#### HAZARDOUS CHEMICALS IN FOOD PACKAGING — A THREAT TO HUMAN HEALTH

#### Food packaging contains many chemicals

4283 substances potentially present in plast i c packaging

substances particularly

hazardous to the

environment

906 substances likely present

63

substances

particularly

hazardous to

human health

12,000 chemicals are used in the manufacture offood contact materials (FCMs) globally. FCMs are materials and products that come into contact with our food, such as storage containers, factory equipment, kitchen utensils, and food packaging.

Many of these chemicals are used as additives in plastic packaging to provide flexibility, colouring, fillers, and durability against heat or sunlight. A large number of chemicals are also used in the manufacture of paper, fibers, and mixed materials food packaging, as well as for inks and dyes.

## Many of these chemicals are hazardous to human health

Over 4,000 chemicals can be present in plastic packaging. Among those chemicals, 906 have been identified as *likely* to be present in plastic packaging, and of those, 68 chemicals are particularly hazardous for the environment while 63 are particularly hazardous for human health. However, most of the chemicals associated with plastic and food packaging have not been evaluated for threats to human health or the environment.

All kinds of food packaging can contain health-threatening chemicals. The Food Packaging Forum has identified 608 chemicals as the most hazardous and therefore high-priority candidates for substitution or elimination from food contact. These chemicals can negatively affect the nervous, endocrine, and immune systems. Many of these chemicals likely cause cancer and other illnesses or can interfere with reproduction and development. Many more food contact chemicals may be hazardous but they have not yet been adequately tested for toxicity.

# Food packaging chemicals readily migrate into the food we eat and beverages we drink

Chemicals can migrate from packaging to our food and beverages. Materials such as glass, stainless steel, and ceramic are known to be more inert (stable) and less likely to allow chemical migration to contents. Plastic, paper, and cardboard are, on the contrary, non-inert materials, so chemicals can more easily migrate directly from the material to the food.

Plastic, paper and cardboard packaging is largely single-use, and accounts for more than 70% offood packaging sales globally (compared to glass which represents about 10% of the market share). The way food is currently packaged and distributed is harmful to human health and the environment.

#### **Current regulations do not protect our health**

Consumers generally trust that government regulations keep them safe. However, food packaging regulations fail to protect our health, notably due to lack ofinformation, transparency and traceability. Waste managers and recyclers themselves often do not have relevant information about the safety of recycled materials that are then used for food packaging.

Under the U.S. regulatory program, only 25% of FCMs have been assessed for health safety. Industry conducts health risks assessments without government oversight, and without adequate data on human toxicity or exposure levels. The regulations do not properly consider effects of low dose exposures on human health, notably of children and vulnerable populations.

In the European Union, only a fraction of FCMs are assessed and the legislation on FCMs is largely outdated and insufficient to adequately protect human health. Yet, upcoming revisions of the legislation provide an opportunity to change that.

### Solutions — Towards safe and reusable packaging

Reusable materials such as glass, stainless steel, and ceramics made with non-toxic glazes and without resin coatings that contain hazard ous materials are often safer and release fewer harmful chemicals than disposable food packaging.



Regulators must take action to ensure that all food packaging is safe, notably by evaluating the safety of all food contact chemicals, requiring traceability and transparency, as well as phasing out hazardous chemicals.

Until stronger regulations to ensure safety are adopted, the safest choice, if available, is reusable food packaging made from an inert material (or avoid packaging all together if that's an option). Reducing and reusing packaging is also better for our environment!

Alternatives to single-use packaging are blossoming across the world, accelerating the transition towards reusable and safe packaging.

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