

Aronia Scientific Articles – Cardiovascular
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Title	Authors	Reference	URL Link
Aronia juice consumption prior to half-marathon race can acutely affect platelet activation in recreational runners	Stevanović V, Pantović A, Krga I, Zeković M, Šarac I, Glibetić M, Vidović N.	Appl Physiol Nutr Metab. 2020 Apr;45(4):393-400. doi: 10.1139/apnm-2019-0267. Epub 2019 Sep 20.	Aronia juice consumption prior to half-marathon race can acutely affect platelet activation in recreational runners (cdnsiencepub.com)
Daily supplementation with aronia melanocarpa (chokeberry) reduces blood pressure and cholesterol: a meta analysis of controlled clinical trials	Hawkins J, Hires C, Baker C, Keenan L, Bush M.	J Diet Suppl. 2020 Aug 14:1-14. doi: 10.1080/19390211.2020.1800887. Online ahead of print.	Daily supplementation with aronia melanocarpa (chokeberry) reduces blood pressure and cholesterol: a meta analysis of controlled clinical trials: Journal of Dietary Supplements: Vol 0, No 0 (tandfonline.com)
The Effects of Aronia melanocarpa Juice Consumption on the mRNA Expression Profile in Peripheral Blood Mononuclear Cells in Subjects at Cardiovascular Risk	Stojković L, Jovanović I, Zivković M, Zec M, Djurić T, Zivotić I, Kuveljić J, Kolaković A, Kolić I, Djordjević A, Glibetić M, Alavantić D, Stanković A.	Nutrients. 2020 May 20;12(5):1484. doi: 10.3390/nu12051484.	Nutrients Free Full-Text The Effects of Aronia melanocarpa Juice Consumption on the mRNA Expression Profile in Peripheral Blood Mononuclear Cells in Subjects at Cardiovascular Risk HTML (mdpi.com)
The Effect of Long-Term Aronia melanocarpa Extract Supplementation on Cognitive Performance, Mood, and Vascular Function: A Randomized Controlled Trial in Healthy, Middle-Aged Individuals	Ahles S, Stevens YR, Joris PJ, Vauzour D, Adam J, de Groot E, Plat J.	Nutrients. 2020 Aug 17;12(8):2475. doi: 10.3390/nu12082475.	Nutrients Free Full-Text The Effect of Long-Term Aronia melanocarpa Extract Supplementation on Cognitive Performance, Mood, and Vascular Function: A Randomized Controlled Trial in Healthy, Middle-Aged Individuals HTML (mdpi.com)

Effects of aronia berry (poly)phenols on vascular function and gut microbiota: a double-blind randomized controlled trial in adult men	Istas G, Wood E, Le Sayec M, Rawlings C, Yoon J, Dandavate V, Cera D, Rampelli S, Costabile A, Fromentin E, Rodriguez-Mateos A.	Am J Clin Nutr. 2019 Aug 1;110(2):316-329. doi: 10.1093/ajcn/nqz075.	Effects of aronia berry (poly)phenols on vascular function and gut microbiota: a double-blind randomized controlled trial in adult men The American Journal of Clinical Nutrition Oxford Academic (oup.com)
Aronia berry extract inhibits TNF- α -induced vascular endothelial inflammation through the regulation of STAT3	Iwashima T, Kudome Y, Kishimoto Y, Saita E, Tanaka M, Taguchi C, Hirakawa S, Mitani N, Kondo K, Iida K.	Food Nutr Res. 2019 Aug 16;63. doi: 10.29219/fnr.v63.3361. eCollection 2019.	Aronia berry extract inhibits TNF-α-induced vascular endothelial inflammation through the regulation of STAT3 (nih.gov)
The effect of Aronia consumption on lipid profile, blood pressure, and biomarkers of inflammation: A systematic review and meta-analysis of randomized controlled trials	Rahmani J, Clark C, Kord Varkaneh H, Lakiang T, Vasanthan LT, Onyeche V, Mousavi SM, Zhang Y.	Phytother Res. 2019 Aug;33(8):1981-1990. doi: 10.1002/ptr.6398. Epub 2019 Jun 24.	The effect of Aronia consumption on lipid profile, blood pressure, and biomarkers of inflammation: A systematic review and meta-analysis of randomized controlled trials - Rahmani - 2019 - Phytotherapy Research - Wiley Online Library
Additive effect of walnut and chokeberry on regulation of antioxidant enzyme gene expression and attenuation of lipid peroxidation in d-galactose-induced aging-mouse model	Song EK, Park H, Kim HS.	Nutr Res. 2019 Oct;70:60-69. doi: 10.1016/j.nutres.2018.09.011. Epub 2018 Oct 4.	Additive effect of walnut and chokeberry on regulation of antioxidant enzyme gene expression and attenuation of lipid peroxidation in d-galactose-induced aging-mouse model - ScienceDirect
Anti-Platelet Properties of Phenolic Extracts from the Leaves and Twigs of <i>Elaeagnus rhamnoides</i> (L.) A. Nelson	Skalski B, Kontek B, Rolnik A, Olas B, Stochmal A, Żuchowski J.	Molecules. 2019 Oct 8;24(19):3620. doi: 10.3390/molecules24193620.	Molecules Free Full-Text Anti-Platelet Properties of Phenolic Extracts from the Leaves and Twigs of <i>Elaeagnus rhamnoides</i> (L.) A. Nelson HTML (mdpi.com)

<p>Aronia (<i>Aronia melanocarpa</i>) Polyphenols Modulate the Microbial Community in a Simulator of the Human Intestinal Microbial Ecosystem (SHIME) and Decrease Secretion of Proinflammatory Markers in a Caco-2/endothelial Cell Coculture Model</p>	<p>Wu T, Grootaert C, Pitart J, Vidovic NK, Kamiloglu S, Possemiers S, Glibetic M, Smagghe G, Raes K, Van de Wiele T, Van Camp J.</p>	<p>Mol Nutr Food Res. 2018 Nov;62(22):e1800607. doi: 10.1002/mnfr.201800607. Epub 2018 Oct 10.</p>	<p>Aronia (<i>Aronia melanocarpa</i>) Polyphenols Modulate the Microbial Community in a Simulator of the Human Intestinal Microbial Ecosystem (SHIME) and Decrease Secretion of Proinflammatory Markers in a Caco-2/endothelial Cell Coculture Model - Wu - 2018 - Molecular Nutrition & Food Research - Wiley Online Library</p>
<p>Standardized <i>Aronia melanocarpa</i> Extract as Novel Supplement against Metabolic Syndrome: A Rat Model</p>	<p>Jakovljevic V, Milic P, Bradic J, Jeremic J, Zivkovic V, Srejovic I, Nikolic Turnic T, Milosavljevic I, Jeremic N, Bolevich S, Labudovic Borovic M, Mitrovic M, Vucic V.</p>	<p>Int J Mol Sci. 2018 Dec 20;20(1):6. doi: 10.3390/ijms20010006.</p>	<p>IJMS Free Full-Text Standardized <i>Aronia melanocarpa</i> Extract as Novel Supplement against Metabolic Syndrome: A Rat Model HTML (mdpi.com)</p>
<p><i>Aronia</i>-citrus juice (polyphenol-rich juice) intake and elite triathlon training: a lipidomic approach using representative oxylipins in urine</p>	<p>García-Flores LA , Medina S , Gómez C , Wheelock CE , Cejuela R , Martínez-Sanz JM , Oger C , Galano JM , Durand T , Hernández-Sáez Á , Ferreres F , Gil-Izquierdo Á .</p>	<p>Food Funct. 2018 Jan 24;9(1):463-475. doi: 10.1039/c7fo01409k.</p>	<p>Aronia–citrus juice (polyphenol-rich juice) intake and elite triathlon training: a lipidomic approach using representative oxylipins in urine - Food & Function (RSC Publishing)</p>
<p>Fruits of Black Chokeberry <i>Aronia melanocarpa</i> in the Prevention of Chronic Diseases</p>	<p>Jurikova T, Mlcek J, Skrovankova S, Sumczynski D, Sochor J, Hlavacova I, Snopek L, Orsavova J.</p>	<p>Molecules. 2017 Jun 7;22(6):944. doi: 10.3390/molecules22060944.</p>	<p>Fruits of Black Chokeberry <i>Aronia melanocarpa</i> in the Prevention of Chronic Diseases (nih.gov)</p>

Aronia berry polyphenol consumption reduces plasma total and low-density lipoprotein cholesterol in former smokers without lowering biomarkers of inflammation and oxidative stress: a randomized controlled trial	Xie L, Vance T, Kim B, Lee SG, Caceres C, Wang Y, Hubert PA, Lee JY, Chun OK, Bolling BW.	Nutr Res. 2017 Jan;37:67-77. doi: 10.1016/j.nutres.2016.12.007. Epub 2016 Dec 10.	Aronia berry polyphenol consumption reduces plasma total and low-density lipoprotein cholesterol in former smokers without lowering biomarkers of inflammation and oxidative stress: a randomized controlled trial - ScienceDirect
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The Search for Dietary Supplements to Elevate or Activate Circulating Paraoxonases	Lou-Bonafonte JM, Gabás-Rivera C, Navarro MA, Osada J.	Int J Mol Sci. 2017 Feb 15;18(2):416. doi: 10.3390/ijms18020416.	The Search for Dietary Supplements to Elevate or Activate Circulating Paraoxonases (nih.gov)
Anthocyanins in chokeberry and purple maize attenuate diet-induced metabolic syndrome in rats	Bhaswant M, Shafie SR, Mathai ML, Mouatt P, Brown L.	Nutrition. 2017 Sep;41:24-31. doi: 10.1016/j.nut.2016.12.009. Epub 2016 Dec 28.	Anthocyanins in chokeberry and purple maize attenuate diet-induced metabolic syndrome in rats - ScienceDirect
The multifunctionality of berries toward blood platelets and the role of berry phenolics in cardiovascular disorders	Olas B.	Platelets. 2017 Sep;28(6):540-549. doi: 10.1080/09537104.2016.1235689. Epub 2016 Oct 25.	The multifunctionality of berries toward blood platelets and the role of berry phenolics in cardiovascular disorders: Platelets: Vol 28, No 6 (tandfonline.com)
Cardioprotective effects of Aronia melanocarpa anthocyanins. From laboratory experiments to clinical practice	Parzonko A, Naruszewicz M.	Curr Pharm Des. 2016;22(2):174-9. doi: 10.2174/1381612822666151112152143.	Cardioprotective effects of Aronia melanocarpa anthocyanins. From laboratory experiments to clinical practice Request PDF (researchgate.net)

Consumption of chokeberry (<i>Aronia mitschurinii</i>) products modestly lowered blood pressure and reduced low-grade inflammation in patients with mildly elevated blood pressure	Loo BM, Erlund I, Koli R, Puukka P, Hellström J, Wähälä K, Mattila P, Jula A.	Nutr Res. 2016 Nov;36(11):1222-1230. doi: 10.1016/j.nutres.2016.09.005. Epub 2016 Sep 14.	Consumption of chokeberry (<i>Aronia mitschurinii</i>) products modestly lowered blood pressure and reduced low-grade inflammation in patients with mildly elevated blood pressure - ScienceDirect
COMMERCIAL EXTRACT FROM ARONIA AS A MODULATOR OF ADHESIVE PROPERTIES OF FIBRINOGEN TREATED WITH HOMOCYSTEINE AND ITS THIOLACTONE IN VITRO	Olas B, Kontek B, Oleszek W, Stochmal A.	Acta Pol Pharm. 2016 Nov;73(6):1609-1613.	(PDF) Commercial extract from Aronia as a modulator of adhesive properties of fibrinogen treated with homocysteine and its thiolactone in vitro (researchgate.net)
Anthocyanin-rich Phytochemicals from Aronia Fruits Inhibit Visceral Fat Accumulation and Hyperglycemia in High-fat Diet-induced Dietary Obese Rats	Takahashi A, Shimizu H, Okazaki Y, Sakaguchi H, Taira T, Suzuki T, Chiji H.	J Oleo Sci. 2015;64(12):1243-50. doi: 10.5650/jos.ess15181. Epub 2015 Nov 19.	Anthocyanin-rich Phytochemicals from Aronia Fruits Inhibit Visceral Fat Accumulation and Hyperglycemia in High-fat Diet-induced Dietary Obese Rats (jst.go.jp)
Anthocyanins-rich Aronia melanocarpa extract possesses ability to protect endothelial progenitor cells against angiotensin II induced dysfunction	Parzonko A, Oświt A, Bazyłko A, Naruszewicz M.	Phytomedicine. 2015 Dec 15;22(14):1238-46. doi: 10.1016/j.phymed.2015.10.009. Epub 2015 Nov 10.	Anthocyanins-rich Aronia melanocarpa extract possesses ability to protect endothelial progenitor cells against angiotensin II induced dysfunction - PubMed (nih.gov)
Antiatherogenic and Cardioprotective Effects of Black Chokeberry (<i>Aronia melanocarpa</i>) Juice in Aging Rats	Daskalova E, Delchev S, Peeva Y, Vladimirova-Kitova L, Kratchanova M, Kratchanov C, Denev P.	Evid Based Complement Alternat Med. 2015;2015:717439. doi: 10.1155/2015/717439. Epub 2015 Aug 13.	Antiatherogenic and Cardioprotective Effects of Black Chokeberry (<i>Aronia melanocarpa</i>) Juice in Aging Rats (nih.gov)
Beneficial Effects of Polyphenol-Rich Chokeberry Juice Consumption on Blood Pressure Level and Lipid Status in Hypertensive Subjects	Kardum N, Milovanović B, Šavikin K, Zdunić G, Mutavdžin S, Gligorijević T, Spasić S.	J Med Food. 2015 Nov;18(11):1231-8. doi: 10.1089/jmf.2014.0171. Epub 2015 May 14.	Beneficial Effects of Polyphenol-Rich Chokeberry Juice Consumption on Blood Pressure Level and Lipid Status in Hypertensive Subjects Journal of Medicinal Food (liebertpub.com)

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Comparison of biological activity of phenolic fraction from roots of Alhagi maurorum with properties of commercial phenolic extracts and resveratrol	Olas B, Hamed AI, Oleszek W, Stochmal A.	Platelets. 2015;26(8):788-94. doi: 10.3109/09537104.2015.1031650. Epub 2015 Apr 22.	Comparison of biological activity of phenolic fraction from roots of Alhagi maurorum with properties of commercial phenolic extracts and resveratrol: Platelets: Vol 26, No 8 (tandfonline.com)
Extract of Aronia melanocarpa-modified hemostasis: in vitro studies	Sikora J, Markowicz-Piasecka M, Broncel M, Mikiciuk-Olasik E.	Eur J Nutr. 2014 Oct;53(7):1493-502. doi: 10.1007/s00394-014-0653-8. Epub 2014 Jan 23.	Extract of Aronia melanocarpa - modified hemostasis: in vitro studies SpringerLink
Aronia melanocarpa Elliot reduces the activity of angiotensin i-converting enzyme- in vitro and ex vivo studies	Sikora J, Broncel M, Mikiciuk-Olasik E.	Oxid Med Cell Longev. 2014;2014:739721. doi: 10.1155/2014/739721. Epub 2014 Jun 23.	Aronia melanocarpa Elliot Reduces the Activity of Angiotensin I-Converting Enzyme—In Vitro and Ex Vivo Studies (nih.gov)
Effects of glucomannan-enriched, aronia juice-based supplement on cellular antioxidant enzymes and membrane lipid status in subjects with abdominal obesity	Kardum N, Petrović-Oggiano G, Takic M, Glibetić N, Zec M, Debeljak-Martacic J, Konić-Ristić A.	ScientificWorldJournal. 2014;2014:869250. doi: 10.1155/2014/869250. Epub 2014 Dec 9.	Effects of Glucomannan-Enriched, Aronia Juice-Based Supplement on Cellular Antioxidant Enzymes and Membrane Lipid Status in Subjects with Abdominal Obesity (nih.gov)
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The polyphenol-rich extracts from black chokeberry and grape seeds impair changes in the platelet adhesion and aggregation induced by a model of hyperhomocysteinemia	Malinowska J, Oleszek W, Stochmal A, Olas B.	Eur J Nutr. 2013 Apr;52(3):1049-57. doi: 10.1007/s00394-012-0411-8. Epub 2012 Jul 19.	The polyphenol-rich extracts from black chokeberry and grape seeds impair changes in the platelet adhesion and aggregation induced by a model of hyperhomocysteinemia SpringerLink
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Short-term supplementation with Aronia melanocarpa extract improves platelet aggregation, clotting, and fibrinolysis in patients with metabolic syndrome	Sikora J, Broncel M, Markowicz M, Chałubiński M, Wojdan K, Mikiciuk- Olasik E.	Eur J Nutr. 2012 Aug;51(5):549- 56. doi: 10.1007/s00394-011- 0238-8. Epub 2011 Aug 18.	Short-term supplementation with Aronia melanocarpa extract improves platelet aggregation, clotting, and fibrinolysis in patients with metabolic syndrome - PubMed (nih.gov)
Anticoagulant effect of polyphenols-rich extracts from black chokeberry and grape seeds	Bijak M, Bobrowski M, Borowiecka M, Podsędek A, Golański J, Nowak P.	Fitoterapia. 2011 Sep;82(6):811-7. doi: 10.1016/j.fitote.2011.04.017. Epub 2011 May 6.	Anticoagulant effect of polyphenols-rich extracts from black chokeberry and grape seeds - ScienceDirect
Fruit juice-induced endothelium-dependent relaxations in isolated porcine coronary arteries: evaluation of different fruit juices and purees and optimization of a red fruit juice blend	Auger C, Kim JH, Trinh S, Chataigneau T, Popken AM, Schini-Kerth VB.	Food Funct. 2011 May;2(5):245-50. doi: 10.1039/c1fo10040h. Epub 2011 May 5.	Fruit juice-induced endothelium-dependent relaxations in isolated porcine coronary arteries: evaluation of different fruit juices and purees and optimization of a red fruit juice blend - Food & Function (RSC Publishing)
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Aronia melanocarpa extract reduces blood pressure, serum endothelin, lipid, and oxidative stress marker levels in patients with metabolic syndrome	Broncel M, Kozirog M, Duchnowicz P, Koter-Michalak M, Sikora J, Chojnowska-Jezierska J.	Med Sci Monit. 2010 Jan;16(1):CR28-34.	Aronia melanocarpa extract reduces blood pressure, serum endothelin, lipid, and oxidative stress marker levels in patients with metabolic syndrome - PubMed (nih.gov)
Effects of polyphenol-rich extract from berries of Aronia melanocarpa on the markers of oxidative stress and blood platelet activation	Olas B, Kedzierska M, Wachowicz B, Stochmal A, Oleszek W.	Platelets. 2010;21(4):274-81. doi: 10.3109/09537101003612821.	Effects of polyphenol-rich extract from berries of Aronia melanocarpa on the markers of oxidative stress and blood platelet activation: Platelets: Vol 21, No 4 (tandfonline.com)
The nitrate and oxidative stress in blood platelets isolated from breast cancer patients: the protective action of aronia melanocarpa extract	Kedzierska M, Olas B, Wachowicz B, Stochmal A, Oleszek W, Jeziorski A, Piekarski J.	Platelets. 2010;21(7):541-8. doi: 10.3109/09537104.2010.492534.	The nitrate and oxidative stress in blood platelets isolated from breast cancer patients: The protective action of aronia melanocarpa extract: Platelets: Vol 21, No 7 (tandfonline.com)
Experimental in vitro arterial reactivity and tissue culture solutions alter the time-dependent stability of anthocyanins from elderberry, chokeberry, and bilberry extracts	Nalliah RE, Phillips JS, Gaier AJ, Gochenaur KE, Bell DR.	Int J Food Sci Nutr. 2009;60 Suppl 1:209-19. doi: 10.1080/09637480902769591. Epub 2009 Apr 18.	Experimental in vitro arterial reactivity and tissue culture solutions alter the time-dependent stability of anthocyanins from elderberry, chokeberry, and bilberry extracts Request PDF (researchgate.net)
Studies on antioxidant properties of polyphenol-rich extract from berries of Aronia melanocarpa in blood platelets	Olas B, Wachowicz B, Nowak P, Kedzierska M, Tomczak A, Stochmal A, Oleszek W, Jeziorski A, Piekarski J.	J Physiol Pharmacol. 2008 Dec;59(4):823-35.	Studies on antioxidant properties of polyphenol-rich extract from berries of Aronia melanocarpa in blood platelets. - Abstract - Europe PMC

Anthocyanin-rich Aronox extract from Aronia melanocarpa E protects against 7beta-hydroxycholesterol-induced apoptosis of endothelial cells	Zapolska-Downar D, Nowicka G, Sygitowicz G, Jarosz M.	Ann Nutr Metab. 2008;53(3-4):283-94. doi: 10.1159/000191290. Epub 2009 Jan 14.	Anthocyanin-Rich Aronox Extract from Aroniamelanocarpa E Protects against 7β-Hydroxycholesterol-Induced Apoptosis of Endothelial Cells - Abstract - Annals of Nutrition and Metabolism 2008, Vol. 53, No. 3-4 - Karger Publishers
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Hypoglycemic and hypolipidemic effects of Aronia melanocarpa fruit juice in streptozotocin-induced diabetic rats	Valcheva-Kuzmanova S, Kuzmanov K, Tancheva S, Belcheva A.	Methods Find Exp Clin Pharmacol. 2007 Mar;29(2):101-5. doi: 10.1358/mf.2007.29.2.1075349 .	Aronia melanocarpa extract reduces blood pressure, serum endothelin, lipid, and oxidative stress marker levels in patients with metabolic syndrome - Get your full text copy in PDF #878315 Medical Science Monitor (medscimonit.com)
[Effect of anthocyanins from Aronia melanocarpa on blood pressure, concentration of endothelin-1 and lipids in patients with metabolic syndrome]	Broncel M, Koziróg-Kołacińska M, Andryskowski G, Duchnowicz P, Koter-Michalak M, Owczarczyk A, Chojnowska-Jeziarska J.	Pol Merkur Lekarski. 2007 Aug;23(134):116-9.	Antihyperlipidemic Effect of Aronia melanocarpa Fruit Juice in Rats Fed a High-Cholesterol Diet SpringerLink
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