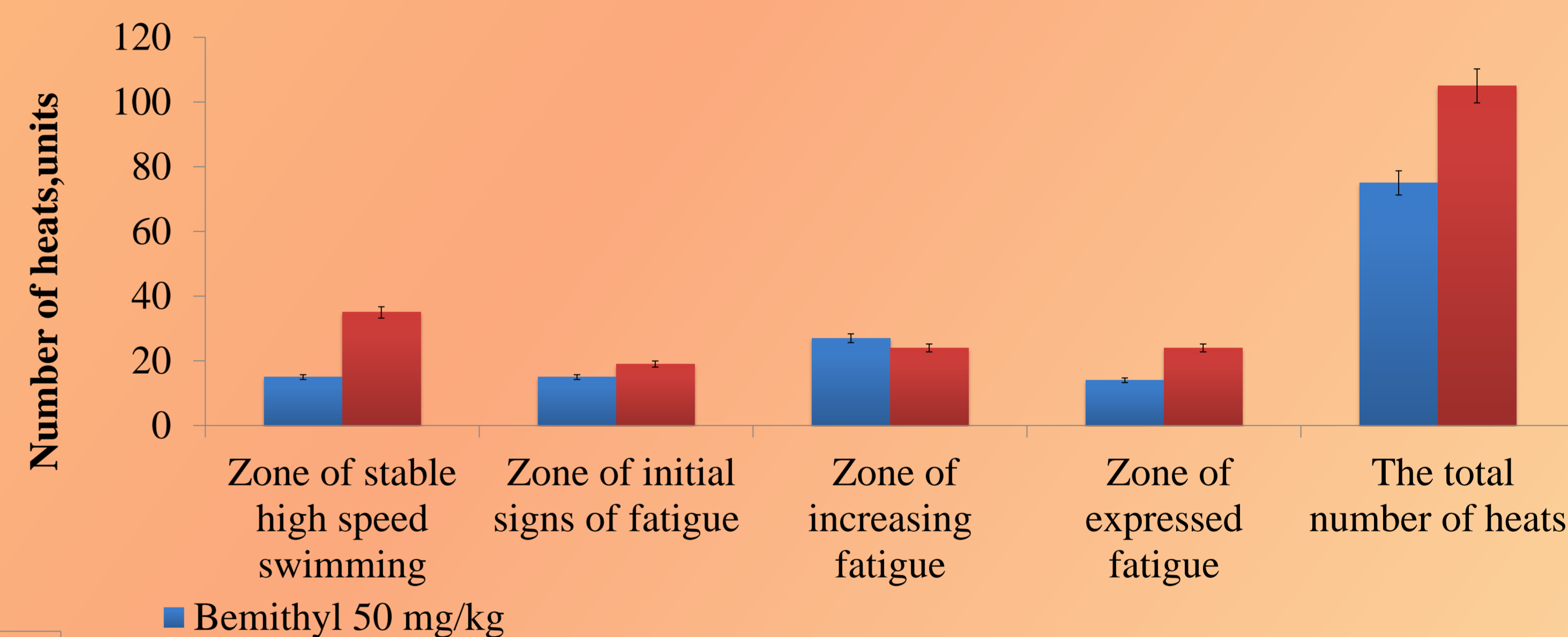
## The effect of combination of adaptogens on the number of heats in the test "Shuttle swimming" without weighting



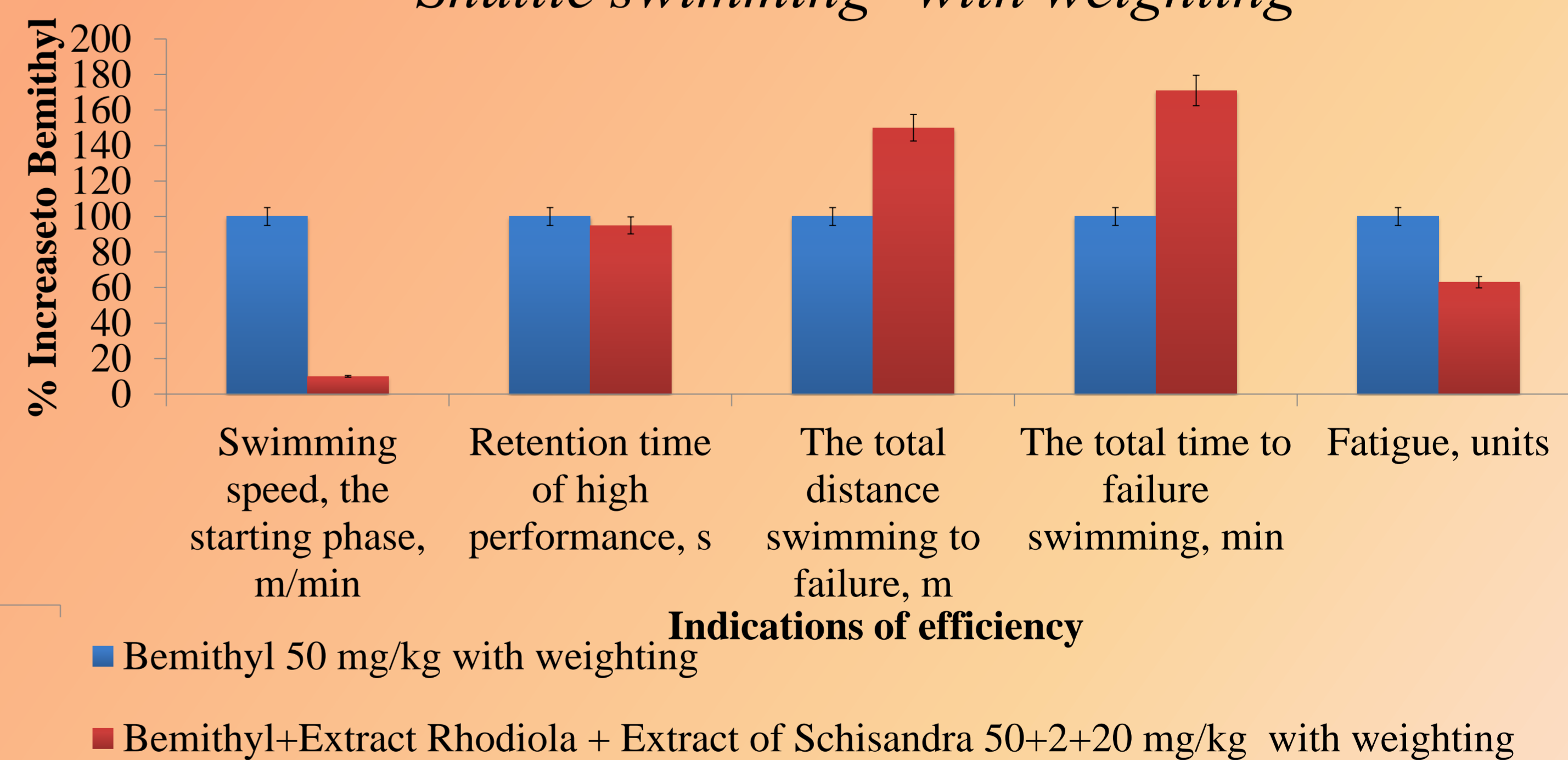
## The effect of combination adaptogens plant and synthetic origin on the physical efficiency mouse male in the test "Shuttle swimming" without weighting



## The effect of combination of adaptogens on the number of heats in the test "Shuttle swimming" with weighting



## The effect of combination adaptogens plant and synthetic origin the physical efficiency mouse male in the test "Shuttle swimming" with weighting



## The results:

- 1) In the test "Forced swimming" combination bemithyl+ dry extract of Rhodiola rosea + dry extract of Schisandra chinensis improves physical efficiency by 16% compared to the reference preparation (bemithyl).
- 2) In the test "Shuttle swimming" without weighting combination bemithyl + dry extract of Rhodiola rosea + dry extract of Schisandra chinensis helped increase the efficiency and endurance by 241% and 156% respectively and reduce fatigue by 10% compared to the reference preparation (bemithyl).
- 3) In the test, "Shuttle swimming" with weighting a combination of bemithyl + dry extract of Rhodiola rosea + dry extract of Schisandra chinensis helped increase endurance by 338% and reduce fatigue by 38% compared to the reference preparation (bemihyl).