

Nutracevit Sp. z o.o., Giewont 38A 92-116 Łódź, Poland



Haskap powder specification:	
Fruit: Certificates:	Haskap, honeyberry (Lonicera caerulea) whole fruit gently dried 100 HACCP, IFS Food Standard, BRC for Food Safety FSSC22000, BIO Certificates: AGRO-BIO-TEST PL-EKO-07
Country of origin:	Poland
Color:	Dark red, ruby
Taste and aroma:	Typical for haskap, sweet & sour, very fruity taste
Application:	1 teaspoon/day added to the musli, yogurt, ice-cream, cold desserts
Nutrition facts (100g): Energy value	1469 kJ/349 kcal
Fat	4,51g, of which saturates 0,55 g
Carbohydrate	62,34 g, of which sugar 40,92g
Fiber	15,77g
Protein	6,85g
Salt	<0,01
Natrium	< 3mg
Anthocyanins content	2.1-2.3%
Appearance: Microbiology:	Fraction 0-1 mm, possible lumps disappearing under hand pressureIn line with requirements:<1000
Pesticides:	Not present
Noxious metals:	In line with Food Law
Water content, max.: GMO:	8% The product does not contain genetically modified ingredients
Packaging:	Bags: 2 kg
Shelf life:	24 months
Metal detection:	Product tested with metal detector: ferromagnetic metals (1,5 mm), stainless steel (2,0 mm), non-ferrous metals (1,5 mm).
Storage conditions:	Product should be stored in conditions where maximum temperature does n exceed 30°C and the maximum air humidity is 75%. After opening the origina packaging the product should be used immediately or tightly sealed to avoid contact with the environment. Protect from light. Hygroscopic.
Radiation:	The product has not undergone radiation/ionizing radiation.
Allergens:	Detailed information available, the product does not contain allerge no allergens present in the same production line
MOQ:	10kg



## Haskap berry/honeysuckle:

It's a bush originating from Northern Hemisphere. It naturally occurs in Siberia, Kamchatka, Kuril islands and Hokkaido. Well-known for its pro-health properties, called a berry of longevity and good sight by Ainu people living in that area.

Haskap berries are very rich in bioactive compounds,: polyphenols, vitamin C, provitamins: A, B1, B2, B6, B9, P and minerals: calcium, magnesium, potassium. They also contain iridoids rarely present in fruits.



The most valuable bioactive substances that are contained in berries are polyphenols, more specifically anthocyanins – pigment, that gives them black colour. Anthocyanins content in haskap fruits is several times higher than in well-known fruits.

Many studies prove that anthocyanins have much higher antioxidant potential than well know reference antioxidants such as vit. E,  $\beta$ -karoten or vit. C. Their free radicals removal activity is much potentiated by iridoids accompanying them in haskap. (Lila M.A. Anthocyanins and human health: An in vitro investigative approach. J. Biomed. Biotechnol. 2004, 5: 306 – 313 14, Miguel MG: Anthocyanins: Antioxidant and/or anti-inflammatory activities. Journal of Applied Pharmaceutical Science 01 (06), 2011, 07-15)

Rich in anthocyanins food consumption is connected with lower rate of civilization diseases morbidity. (Clifford M.N.: Anthocyanins - nature, occurrence and dietary burden. J. Sci. Food Agric., 2000; 80: 1063-1072)

Those compounds act antiatherogenic, lower oxidative stress, remove free radicals and mitigate side effects of

**chemotherapy.** (Grajek W.: 2004. *Rola przeciwutleniaczy w zmniejszaniu ryzyka wystąpienia nowotworów i chorób układu krążenia*. Żywność. Nauka. Technologia. Jakość, **1 (38)**, 3-11.; Piasek A.: 2010. *Badanie zmian składu fitokompleksu i właściwości przeciwutleniających owoców aronii czarnoowocowej* (*Aronia melanocarpa (Michx.) Elliott) i wiciokrzewu sinego (Lonicera caerulea L.) pod wpływem przetwarzania*. Rozprawa doktorska, Gdańsk, 6–40; Szot I., Lipa T., Sosnowska B.: 2014. *Jagoda kamczacka – właściwości prozdrowotne owoców i możliwości ich zastosowania*. Żywność. Nauka. Technologia. Jakość, 4 (95), 18 – 29; 14, 22. )

We grow haskap in **organic** way, as we believe that such a treasure can only be grown in a natural way, without any chemical agents. We care about the highest level of polyphenols in our berries, that is why we cooperate with Food Faculties at Polish Universities and examine pro-healthy compounds level. Thanks to research done we know which cultivars are the best, how to grow them in optimal way, when do the harvest, how to store and process them in a way that preserves what is the most valuable in haskap.

