科学家在食品包装中发现 3000 多种潜在

有害化学物质 More than 3,000 potentially harmful

chemicals found in food packaging

目前已知全球有数干种化学品被故意添加入食品包装,但其中只有很少种类的毒性和暴露信息为人们所知晓,绝大多数人们既不认识也不了解其毒性与暴露信息。一份研究报告指出,科学家们已经确定了3000多种可在食品包装和其他食品相关材料中发现的潜在有害化学物质,其中三分之二是以前未发现与食品接触的化学品。



[Photo/Pexels]

Scientists have identified more than 3,000 potentially harmful chemicals that can be found in food packaging and other food-related materials, two-thirds of which were not previously known to be in contact with food.

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现的潜在有害化学物质,其中三分之二是以前未发现与食品接触的化学品。

An international group of scientists analyzed more than 1,200 scientific studies where chemicals had been measured in food packaging, processing equipment, tableware and reusable food containers.

一个国际科学家小组分析了 1200 多项科学研究,这些研究对食品包装、加工设备、餐具和可重复使用的食品容器中的化学物质进行了检测。 A report released on Thursday by the Food Packaging Forum, a Switzerland-based non-profit, noted little is known about many of the 3,240 chemicals examined in these studies or their effects on people.

瑞士非营利组织"食品包装论坛"5月19日发布的一份报告指出,人们对这些研究中检测的3240种化学物质中的许多物质及其对人类的影响知之甚少。

Manufacturers are either intentionally or unintentionally adding these chemicals to packaging and other equipment, said Pete Myers, a report co-author and founder and chief scientist of Environmental Health Sciences, a non-profit advocacy group. Either way, many of those chemicals are ending up in the human body, he said.

该报告合著者、非营利性倡导组织环境健康科学创始人兼首席科学家皮

特迈尔斯表示,制造商有意或无意地将这些化学品添加到包装和其他设备中。不管怎样,其中许多化学物质最终都会进入人体。

"If we don' t know what it is, we don' t know its toxicity," Myers said. "The mix of chemicals is just too complicated to allow us to regulate them safely."

迈尔斯说: "如果我们不知道它是什么,就不了解其毒性。化学物质的混合物太复杂了,我们无法对其进行安全监管。"

The new analysis, published in the journal Critical Reviews in Food Science and Nutrition, comes amid growing concerns about exposure to potentially toxic chemicals in food and water. 这项新分析发表在《食品科学与营养学评论》杂志上,眼下人们越来越关注食品和水中潜在的有毒化学品。

The Food Packaging Forum has created a searchable database with the chemicals found in the packaging and equipment, known as food contact materials. While many of the chemicals on the list are known hazards such as phthalates and PFAS, others have not been adequately studied, the group said, and their health effects are unclear.

食品包装论坛用包装和设备中发现的化学物质(即接触食品的材料)创建了一个可搜索的数据库。该组织表示,虽然清单上的许多化学物质都是已知的有害物质,如邻苯二甲酸盐和全氟烷基和多氟烷基化合物

(PFAS),但其他化学物质尚未得到充分研究,尚不清楚它们对健康的影响。

Researchers were shocked to find chemicals in food contact materials that consumers could have no knowledge of. Just one-third of the chemicals studied appeared in a previously compiled database of more than 12,000 chemicals associated with the manufacturing of food contact materials.

研究人员震惊地发现,在食品接触材料中存在消费者可能一无所知的化学品。所研究的化学品中仅有三分之一出现在先前汇编的与食品接触材料制造有关的 12000 多种化学品的数据库中。

Previous studies have found potentially dangerous PFAS

"forever chemicals" in food packaging. Those chemicals have been linked to a list of health problems.

此前的研究发现,食品包装中含有存在潜在危险性的 PFAS "永久性化学品"。这些化学物质与一系列健康问题有关。

Nearly two-thirds of the studies analyzed in the new report looked at chemicals in plastic. Packaging manufacturers often add chemicals without knowing the long-term ramifications, said Jessica Heiges, a UC Berkeley doctoral candidate who studies disposable food items such as plasticware and packaging and was not involved in the report.

新报告中分析的近三分之二的研究关注塑料中的化学物质。加州大学伯克利分校博士研究生杰西卡海格斯表示,包装生产商经常在不了解长期后果的情况下添加化学品。海洛斯从事塑料制品包装等一次性食品包装的研究,她没有参与该报告。

The chemicals "are terrifying because we don't know what their impacts are", Heiges said. "What's most alarming is this cocktail of chemicals, how they're interacting with each other. Some of them are persisting in the environment and in our bodies as we're consuming them."

海格斯称,这些化学物质"很可怕,因为我们不知道它们的影响是什么。最令人担忧的是这些化学物质的混合物,它们是如何相互作用的。当我们摄入它们时,其中一些会持续存在于环境和我们的身体中。"

It's likely many of those unknown chemicals are harmful, said Alastair Iles, an associate professor in UC Berkeley's environmental science, policy and management department, also not involved with the study.

加州大学伯克利分校环境科学政策和管理系副教授阿拉斯泰尔·艾尔斯 表示,许多这些未知化学物质很可能是有害的,他也没有参与这项研究。

"The report only underlines our gross ignorance when it comes to the chemicals that people are being exposed to every day," he said. "If we didn' t know that there were so many chemicals in packages, what does that say about our knowledge about

chemical risks?"

他说: "这份报告只是强调了我们对每天接触的化学物质有多么无知。如果我们连包装中有这么多化学物质都不知道,那说明我们对化学品风险的又了解多少呢?"