STATISTICS 3
WS 2019 (Mag. Thomas Forstner)

Course-Number: 366.542

5) The influence of specific diets on hepatomegaly (enlargement of the liver) is investigated in an animal experiment with mice. Three diets were given which differed in the amount of carbohydrate they contained: 8 mice received a low carbohydrate diet, 8 received an intermediate carbohydrate diet and 8 mice received a diet with a high amount of carbohydrate. The liver weights are expressed as percentage of body weight.

	Liver weight [expressed as percentage of body weight]							
Low carbohydrate	3,64	3,77	4,18	4,21	3,88	3,93	3,91	3,96
Intermediate carbohydrate	3,42	3,96	3,87	4,19	3,58	3,76	3,84	3,98
High carbohydrate	3,17	3,63	3,38	3,47	3,39	3,41	3,55	3,44

   a) Formulate appropriate statistical hypotheses for this research question.
   b) Choose an appropriate statistical test (type I error = 5%) for evaluating this research question. Don't forget to verify the assumptions of the statistical test.

6) Use an appropriate method to conduct multiple comparisons based on the results of example 5.