

The effect of pentadecapeptide BPC 157 on high-fat diet induced hypertension in rat

Vilim Dretar^a, Filip Radevski^a, Pavla Peraić^a, Josh Fry^a, Marko Belamarić^a, Marko Antunović^a, Ivan Krezić^a

^a*School of Medicine University of Zagreb, Department of Pharmacology*

Vilim Dretar (0000 – 0002 – 3969 – 712X), Filip Radevski (0000-0001-7556-1652), Pavla Peraić (0000-0002-1733-5443), Josh Fry (0000 – 0003 – 1280 - 7576), Marko Belamarić (0000 - 0002 – 0552 – 8264), Marko Antunović (0000-0002-3801-5481) , Ivan Krezić (0000-0001-7994-5645)

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Hyperlipidaemia, hypercholesterolaemia and hypertriglyceridaemia are known as factors that increase blood pressure and risk of cardiovascular complications. We wanted to examine effects of pentadecapeptide BPC 157 on high-fat diet induced hypertension in rats. 4 Male Wistar Albino rats (240g) 4 months old, were used in this study. 2 rats per each group were fed with fat (white bacon) for 4 weeks. Control group was given water p.o. ad libitum while BPC group was given (10ng/kg) of pentadecapeptide BPC 157 per liter solution p.o. ad libitum. Blood pressure was measured using noninvasive tail cuff method every day for 4 weeks period. Systolic blood pressure increased in both groups but increase in control groups was significantly higher than in BPC 157 treated group (CON day 0. = 158 mmHg, BPC day 0. = 155 mmHg; CON day 25. = 205 mmHg, BPC day 25. = 165 mmHg). Drop of blood pressure in first few days can be attributed to adapting on the new food that was given to rats. Feeding rats with a high-fat diet is known to produce changes of which one of the consequences is increased blood pressure or hypertension. We proved that pentadecapeptide BPC 157 decreases systolic blood pressure induced by fat diet.