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# Grape pomace seed and skin powder as source of dietary fibre


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## INTRODUCTION

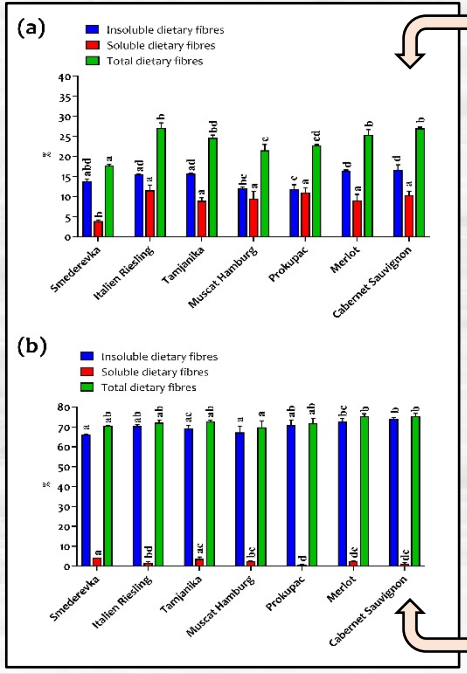
Dietary fibre possesses some health benefits, such as regulation of glucose absorption, prevention of obesity, reduction of blood cholesterol level and protection from cardiovascular damage. Grape pomace and its constituents (seed and skin) present a good source of dietary fibre. They can be used as gelling or binding water agents. However, they are mostly incorporated into various food products as an integral part of milled pomace flour and powder, contributing to the functional, nutritional, physicochemical, textural and sensory properties of products

## AIM

The aim of this study is to determine the content of dietary fibres in the seven different unfermented pomace seed and skin flours of international (Italien Riesling, Muscat Hamburg, Merlot, Cabernet Sauvignon) and indigenous (Smederevka, Tamjanika, Prokupac) grape varieties.

## MATERIAL AND METHODS

The content of total (TDF), soluble (SDF) and insoluble (ISDF) dietary fibres in seed and skin flours were determined by the enzyme-gravimetric method.




GRAPE POMACE SKIN FLOUR

GRAPE POMACE SEED FLOUR

## RESULTS

The results showed that the content of TDF was almost three times higher in seed flour than in skin flour, for all analysed varieties. Seed flour had more ISDF (66.30-74.18%) and TDF (69.89-75.42%), and less SDF (0.89-4.27%), in comparison to the skin flour. The highest content of ISDF was confirmed in the seed and skin flour of the Cabernet Sauvignon variety. On the other hand, the highest content of SDF was determined in the skin of Italian Riesling and seeds of Smederevka varieties.

## CONCLUSIONS

Although there are differences in content, the seed and skin flour of all analysed international and indigenous varieties represent a good source of dietary fibre and can be successfully applied in the formulation of functional and nutritionally valuable food products. To the best of our knowledge, this is the first report on dietary fibre in the seed and skin flour of the autochthonous Prokupac and Tamjanika varieties.

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