



European
Commission

CADMIUM IN CHOCOLATE



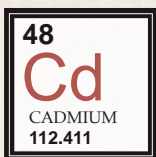
Europeans are the **biggest chocolate consumers** in the entire world!

We represent only **6%** of the world's population but we consume half of the world's chocolate. As there is no domestic cocoa production in Europe, **the European Union needs to import all the cocoa** or the cocoa beans it needs.



50%
of the world
COCOA

Chocolate contains **many nutrients good for your health** but is sometimes contaminated by **Cadmium**, a **toxic heavy metal**, present in the **soil of some cocoa plantations**.

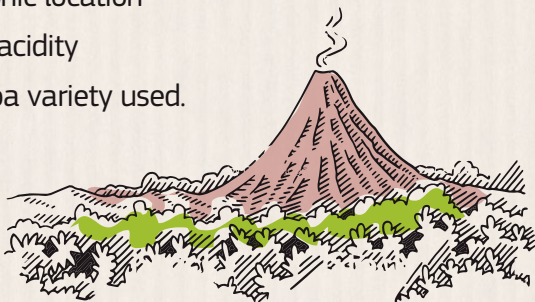


It accumulates over time in the human body and has detrimental effects on kidneys, lungs and bones. It has also been classified as a human carcinogen.

Cadmium can be found naturally in soil because of volcanic activity, forest fires and weathering of rocks.

Therefore, its presence in cocoa beans is influenced by many factors, including:

- geographic location
- the soil acidity
- the cocoa variety used.



Cadmium can also be found in other food products, from fish to cereals.

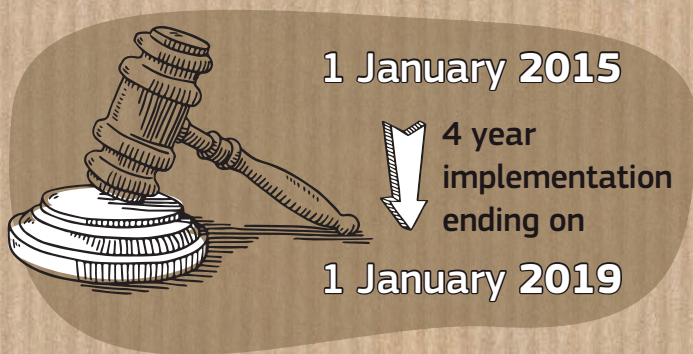
THE CADMIUM LEVEL IN CHOCOLATE IS LOWER THAN IN THE COCOA BEANS DUE TO THE PROCESSING OF COCOA BEANS INTO CHOCOLATE.

Cocoa and chocolate producers can blend cacao beans from different lots, which have different levels of cadmium. Like this, they can guarantee products of a consistent high quality, which are also compliant with the maximum levels and ensure a high level of food safety.

LIMITS APPLY TO THE FINISHED-PRODUCT AND NOT TO THE RAW COCOA BEANS!



To address this health issue, the European Union has developed a **fair and balanced legislation**. Its role is to protect consumers and particularly the most vulnerable consumers such as young children. **THE EUROPEAN REGULATION (EU) NO 488/2014 ESTABLISHED THE MAXIMUM LEVELS OF CADMIUM THAT DIFFERENT TYPES OF CHOCOLATE AND COCOA POWDER, AMONG OTHER FOODSTUFFS, CAN CONTAIN.** For setting a science-based maximum level, the EU undertook a risk analysis. Furthermore, the levels are in line with the international standards set by the Codex Alimentarius Commission and, by **setting the levels for the processed products and not for the beans, the impact on cocoa bean producers is alleviated.**



The legislation already entered into force on **1 January 2015 for the other food products**, but the European Union granted a **4-year implementation period for cocoa producers and processors** to allow them to adapt to the new rules. This period ended on **1 January 2019** and from this date onwards products exceeding the maximum level cannot be placed on the market.

Maximum levels of Cadmium in cocoa products



0.10 mg/kg



0.30 mg/kg



0.80 mg/kg



Cocoa Powder

0.60 mg/kg

THE DARKER THE CHOCOLATE, THE HIGHER THE MAXIMUM LEVELS



The EU is financing capacity-building activities, seminars, sustained training missions and study tours for producing countries. The EU is also supporting ongoing research activities to find mitigating solutions for cadmium.



The EU also supports the development of international standards and guidelines including the participation of producing countries in standard setting organisations.



The EU is already implementing a specific development programme under DeSIRA (Development-Smart Innovation through Research in Agriculture) Initiative, a 6 million Euros intervention on low cadmium and climate-relevant innovation to promote sustainable cocoa production in Colombia, Ecuador and Peru.