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Item 9 of the provisional agenda

Sulphur dioxide content in dried apricots

Comment by International Nut and Dried Fruit Council on sulphur dioxide content in dried apricots

Submitted by the International Nut and Dried Fruit Council

Summary

The International Nut and Dried Fruit Council (INC) submitted the following comment related to a recommendation by the European Food Safety Authority to lower maximum limits for sulphur dioxide–sulphites in European Union specifications.

INC Comment on the Re-evaluation of Sulfur Dioxide

June 1, 2023

1. Background

Sulfur dioxide (SO₂) is currently undergoing a reclassification process under the Classification Labelling and Packaging Regulation (1272/2008) of the European Parliament and of the Council.

The European Food Safety Authority (EFSA) published a scientific opinion¹ on November 24, 2022, recommending that the maximum limits for sulfur dioxide-sulfites in EU specifications should be lowered based on the actual levels in the commercial food additives, and the levels for infants should also be lowered.

The EFSA Panel on Food Additives and Flavourings conducted a risk assessment for toxic elements found in sulfur dioxide-sulfites (E 220-228). Analytical data on arsenic, lead, cadmium, and mercury in commercial samples of E 221, E 222, E 223, and E 224 were provided by three International Business Organizations (IBOs). EFSA calculated the potential exposure to these elements from the use of sulfur dioxide-sulfites (E 220-E 280) by assuming that they may be present in the food additive up to a certain limit and then calculating it pro-rata to the estimates of exposure to the food additive itself. According to the EFSA Scientific Opinion, the current levels of sulfur dioxide-sulfite usage may be a cause for concern. However, the available toxicity data was insufficient to establish an Acceptable Daily Intake (ADI) level for SO₂ and instead established a Margin of Exposure (MOE).

EFSA also concluded that for the majority of the population, dried fruits are not the main contributors to sulfur dioxide-sulfites exposure.

2. INC Comments on the Re-evaluation of Sulfur Dioxide (SO₂)

Firstly, it is important to note that there are no viable alternatives to sulfites that can achieve the same results. This is because sulfites are highly effective at preventing spoilage, extending the shelf life of dried fruits and preserving color, especially in dried apricots. Additionally, sulfites can prevent the growth of bacteria, mold, and ochratoxin A contamination, which can cause food poisoning and other health problems.

In dried apricots, the purpose of the drying process is to extend the shelf life of the product by reducing various reaction rates, such as physical, chemical, microbiological, and enzymatic reactions, through the removal of water. In addition, drying reduces costs associated with packaging, storage, and transportation, while also preserving the nutritional value of the fruit. Sulfurization helps to prolong their shelf life and maintain the natural color of the apricots, which favors the potential expansion of dried-apricot trade internationally.

¹ EFSA FAF Panel (EFSA Panel on Food Additives and Flavourings), Younes, M, Aquilina, G, et al., 2022. Follow-up of the re-evaluation of sulfur dioxide (E 220), sodium sulfite (E 221), sodium bisulfite (E 222), sodium metabisulfite (E 223), potassium metabisulfite (E 224), calcium sulfite (E 226), calcium bisulfite (E 227) and potassium bisulfite (E 228). EFSA Journal 2022; 20 (11):7594, 139 pp. <https://doi.org/10.2903/j.efsa.2022.7594>

The majority of dried fruits available in the European Union are imported, as production in Europe is minimal, with a considerable amount coming from Türkiye. In 2022/2023, world dried apricot production was estimated at 165,530 metric tons. With 85,610 MT, Türkiye continued to lead global production, accounting for 52% of the share.

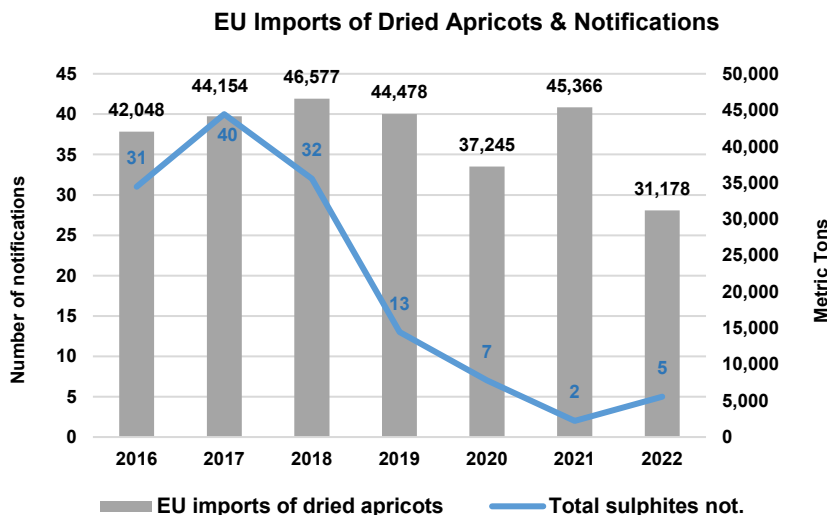
2022/2023 Top Dried Apricot Producing Countries. Metric tons

Country	Production (MT)
Türkiye	85,610
Iran	24,000
Uzbekistan	7,000
Afghanistan	6,000
China	5,000
Tajikistan	5,000
Others	32,920

Source: INC International Nut and Dried Fruit Council

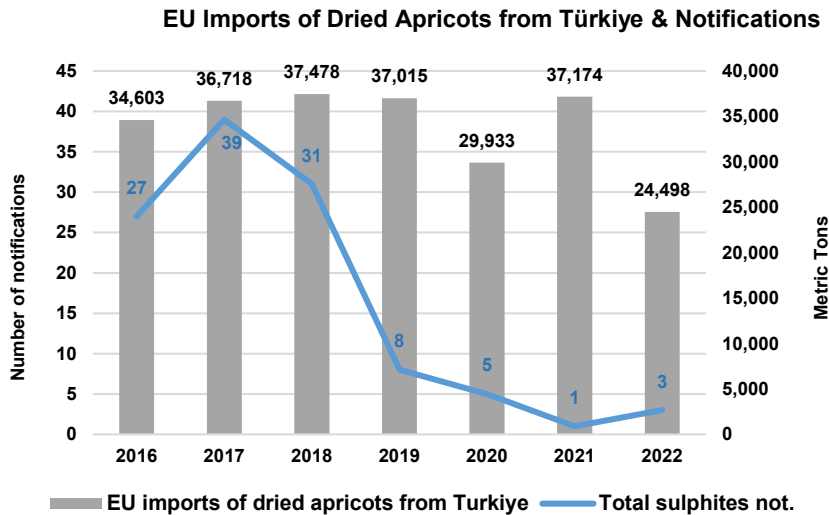
Volumes of dried apricot exports to EU Member Countries between 2016-2022 ranked between 31,000 MT and 42,000. Lowering the maximum levels of sulfites allowed in dried fruits would have an impact on the availability of various types of dried fruits in the EU market, potentially resulting in a mismatch between supply and demand.

Regarding EU border rejections notifications, in the last years there has been a significant reduction in alerts related to sulfites and dried apricots. The reduction in notifications due to sulfites can be viewed as a positive outcome that highlights the success of the industry in ensuring product safety.



Source for imports: European Commission Trade Helpdesk (Comex)

Source for notifications: EU Rapid Alert System for Food and Feed (RASFF)



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 Source for notifications: EU Rapid Alert System for Food and Feed (RASFF)

3. Conclusions

To sum up, there are no substitutes that can match the effectiveness of sulfites in preventing mold growth, extending shelf life and retaining color. Therefore, they are considered essential in the production and marketing of some types of dried fruits, with dried apricots being the most prominent example.

EFSA's Panel concluded that the intake of sulfur dioxide-sulfites may represent a safety concern, however, the available toxicity data was insufficient for them to derive an Acceptable Daily Intake level. In addition, according to the EFSA's conclusion, dried fruits are not the main contributors to SO₂ exposure for the majority of the population.

The current EU sulfite maximum levels have provided enough flexibility for producing dried fruits in the exporting countries. However, any reduction in the maximum levels would have an impact on the availability of various types of dried fruits in the EU market and they would not meet the demand. If the levels were reduced, it could lead to a shortage of some dried fruits, which would be exported to countries with higher maximum levels.

The INC urges to maintain the previously established maximum limits, which currently stands at 2000 ppm. Lowering existing maximum limits would have a negative impact from the European trade perspective and could affect not only consumers price-wise but also food manufacturers, without achieving the intended purpose.