

Circular economy and metal waste in cooking - how to reuse them

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What does circular economy mean?

- This is a model of production and consumption, which limits waste to a minimum. It provides benefits to the environment, the economy and all of us, while aiming to extend the life cycle of products.
- When a product reaches the end of its life cycle, the materials from which it is composed continue to be used in another way. This is done over and over again, thus minimizing waste disposal.



The model is based on the principles of the 3 R:

- > reduce
- > reuse
- > recycle





Concept of a circular economy - Linear vs Circular Economy

- > The concept is built in opposition to the traditional linear economic model in which raw materials are used, goods and products are created from them, they are consumed, and the leftovers are thrown away. This model relies on large quantities of cheap and accessible materials and energy sources.
- In the circular economy, we follow the linear model to a certain extent, but here the residues are not thrown away, but are recycled and re-used as part of other products.





Why it is necessary to move to a circular economy?

- The demand for raw materials and resources increases a great number of them are limited in quantity. They often do not reach the EU and European countries become dependent on imports from other countries.
- Effect on the environment the extraction and consumption of raw materials increases energy consumption and greenhouse gas emissions. More sensible use of raw materials can help fight climate change.



Advantages of the Circular economy in reducing food waste



- Circular economy approaches such as prevention, rescue and redistribution, recycling and composting, and upcycling can reduce waste and offer advantages.
- Circular economy enables food waste and promoting sustainability.
- Food waste is a global issue with economic, environmental and social implications.





How to reuse metal waste in the kitchen in the context of the circular economy

- The implementation of circular economy principles to cooking-related metal waste has the potential to reduce pressure on natural resources and optimize material use.
- Metal waste is common in the kitchen. It is obtained as a result of using the food products contained in them to prepare various dishes.
- Incorporating a circular economy into cooking processes is a key step towards reducing metal and plastic waste. The aim is sustainable preservation of resources for future generations by reducing environmental pollution and reusing them in the kitchen or in our everyday life.

Reuse and recycling



Metal waste that occurs in the kitchen may include the following packaging: aluminum beverage cans, tins, foil.

- Aluminum and steel products can be collected and sent for recycling. Aluminum is 100% recyclable and retains its properties when processed repeatedly.
- Using the tools of the circular economy, new cookware or decorative objects can be created from recycled metals.







When recycled, metal cans can be melted down and find a use for the production of:

- pots, pans, and other cooking utensils.
- knives, ladles and other kitchen tools.







Benefits of recycling metal waste in food production



- Reducing the cost of new materials by reusing old ones.
- Penvironmental benefit:

 Reduction in the amount of waste and emissions associated with the extraction and processing of new metals.
- Social benefit: Promoting community initiatives to collect and recycle metal waste.

Practical tips for reusing metal cans after cooking at school

The boxes can be reused and turned into decorations for Christmas, Easter or other holidays.

After cooking classes at school, students can wash and dry the metal jugs before reusing them to avoid food residue and odors.

Metal boxes can be reused with different decoration to store products like flour, sugar, salt or spices in the school kitchen.

Mini pots out of metal jugs for plants and spices in the schoolyard to be made.



Note: Pictures in the presentation are taken from the Internet for learning purposes.

- https://images.app.goo.gl/HfurRBkXmyPScjvg7
- https://images.app.goo.gl/KkjzrVSXM3qUDTZM8
- https://www.instagram.com/precisiongrow_/p/C37nr-bKFlv/
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