

Aronia Scientific Research – Heavy Metals
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Title	Authors	Reference	URL Link
Aronia melanocarpa Ameliorates Adrenal Cytoarchitecture Against the Hexavalent Chromium-Induced Injury	Savici J, Cristina RT, Brezovan D, Radulov I, Balta C, Boldura OM, Muselin F.	Biol Trace Elem Res. 2020 Oct 1. doi: 10.1007/s12011-020-02401-7. Online ahead of print.	Aronia melanocarpa Ameliorates Adrenal Cytoarchitecture Against the Hexavalent Chromium-Induced Injury SpringerLink
Beneficial Impact of an Extract from the Berries of Aronia melanocarpa L. on the Oxidative-Reductive Status of the Submandibular Gland of Rats Exposed to Cadmium	Dąbrowski A, Onopiuk BM, Car H, Onopiuk P, Dąbrowska ZN, Rogalska J, Brzóska MM, Dąbrowska E.	Antioxidants (Basel). 2020 Feb 22;9(2):185. doi: 10.3390/antiox9020185.	Antioxidants Free Full-Text Beneficial Impact of an Extract from the Berries of Aronia melanocarpa L. on the Oxidative-Reductive Status of the Submandibular Gland of Rats Exposed to Cadmium HTML (mdpi.com)
The Impact of a Polyphenol-Rich Extract from the Berries of Aronia melanocarpa L. on Collagen Metabolism in the Liver: A Study in an In Vivo Model of Human Environmental Exposure to Cadmium	Kozłowska M, Brzóska MM, Rogalska J, Galicka A.	Nutrients. 2020 Sep 10;12(9):2766. doi: 10.3390/nu12092766.	Nutrients Free Full-Text The Impact of a Polyphenol-Rich Extract from the Berries of Aronia melanocarpa L. on Collagen Metabolism in the Liver: A Study in an In Vivo Model of Human Environmental Exposure to Cadmium HTML (mdpi.com)
Estimation of the Chelating Ability of an Extract from Aronia melanocarpa L. Berries and Its Main Polyphenolic Ingredients Towards Ions of Zinc and Copper	Borowska S, Tomczyk M, Strawa JW, Brzóska MM.	Molecules. 2020 Mar 26;25(7):1507. doi: 10.3390/molecules25071507.	Molecules Free Full-Text Estimation of the Chelating Ability of an Extract from Aronia melanocarpa L. Berries and Its Main Polyphenolic Ingredients Towards Ions of Zinc and Copper HTML (mdpi.com)
Extract from Aronia melanocarpa L. Berries Protects Against Cadmium-induced Lipid Peroxidation and Oxidative Damage to Proteins and DNA in the Liver: A Study using a Rat Model of Environmental Human Exposure to this Xenobiotic	Mężyńska M, Brzóska MM, Rogalska J, Galicka A.	Nutrients. 2019 Mar 31;11(4):758. doi: 10.3390/nu11040758.	Nutrients Free Full-Text Extract from Aronia melanocarpa L. Berries Protects Against Cadmium-induced Lipid Peroxidation and Oxidative Damage to Proteins and DNA in the Liver: A Study using a Rat Model of Environmental Human Exposure to this Xenobiotic HTML (mdpi.com)
The Protective Impact of Black Chokeberry Fruit Extract (Aronia melanocarpa L.) on the Oxidoreductive System of the Parotid Gland of Rats Exposed to Cadmium	Dąbrowska Z, Dąbrowska E, Onopiuk B, Onopiuk P, Orywał K, Mroczo B, Pietruska M.	Oxid Med Cell Longev. 2019 Nov 23;2019:3403264. doi: 10.1155/2019/3403264. eCollection 2019.	The Protective Impact of Black Chokeberry Fruit Extract (Aronia melanocarpa L.) on the Oxidoreductive System of the Parotid Gland of Rats Exposed to Cadmium (nih.gov)

Extract from Aronia melanocarpa L. Berries Prevents Cadmium-Induced Oxidative Stress in the Liver: A Study in A Rat Model of Low-Level and Moderate Lifetime Human Exposure to this Toxic Metal	Mężyńska M, Brzóska MM, Rogalska J, Piłat-Marcinkiewicz B.	Nutrients. 2018 Dec 21;11(1):21. doi: 10.3390/nu11010021.	Extract from Aronia melanocarpa L. Berries Prevents Cadmium-Induced Oxidative Stress in the Liver: A Study in A Rat Model of Low-Level and Moderate Lifetime Human Exposure to this Toxic Metal (nih.gov)
Protective Effect of Chokeberry (Aronia melanocarpa L.) Extract against Cadmium Impact on the Biomechanical Properties of the Femur: A Study in a Rat Model of Low and Moderate Lifetime Women Exposure to This Heavy Metal	Brzóska MM, Roszczenko A, Rogalska J, Gałążyn-Sidorczuk M, Mężyńska M.	Nutrients. 2017 May 25;9(6):543. doi: 10.3390/nu9060543.	Nutrients Free Full-Text Protective Effect of Chokeberry (Aronia melanocarpa L.) Extract against Cadmium Impact on the Biomechanical Properties of the Femur: A Study in a Rat Model of Low and Moderate Lifetime Women Exposure to This Heavy Metal HTML (mdpi.com)
Effect of an Extract from Aronia melanocarpa L. Berries on the Body Status of Zinc and Copper under Chronic Exposure to Cadmium: An In Vivo Experimental Study	Borowska S, Brzóska MM, Gałążyn-Sidorczuk M, Rogalska J.	Nutrients. 2017 Dec 19;9(12):1374. doi: 10.3390/nu9121374.	Nutrients Free Full-Text Effect of an Extract from Aronia melanocarpa L. Berries on the Body Status of Zinc and Copper under Chronic Exposure to Cadmium: An In Vivo Experimental Study HTML (mdpi.com)
The Mechanism of the Osteoprotective Action of a Polyphenol-Rich Aronia melanocarpa Extract during Chronic Exposure to Cadmium is Mediated by the Oxidative Defense System	Brzóska MM, Rogalska J, Roszczenko A, Galazyn-Sidorczuk M, Tomczyk M.	Planta Med. 2016 May;82(7):621-31. doi: 10.1055/s-0042-103593. Epub 2016 Apr 20.	pmZ0904 621..631 (thieme-connect.com)
Antioxidants as a Potential Preventive and Therapeutic Strategy for Cadmium	Brzóska MM, Borowska S, Tomczyk M.	Curr Drug Targets. 2016;17(12):1350-84. doi: 10.2174/1389450116666150506114336.	Antioxidants as a Potential Preventive and Therapeutic Strategy for Cadmium - PubMed (nih.gov)
Chokeberry (Aronia melanocarpa (Michx.) Elliot) concentrate inhibits NF-κB and synergizes with selenium to inhibit the release of pro-inflammatory mediators in macrophages	Appel K, Meiser P, Millán E, Collado JA, Rose T, Gras CC, Carle R, Muñoz E.	Fitoterapia. 2015 Sep;105:73-82. doi: 10.1016/j.fitote.2015.06.009. Epub 2015 Jun 14.	Chokeberry (Aronia melanocarpa (Michx.) Elliot) concentrate inhibits NF-κB and synergizes with selenium to inhibit the release of pro-inflammatory mediators in macrophages - PubMed (nih.gov)
Protective Effect of Aronia Melanocarpa Polyphenols on Cadmium Accumulation in the Body: A Study in a Rat Model of Human Exposure to this Metal	Brzoska MM, Galazyn-Sidorczuk M, Jurczuk M, Tomczyk M.	Curr Drug Targets. 2015;16(13):1470-87. doi: 10.2174/1389450116666150102121708.	Protective effect of Aronia melanocarpa polyphenols against cadmium-induced disorders in bone metabolism: A study in a rat model of lifetime human exposure to this heavy metal - ScienceDirect

Protective effect of Aronia melanocarpa polyphenols against cadmium-induced disorders in bone metabolism: a study in a rat model of lifetime human exposure to this heavy metal	Brzóška MM, Rogalska J, Galazyn-Sidorczuk M, Jurczuk M, Roszczenko A, Tomczyk M.	Chem Biol Interact. 2015 Mar 5;229:132-46. doi: 10.1016/j.cbi.2015.01.031. Epub 2015 Feb 3.	Protective effect of Aronia melanocarpa polyphenols against cadmium-induced disorders in bone metabolism: a study in a rat model of lifetime human exposure to this heavy metal - PubMed (nih.gov)
[The influence of Aronia Melanocarpa Elliot and acetylcysteine on selected biochemical parameters of experimental animals with chronic lead acetate poisoning]	Kowalczyk E, Jankowski A, Niedworok J, Smigielski J, Jankowska B.	Folia Med Cracov. 2003;44(1-2):207-14.	[The influence of anthocyanins from Aronia melanocarpa on selected parameters of oxidative stress and microelements contents in men with hypercholesterolemia]. - Abstract - Europe PMC
Effect of anthocyanins on selected biochemical parameters in rats exposed to cadmium	Kowalczyk E, Kopff A, Fijałkowski P, Kopff M, Niedworok J, Błaszczuk J, Kedziora J, Tyślerowicz P.	Acta Biochim Pol. 2003;50(2):543-8.	D:\ACTA\2-2003\kowalczyk.vp (actabp.pl)
[The effect of anthocyanins from Aronii melanocarpa and acetylcysteine on selected after-effects of lead acetate poisoning]	Kowalczyk E, Jankowski A, Niedworok J, Smigielski J, Jankowska B.	Pol Merkur Lekarski. 2002 Mar;12(69):221-3.	[The influence of anthocyanins from Aronia melanocarpa on selected parameters of oxidative stress and microelements contents in men with hypercholesterolemia] - PubMed (nih.gov)
The Beneficial Impact of the Black Chokeberry Extract against the Oxidative Stress in the Sublingual Salivary Gland of Rats Intoxicated with Cadmium	Onopiuk BM, Dąbrowska ZN, Rogalska J, Brzóška MM, Dąbrowski A, Bijowski K, Onopiuk P, Mroczko B, Orywał K, Dąbrowska E.	Oxid Med Cell Longev. 2021 Dec 31;2021:6622245. doi: 10.1155/2021/6622245. eCollection 2021.	The Beneficial Impact of the Black Chokeberry Extract against the Oxidative Stress in the Sublingual Salivary Gland of Rats Intoxicated with Cadmium (nih.gov)
Cyanidin 3-O-β-Galactoside Alleviated Cognitive Impairment in Mice by Regulating Brain Energy Metabolism During Aging	Fan Z, Wen H, Zhang X, Li J, Zang J.	J Agric Food Chem. 2022 Feb 2;70(4):1111-1121. doi: 10.1021/acs.jafc.1c06240. Epub 2022 Jan 18.	The Beneficial Impact of the Black Chokeberry Extract against the Oxidative Stress in the Sublingual Salivary Gland of Rats Intoxicated with Cadmium (nih.gov)