

Effects of long-term dietary administration of kale (*Brassica oleracea* L. var *acephala* DC) leaves on antioxidant status and blood biochemical parameters in rats. **Katarzyna Papierska, Ewa Ignatowicz, Jadwiga Jodynis-Liebert, Małgorzata Kujawska, Róża Biegańska-Marecik**

Supplementary Materials

Table S1. Biochemical blood markers of rats fed a diet with freeze-dried kale leaves for 90 days.

Parameter	Sex	Content of kale leaves in feed (g/kg)			
		0	10	30	60
Alanine aminotransferase (U/L)	M	61.4±7.5	52.5±6.2	55.3±3.6	54.1±8.4
	F	48.6±3.5	51.7±6.3	51.7±6.9	52.7±5.1
Aspartate aminotransferase (U/L)	M	169±42	124±23*	179±25	114.3±30.7**
	F	152±28	163±31	203±49*	164±33
Alkaline phosphatase (U/L)	M	87.6±17.2	74.7±10.7	62.9±8.2	82.5±11.2
	F	50.6±9.0	44.2±7.0	37.2±6.9	60.7±13.6
Total protein (g/L)	M	55.4±2.2	58.5±3.0	57.2±4.0	56.4±3.4
	F	57.2±3.9	58.9±4.8	58.4±3.3	57.9±4.2
Total cholesterol (mmol/L)	M	1.4±0.1	1.5±0.2	1.7±0.3	1.5±0.2
	F	1.9±0.3	1.6±0.4	1.5±0.2	1.9±0.3
Chloride (mmol/L)	M	98.3±1.7	98.3±1.1	99.3±1.8	98.3±1.5
	F	99.8±1.6	100.6±1.8	103.7±1.6	101.4±2.2
Inorganic phosphorus (mmol/L)	M	2.7±0.4	2.3±0.1	2.7±0.2	2.5±0.2
	F	3.0±0.5	2.3±0.4	2.7±0.4	2.4±0.4
Glucose (mmol/L)	M	8.8±1.2	7.7±1.2	6.2±1.0	9.0±1.4
	F	7.8±1.3	7.0±1.2	5.5±0.3**	7.5±1.3
Creatinine (mmol/L)	M	45.9±6.5	44.5±6.8	46.8±2.9	44.8±6.1
	F	44.0±3.9	45.4±5.4	48.4±5.4	42.7±4.4
Blood urea (mmol/L)	M	8.2±1.5	9.0±0.6	8.5±1.5	9.0±1.5
	F	7.8±0.6	8.7±1.0	7.3±0.9	8.7±1.5
Potassium (mmol/L)	M	6.0±0.4	5.9±0.3	5.8±0.3	5.9±0.3
	F	5.9±0.3	5.8±0.3	6.2±0.8	6.0±0.2
Sodium (mmol/L)	M	149.3±1.9	150.3±1.6	150.5±1.9	148.5±1.3
	F	150.6±1.8	149.1±2.6	148.0±1.9	147.8±2.3
Calcium (mmol/L)	M	2.6±0.1	2.8±0.1**	2.9±0.1***	3.1±0.1***
	F	2.6±0.2	2.8±0.1	2.8±0.1	2.9±0.1

Results are presented as mean±standard deviation of 8 values corresponding to 8 animals, each value being the mean of quadruplicate assays; M - males; F - females; * $p<0.05$ for statistical difference vs. control; ** $p<0.01$ for statistical difference vs. control; *** $p<0.001$ for statistical difference vs. control.

Table S2. Hematological markers in rats fed a diet with freeze-dried kale leaves for 90 days.

Parameter	Sex	Content of kale leaves in feed (g/kg)			
		0	10	30	60
White blood cells count (G/L)	M	5.7±1.1	6.8±1.0	5.4±1.4	6.2±0.8
	F	2.9±0.7	4.3±0.7	3.4±0.7	4.4±0.9
Neutrophils (%)	M	5.3±0.9	5.2±1.2	6.3±1.0	5.3±0.8
	F	3.7±0.6	5.1±0.9	4.4±0.6	3.7±0.5
Lymphocytes (%)	M	90.4±1.8	89.5±3.7	88.2±2.1	89.9±2.5
	F	92.8±1.0	90.5±4.2	90.7±2.6	63.0±2.8
Monocytes (%)	M	3.2±0.5	4.1±1.0	4.1±0.8	3.7±0.7
	F	2.5±0.4	2.7±0.6	2.6±0.4	2.3±0.4
Eosinophils (%)	M	0.7±0.1	0.9±0.2	0.9±0.2	0.8±0.1
	F	0.7±0.2	1.2±0.2	1.3±0.3	0.6±0.1
Basophils (%)	M	0.4±0.1	0.3±0.1	0.4±0.1	0.4±0.1
	F	0.4±0.1	0.4±0.1	0.7±0.1	0.3±0.1
Red blood cells count (T/L)	M	8.8±0.3	8.8±0.4	8.6±0.4	8.9±0.2
	F	8.4±0.4	8.2±0.5	8.4±0.3	8.4±0.4
Hemoglobin (g/L)	M	150.5±6.2	146.9±3.5	142.9±5.5	149.4±3.9
	F	149.4±5.6	143.4±8.6	146.0±4.7	145.5±5.9
Platelet count (G/L)	M	1260±121	1289±126	1265±174	1093±92
	F	1203±53	1158±108	1111±51	1158±108

Results are presented as mean±standard deviation of 8 values corresponding to 8 animals, each value being the mean of quadruplicate assays; M - males; F - females.