Are there roaches in your coffee and chocolate?

The interwebs are abuzz from the NPR interview earlier this week with entomologist Douglas Emlen, who is a specialist on scarab beetles. (And how funny is it that a discussion of Dung Beetles happened on a program called "Fresh Air"?!) At about 34:00, he started telling some fun entomology stories—one of which ended with a statement that most mass-produced, pre-ground coffee, as well as chocolate, has roach parts in it.

For most entomologists or folks working in agriculture, this is not much of a shock. I have covered before how the FDA allows a wide variety of insect parts in most food products. For some people, though, including interviewer Terri Gross, this clearly was another case of OMGWTFBUGZINMAIFOODZ! For those that aren’t afraid to know, here is the allowable amount of insects in chocolate and coffee beans:

<table>
<thead>
<tr>
<th>Food</th>
<th>Defect</th>
<th>Action Level</th>
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</thead>
<tbody>
<tr>
<td>CHOCOLATE</td>
<td>Insect filth</td>
<td>Average is 60 or more insect fragments per 100 grams when 6 100-gram</td>
</tr>
<tr>
<td>AND</td>
<td>(AOAC 965.38)</td>
<td>subsamples are examined OR Any 1 subsample contains 90 or more insect</td>
</tr>
<tr>
<td>CHOCOLATE LIQUOR</td>
<td></td>
<td>fragments</td>
</tr>
<tr>
<td>COFFEE BEANS, GREEN</td>
<td>Insect Filth and Insects</td>
<td>Average 10% or more by count are insect-infested.</td>
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</tbody>
</table>
The **action level** means that if there are MORE than 60 insect fragments in 0.2 lbs of chocolate (100 grams, more or less), or MORE than 10% of the beans are damaged or infested, the food is rejected.

Both of these have the same FDA marking: **SIGNIFICANCE: Aesthetic**

In other words, it will not harm you to eat these insect parts. It simply Freaks. People. Out. So FDA controls contamination below a noticeable level.

Americans like processed foods. However, there is a price for having someone else process stuff in bulk—some things will fall in that you might not want to know about. (You SOOO do not ever want to go to a pickle factory. Trust me.)

We also like our food **PERFECT**—which means that producers have to use chemicals to make fruit perfectly shaped and unblemished, as well as using lots of preservatives to keep things lasting in their packages.

Sadly, as we have become more and more disconnected from nature, we become more convinced that the world should (and can be) made sterile and safe. That is utter bullshite.

Nature is dirty. Life is dirty. Poop, rats, and insects happen, despite everyone's best efforts.

When we demand perfection, we create an unobtainable standard that results in tons of food wastage every year.

Are convenience, perfection, and sterility really the most important things to think about when choosing foods? What about how it was grown, or how many resources are used to package and ship it? What about the welfare of the people who produced and manufactured it? In the case...
of coffee and chocolate, these are not insignificant issues.

In the US, most of us actually have lots of choices about our food consumption—which of these might you choose?

- Stop eating food that is pre-prepared and pre-packaged. That way you’ll know exactly what goes into your food.
- Be willing to accept some damage to food (a blemish on your apple, bread without preservatives that goes moldy in a week) so that fewer chemicals are used in search of perfection.
- If you can, join a community garden and learn how hard it is to grow food. Discover that fruit with a little insect nibble on it still tastes pretty good.
- Accept that insects will occasionally get into food, and that the convenience of having packaged food outweighs the knowledge that something with lots of legs might be in it.

List of Fair Trade coffee and chocolate companies

This entry was written by Bug Girl and posted on May 5, 2009 at 5:43 pm and filed under Ask an Entomologist, Entomology, Food, Insects, Science, Skepticism with tags beans, chocolate, coffee, FDA, NPR, roaches. Bookmark the permalink. Follow any comments here with the RSS feed for this post. Post a comment or leave a trackback: Trackback URL.

6 Comments

1. John
   Posted May 5, 2009 at 6:07 pm |
   Permalink
   I don’t care about the insect bits as long as they aren’t harmful and I don’t have to think about them while eating.

2. Kevin Z
   Posted May 5, 2009 at 6:12 pm |
Permalink

lol, what you don’t know won’t kill you...

Hey wait, is that a thorax in your teeth? (that’s what the FDA means by aesthetic right?)

3. Joshua

Posted May 5, 2009 at 6:18 pm |

Permalink

Oh, man, I can’t even imagine the freak out if he told them about fig wasps...

4. Chris

Posted May 5, 2009 at 6:36 pm |

Permalink

I read somewhere that even though vegans/vegetarians don’t eat meat, they get enough vitamin B12 (only found in animal products) in their diet because of insect contamination. 😁

5. Bug Girl

Posted May 5, 2009 at 7:34 pm |

Permalink

Joshua–a very fun exercise is to offer people **fig newtons** before...and after explaining fig wasps.

There is always a noticeable difference, even though they happily ate them just an hour before 😅

6. BookGeekGrrl

Posted May 5, 2009 at 10:34 pm |

Permalink

Wait, now I wanna hear about the fig wasps!
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Website

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