

**22ª PROCESSO DE SELEÇÃO DE CANDIDATOS AO CURSO DE MESTRADO
PROGRAMA DE PÓS-GRADUAÇÃO EM QUÍMICA
UNIVERSIDADE FEDERAL DE OURO PRETO**

**CHAVES DE RESPOSTA
AVALIAÇÃO DE CONHECIMENTOS EM LÍNGUA INGLESA**

Leia o texto para responder as questões que seguem:

“Testing by a US consumer group has found widely variable amounts of cadmium and lead in a variety of chocolate products, including chocolate bars, brownie mixes and chocolate chips.

A single serving of around a third of products tested by Consumer Reports scientists contained sufficient either lead or cadmium to exceed the state of California’s daily maximum allowable dose level (MADL). The US does not set federal limits for cadmium and lead content in foods, and California’s exposure limits are the most stringent set by any state. The EU introduced cadmium limits in chocolate and other foods in 2019. Exposure to heavy metals can damage the central nervous system, causing developmental delay and learning problems posing significant risk to pregnant women and children.

Lead and cadmium tend to accumulate more in cocoa solids than cocoa butter. Hence, products with higher proportions of cocoa solids such darker chocolate tended to contain more of the metals than products with lots of other ingredients.

Consumer Reports investigations have previously suggested that the metals get into cacao in different ways. Cadmium is taken up from the soil, and accumulates in the cacao bean as the plant grows. Meanwhile lead is mostly introduced as the beans dry, gathering contaminated dust and dirt.

The report suggests companies can do more to minimize lead in their products by promoting cleaner practices where drying beans are covered and soil contact minimized. Cadmium is more challenging to address but options include treating soils or replacing older cacao trees with younger ones, as well as blending beans from different areas to maintain lower average cadmium levels.

Consumer Reports has called on big brands to do more to reduce metal levels in their products. Hershey responded that it is continuing to look for ways to remove more of the metals in its products, while Nestle said it was working with suppliers to monitor and minimize these substances in its foods.”

Fonte:

https://www.chemistryworld.com/news/testing-extends-range-of-us-chocolate-foods-containing-lead-and-cadmium/4018332.article?utm_source=cw_monthly&utm_medium=email&utm_campaign=cw_newsletters (acesso em 20/01/2024)

1. This passage is mostly about:
 - (a) the world problems with the cacao production.
 - (b) the decline in chocolate production worldwide.
 - (c) new methods of chocolate production.
 - (d) the contamination of chocolate with heavy metals.

2. According to the text, the presence of cadmium in cacao is mainly from:
 - (a) the soil contaminated with the metal.
 - (b) the presence of the metal in the air.
 - (c) the cocoa processing.
 - (d) the cocoa transport.

3. According to the text, regarding the minimization of the contents of lead and cadmium in chocolate products:
 - (a) There is no difficulty in minimizing lead and cadmium in chocolate products.
 - (b) Minimizing cadmium in chocolate products is more challenging compared to lead.
 - (c) It is more challenging to minimize lead than cadmium in chocolate products.
 - (d) It is impossible to minimize lead and cadmium in chocolate products.

4. In the sentence “Hence, products with higher proportions of cocoa solids such darker chocolate...”, in the third paragraph,
The word “hence” can be replaced with, except:
 - (a) therefore
 - (b) thus
 - (c) however
 - (d) consequently

5. Read the following sentence “...options include treating soils or replacing older cacao trees with younger ones”.
The word “ones” refer to:
 - (a) options
 - (b) soils
 - (c) cacao trees
 - (d) younger

6. In the sentence “The report suggests companies can do more to minimize lead in their products...”, in the fifth paragraph, the word “their” refers to:

- (a) report
- (b) companies
- (c) lead
- (d) products

7. Read the sentence: “Meanwhile, lead is mostly introduced as the beans dry, gathering contaminated dust and dirt.”

The word "mostly" can be replaced with:

- (a) only
- (b) solely
- (c) predominantly
- (d) exclusively

8. According to the text, which of the following statements is correct?

- (a) Exposure to lead and cadmium does not represent risks to pregnant women and children.
- (b) Cadmium and lead were widely found in several chocolate products by a US consumer group.
- (c) The big brands, such as Nestle and Hershey, do not care about minimizing lead and cadmium in chocolate products.
- (d) Cocoa butter tends to accumulate more lead and cadmium than cocoa solids.