

# Attitudes of pharmacists about anthocyanin-based products from blueberry fruit in the pharmacies



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## Results



## Background

- Anthocyanins possess strong antioxidant and anti-inflammatory physiological activities.
- Anthocyanins are particularly abundant in different fruits, especially in blueberries, black currants and grapes.
- Blueberries are rich in anthocyanins, which have been studied for many years.
- Interest in these compounds has grown attributing to their possible therapeutic and beneficial effects, among which are the reduction of coronary heart disease, anticancer/antitumor, anti-inflammatory, and antidiabetic effects, as well as the improvement of visual acuity and cognitive behavior.

**Purpose:** Gathering and analysis of pharmacists' attitudes and knowledge toward anthocyanin-based products from blueberry fruit in the pharmacies.

## Methods

The attitudes of pharmacists about anthocyanin-based products from blueberry in the pharmacies was tested with electronic based questionnaire.

- In the study, **107** pharmacists from the Republic of Serbia and the Republic of Srpska participated, mostly females (84.1%), over 30 years of age who work in pharmacy chains (3 or more pharmacies) (79.4%).
- When asked if you have any of the anthocyanin-based products from blueberry fruit in the pharmacy, the majority answered in the affirmative (72%) and that these are dietary supplements for maintaining eye health (76.9%).
  - Half of the surveyed pharmacists (50.5%) answered that they only sometimes recommend these products.
    - More than 50% were familiar with the pharmacological action of anthocyanins, and as many as 64% that anthocyanins achieve their positive effect on vision in low light by regenerating visual purple, rhodopsin. Also, the pharmacist knew other pharmacological activities of anthocyanins, as vasoprotective (52.3%), antioxidant (83.2%) and anti-inflammatory (44.9%). A large number of respondents knew that carotenoids (lutein and zeaxanthin), in addition to anthocyanins, also show a beneficial effect on vision.

## Conclusion

**Pharmacists do not recommend anthocyanin-based products to improve night vision because they have insufficient knowledge about their pharmacological activity.**

