

# 7 Things to Know: Benefits & Safety of Spices



## **Fact #1: Spices provide consumers with significant health benefits.**

The United States Dietary Guidelines for Americans (DGA) recommends the use of herbs and spices to flavor food cooked at home as a strategy to reduce added sodium, sugar, and saturated fat. The DGA also recommends the use of spices and herbs to “add to the enjoyment of nutrient-dense foods, dishes, and meals that reflect specific cultures.” Additionally, there is a growing body of research on the potential for certain spices to improve health, including spice consumption’s impact on improving cardiovascular and metabolic health, providing antioxidants, and supporting the gut microbiome.

## **Fact #2: Spices make up 1/100th of a person’s daily diet.**

While spices are an integral part of most people’s diet, they do not account for a large portion of each person’s daily food intake, since they are typically consumed in small amounts. Therefore, exposure to trace heavy metals, which occur naturally in spices, would be very minor compared to consuming other common foods and beverages, such as fruit juices and rice.

## **Fact #3: Trace amounts of heavy metals in spices occur naturally.**

Spices originate from a variety of plant crops grown in many different countries around the world. Levels of heavy metals present in the environment vary considerably by geography and the length of time each plant needs to reach maturation for harvest. Moreover, spices are sourced from different parts of the plant, including the roots, seeds, bark, fruit, or leaves. Their heavy metal content varies based on how the plant takes up and stores substances from the soil and from which part of the plant the spice is derived.

## **Fact #4: Spices are safe for consumers.**

All global regulatory authorities recognize that spices are safe for human consumption. In the United States, spices are “generally regarded as safe for their intended use,” according to the Food and Drug Administration (FDA).

Due to their minimal impact on overall consumer exposure, FDA has not established guidelines for heavy metal levels in spices. Rather, the agency – through its Closer to Zero initiative – is focused on reducing exposure to toxic elements from foods eaten by babies and young children.

## **Fact #5: Heavy metals in spices are well-regulated.**

Because heavy metals occur naturally in spices, global regulatory authorities have considered heavy metal limits for spices that are based on natural occurrence, environmental considerations, production, and consumption patterns. The most effective regulations, such as those in the European Union, rely on standards that are supported by available scientific evidence and enable access to a safe and reliable supply of spices for consumers.

## **Fact #6: The spice industry supports limits on heavy metals in spices.**

The spice industry supports limits for heavy metals that are based on science and that are technically achievable, such as those recently adopted for lead in 2021 by the European Union and those under consideration by the United Nation’s World Health Organization and Food and Agriculture Organization. Importantly, these standards are differentiated by spice type, which accounts for the natural variability in the products.

## **Fact #7: The spice industry actively works to reduce heavy metals’ presence in spices.**

The spice industry employs a variety of tactics to reduce heavy metal contamination, such as the use of Good Agricultural Practices, Good Manufacturing Practices, testing, and monitoring. The spice industry also works with producers and other partners around the world, such as the Sustainable Spice Initiative, to provide training on these practices, while also investing in ongoing research to minimize toxic elements in the spice supply chain.

For more information, visit [astaspice.org](http://astaspice.org)

