

LOVE FOOD REDUCE WASTE

Training of trainers
Module n.7

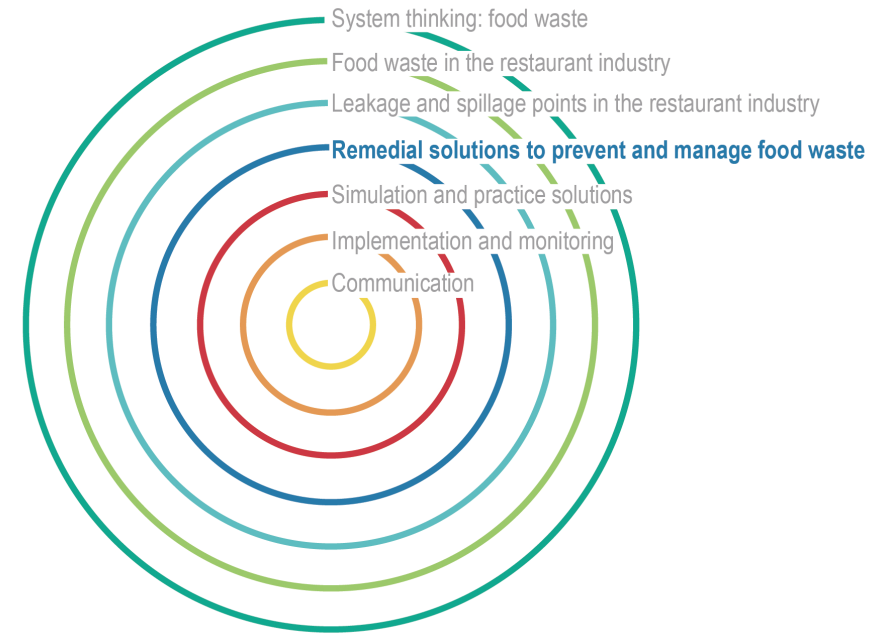
12/02/2019

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7. STRATEGIES, SOLUTIONS AND CONDITIONS TO PREVENT AND MANAGE THE FOOD WASTE IN THE (1h) (N. Tecco)



1. Debrief of the results of the role play of the day before
2. Brainstorming about the solution to prevent and manage food waste
3. The risk of competitive and conflicting solutions
4. The conditions for good solutions adoption
5. Building an effective action plan

1. Debrief of the results of the role play of the day before

YESTERDAY WORKING GROUP ABOUT THE HOLES INTO THE LAYERS OF AN HYPOTHETICAL RESTAURANT SYSTEMS

WHAT

FOOD WASTE IN THE FOOD SERVICE INDUSTRY (DRIVERS)

WHERE

FOOD PREPARATION (Kitchen)

FOOD CONSUMPTION (Dining area)

WHO

Restaurants managers

Chefs

Room staff

Clients/guests

WHEN

Supply plan

Provision & purchase

Storage

Preparation

Service

Consumption

Disposal

WHY

- Lack of inventory planning
- Lack of menu planning

- Difficulties in forecasting the flow of clients
- Lack of menu design

- Lack of sensory skills

- Lack of culinary skills (preparation mistakes, leftovers reuse for new meals)
- Overcooking
- Lack of technology awareness in the use of fridge, freezer, oven
- Lack of by-products valorisation (oil, coffee grounds)

- Too big portion
- Standardised portion not adapted to clients' need

- Lack of by-products valorisation (oil, coffee grounds)

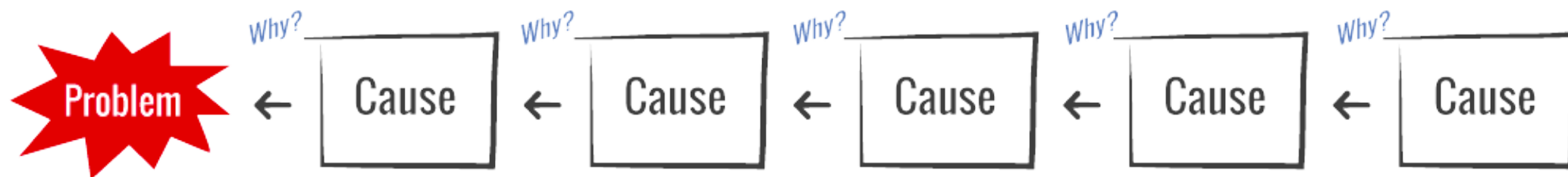
- Wrong storage practices
- Unsuitable storage conditions
- Lack of monitoring used by dates
- Misinterpretation of used by and best before
- Lack of technology awareness in the use of fridge, freezer, oven

- Big ordering
- Lack of a sense of ownership or responsibility about the food they leave
- The amount of food clients get is considered to be out, with any leeway for change

- Time rush
- Weak social pressure
- Scarce' food waste knowledge, sensitivity and concerns
- Scarce data availability on the quantity of food waste

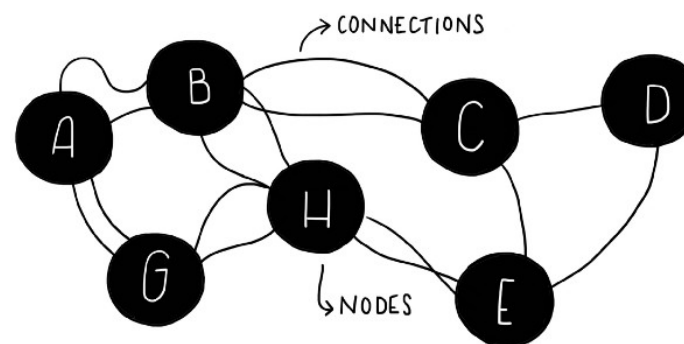
The 5W schema makes it clear that the problem of food waste in the food service industry is a very systemic one, result of multiple actions that imply many actors where at the moment is difficult to carry out a separation between the drivers and the consequence of the different actions and their relationship

- By finding the interconnections within the layer and across the layer is possible to elaborate a cause-effect map

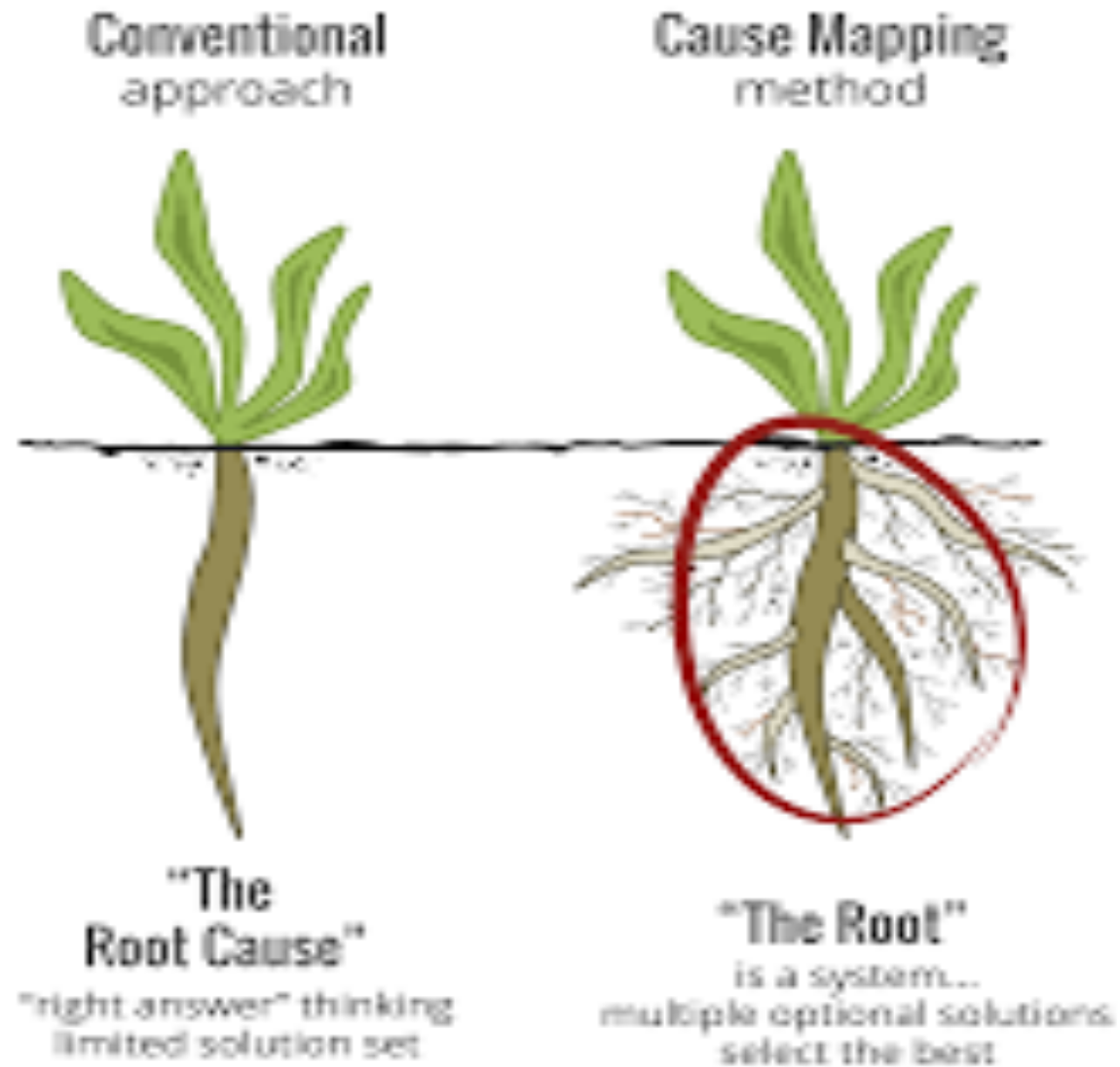


- to understand the connections among the causes and finding **root causes and feedback loops.**

INTERCONNECTED FEEDBACK LOOPS?



THE ROOT CAUSE AND THE ROOT AS A SYSTEM

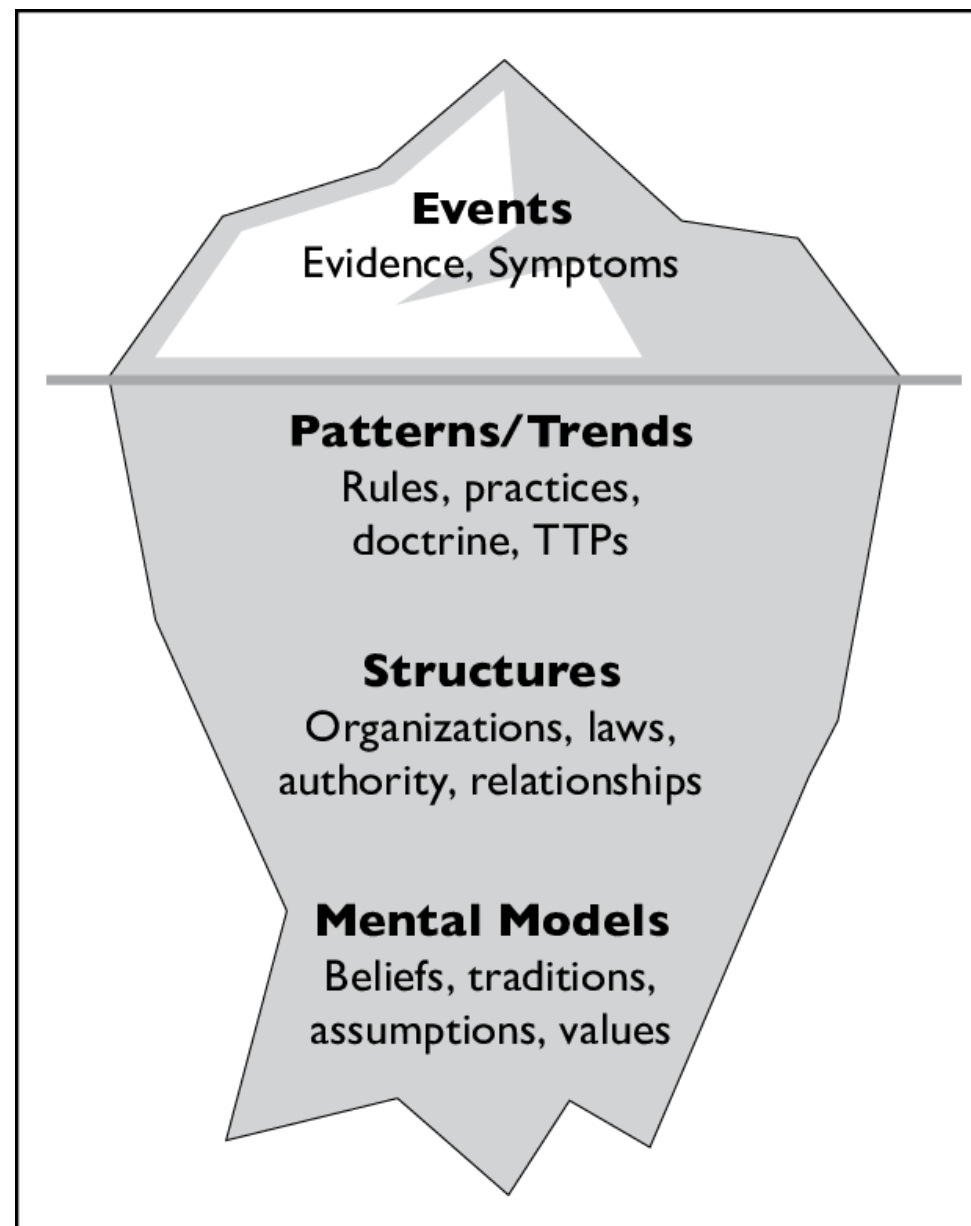


A PROBLEM WELL DEFINED IS A PROBLEM HALF SOLVED

WHAT HAPPENS IF I HAVE MANY PROBLEMS TO SOLVE?

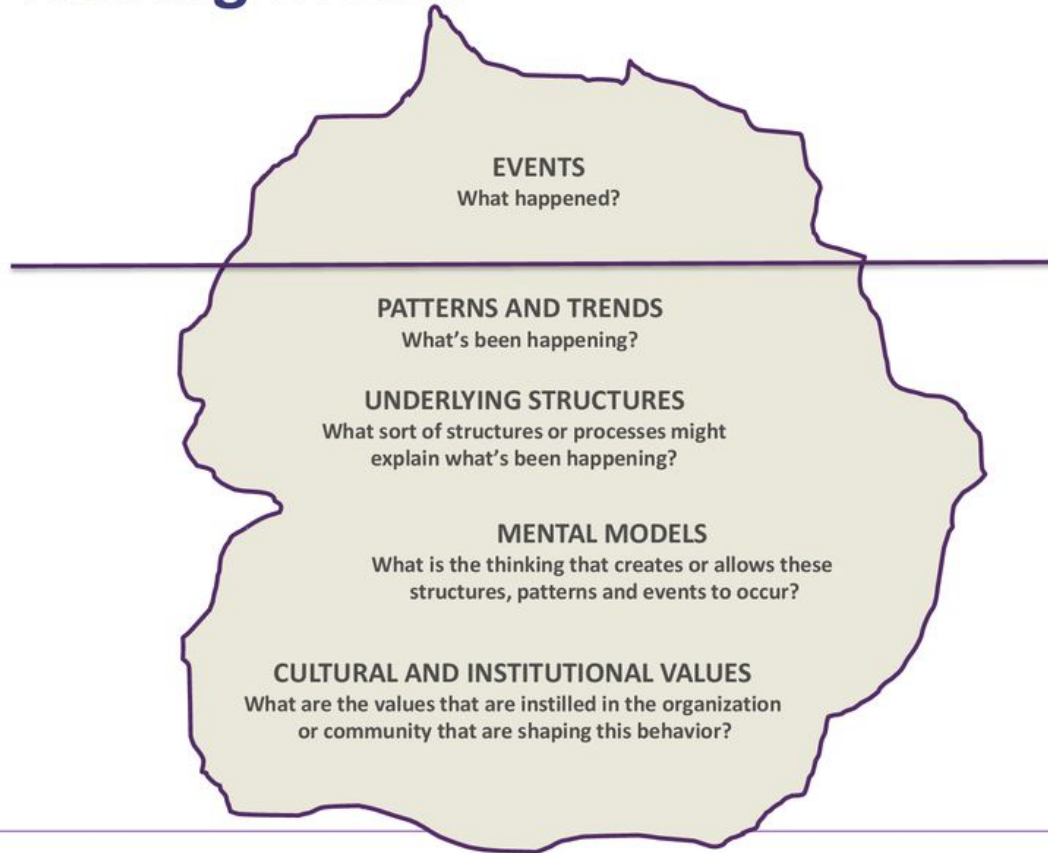
The iceberg model is a valuable tool to encourage systemic thinking and help you contextualize an issue as part of a whole system. By asking you to connect an event—a single incident or occurrence—to patterns of behaviour, systems structures, and mental models, **the iceberg allows you to see the structures underlying the event.**

Just like an iceberg, 90% of which is invisible beneath the water, these structures are often hidden below the surface. However, if you can identify them and connect them to the events that you are seeing, **you may be able to develop lasting solutions that target the whole system rather than short term, reactive solutions.**



SYSTEMS THINKING

The Iceberg Model



TOO BIG PORTION!

- When I go eating out I cannot finish the food on my plate
- On the menu, there no customized portion and I'm so curios to taste many things
 - Customers find satisfaction only with big portions
 - When people go eating out wants to eat more

Consumer research

WRAP has carried out extensive research in 2012-13 to identify **why** we waste food when we eat out in UK:

- Restaurants
- Pubs
- Quick service restaurants
- Hotels
- Staff restaurants
- Leisure venues.

The research also looked at **what** food we leave on our plates and **what can be done** to reduce the amount of food wasted.

Here's a summary of the way the research was carried out.

Stage one

An **on-line survey** of more than 5,000 adults to find out why people leave food when eating out. This was followed by 12 discussion groups. The groups involved **in-depth** discussions about food waste when eating out-of-home.

Stage two

Six discussion groups were held. Participants discussed what, if any, **messages** would encourage them to waste less food out-of-home.

Stage three

Nine discussion groups were held. The discussions explored messages which were included on **menus, table cards, place mats and drinks mats** to find out what food waste reduction messages might influence people and where these messages could be used to change food waste behaviour.

Why customers leave food on their plates - research findings

This section has details of the research findings.

More details are available in the research report and PowerPoint slide decks available via links on [page 7](#).

- The majority of people don't want to think about food waste when having a meal out. Three-fifths of people surveyed in stage one agreed with the statement 'I don't want to think about leaving food when I eat out'.
- The main reason people gave for leaving food is that portion sizes are too big - 41%.
- People feel portion sizes are predetermined for them and not something they have control over.
- Chips, vegetables and salad (including garnishes) are the types of food most likely to be left on customers' plates. People consider some of this food to be 'plate fillers' rather than part of the meal they ordered. Some didn't even consider them to be food, especially salad garnishes.
- At a UK level 32% of people who left food, left chips or French fries. 18% left vegetables, 11% left meat/meat products and the same percentage left salad/coleslaw or potatoes.
- More people leave food on their plates in hotels, pubs and restaurants than other venues.
- People who leave food at the end of their meal are more likely to be women – 59% women, 41% men.
- Large portions of food are off putting to 44% of people.
- Having a meal out is often perceived as being a treat, an occasion for people to indulge and a time when they don't want to have to worry about leaving food.
- People who have eaten out for the 'experience' rather than simply to 're-fuel' are more likely to leave food at the end of their meal.
- People who leave food don't appear to feel a sense of ownership or responsibility over the food they leave. The amount of food they get is considered to be out of their control and a sizeable number of people won't ask for anything different.
- If eating more than one course, people will often leave part of their main dish and accompanying sides so they can eat a starter or pudding.

[continued...](#)

2. Brainstorming about the solution to prevent and manage food waste

A PROBLEM WELL DEFINED IS A PROBLEM HALF SOLVED

WHAT HAPPENS IF I HAVE MANY PROBLEMS TO SOLVE?

The areas of intervention (HOW in substitution to the WHY) are therefore multiple and open the way to different types of solutions, operating on the different fronts of the reduction, the re-use/recovery and the recycle of the food waste based on environmental, social and economic goals. They include, reorganization processes, food waste audit and monitoring, training for the acquisition of the missing skill, redistribution of the food surplus, awareness campaigns, creation of communities of practices, recommendations.

These are solutions, which beyond differ in terms of type, differ for their degree of feasibility, profit and saving potential, implementation effort, social and environmental spill overs (with a further distinction between weak and strong sustainability).

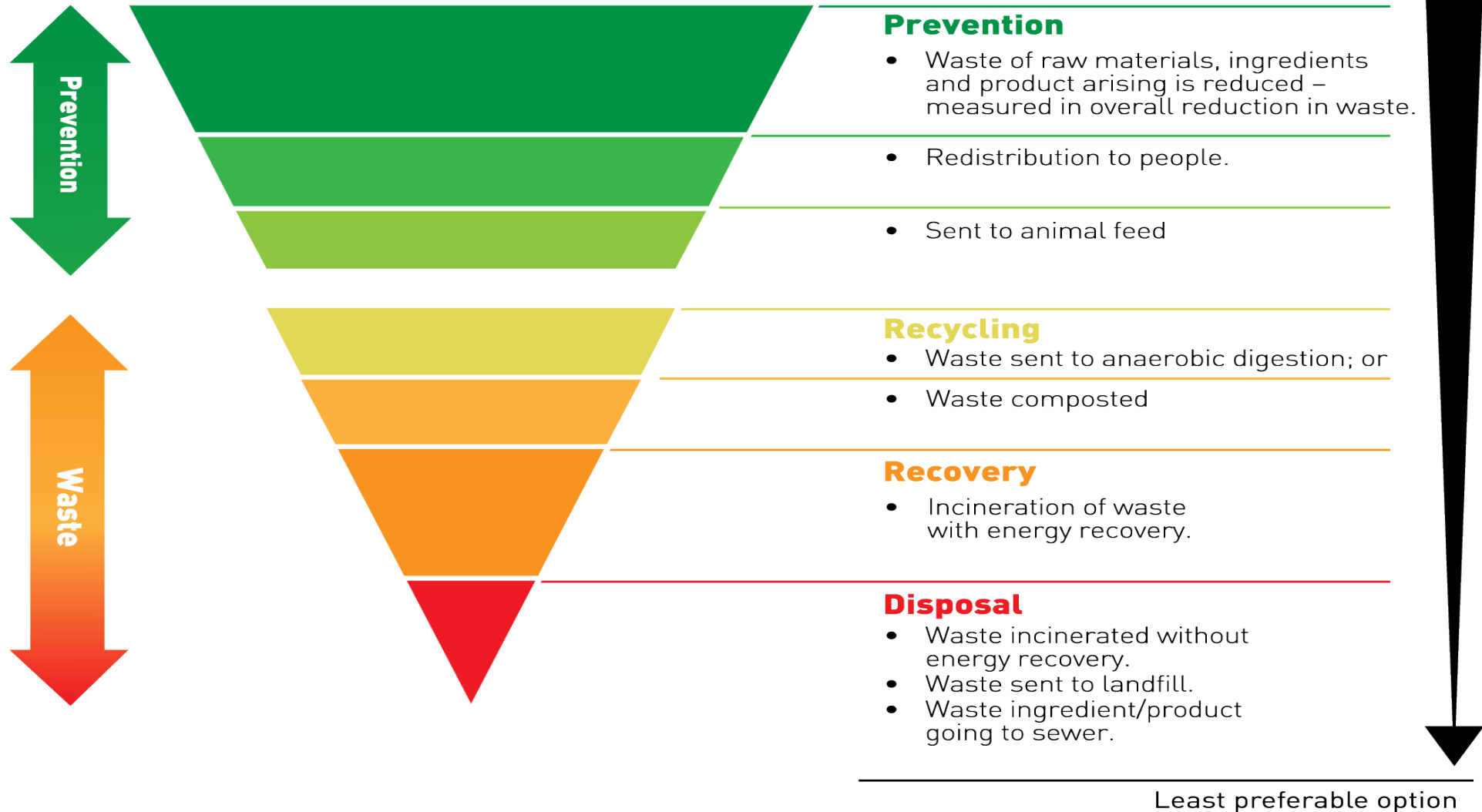
Such a rich availability of solutions risks however to turn into a competing context without achieving “win-win-win” benefits for all actors and at all scales.

FOSTER approach by operating upstream the food value chain to reduce its production according to the Waste Hierarchy and following the principles of the Circular Economy will work in the promotion of a proper ration in the combination of these solutions.

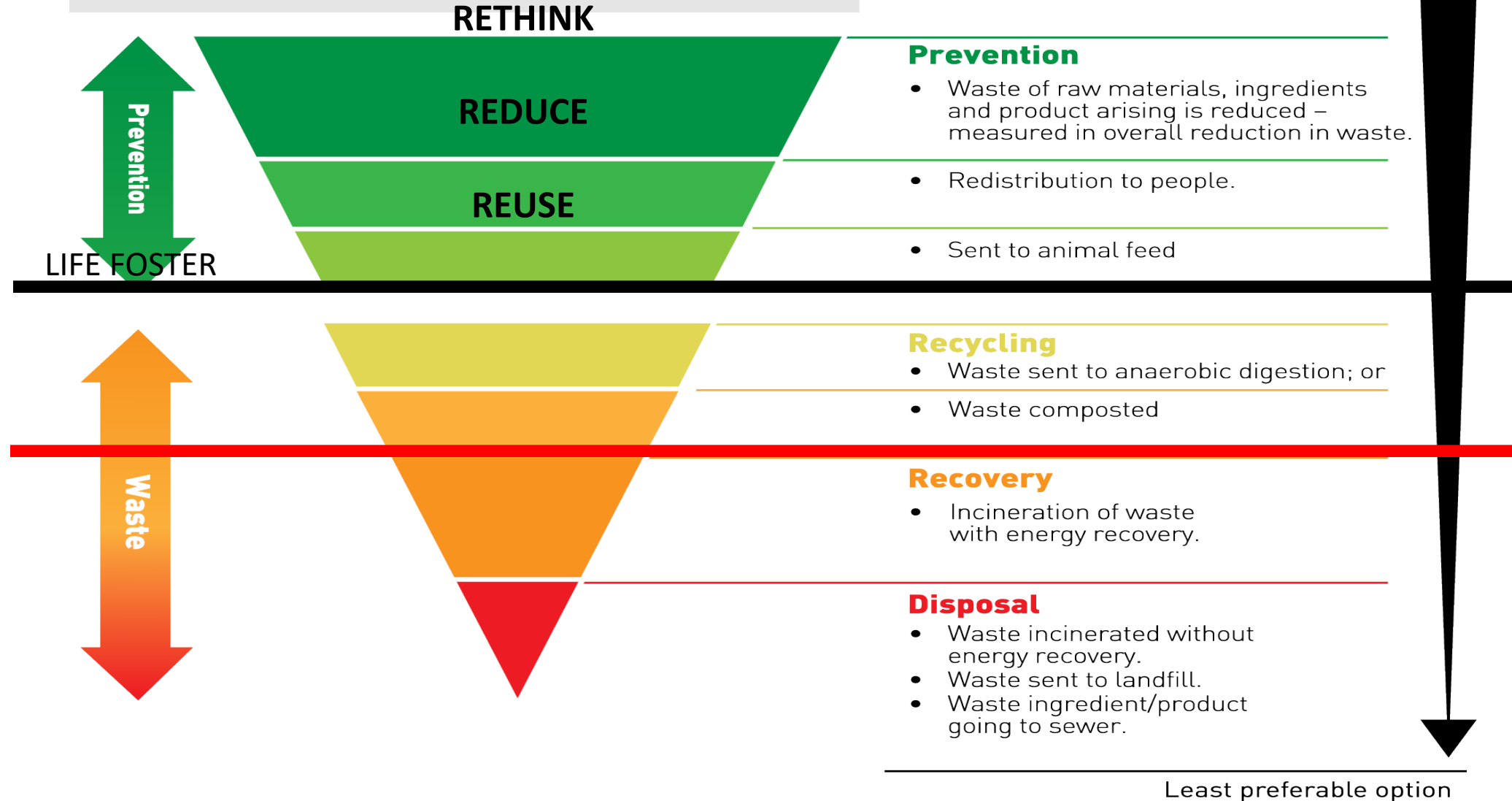
- FIND THE ROOTS CAUSES TO BE ABLE TO DEVELOP LASTING AND STRATEGICAL SOLUTION THAT TARGET THE WHOLE RESTAURANT SYSTEM RATHER THAN SHORT TERM REACTIVE SOLUTIONS
- ACT ON WHAT YOU CAN CONTROL
- ACT ON THE MOST RELEVANT ASPECTS IN TERMS OF IMPACT ON THE REDUCTION OF FOOD WASTE QUANTY REDUCTION
- ACT ON RECURRING PROBLEMS



Food and drink material hierarchy



Food and drink material hierarchy



CUCINA CIRCOLARE



Second life receipts, doggie box of something more?

Let's have an insight

https://www.youtube.com/watch?v=W_QQQ0o6acE

STARTING FROM THE WORK OF YESTERDAY,
SELECT 7 ACTIONS (SOLUTIONS) TO IMPROVE
THE PREVENTION AND MANAGEMENT OF
FOOD WASTE MANAGEMENT INTO THE
RESTAURANT SYSTEM

WHAT

FOOD WASTE REDUCTION IN THE FOOD SERVICE INDUSTRY (SOLUTIONS)

WHERE

FOOD PREPARATION (Kitchen)

FOOD CONSUMPTION (Dining area)

WHO

Restaurants managers

Chefs

Room staff

Clients/guests

WHEN

Supply plan

Provision & purchase

Storage

Preparation

Service

Consumption

Disposal

HOW

- Inventory planning
- Menu and production planning

- Forecast of the clients' flow
- Advanced booking
- Just in time cooking
- Menu design

- Staff training to improve sensory skills

- Staff training to improve culinary skills (leftovers reuse for second life recipes)
- Just in time cooking
- Donation of kitchen surplus
- Improvement of technology awareness in the use of fridge, freezer, oven
- By-products valorisation (e.g. cooking oil)
- Freeze the food surplus

- Awareness of storage management practices
- Proper kitchen organisation and management
- Lack of monitoring used by dates
- Right interpretation of used by and best before
- Monitoring used by dates
- Improvement of technology awareness in the use of fridge, freezer, oven

- Smaller portion and plates
- Portion choices
- Customisation of portion size
- Various food choices and prizes
- Guiding customers in the food choices
- Limited time offer

- Doggie bag to consume later
- Donation of kitchen surplus
- By-products and waste valorisation (e.g. coffee grounds)

- Education for careful ordering

- Provision of social cues
- Education and awareness on the value of food
- Food waste quantification and measurement (accounting systems, tracking & analytics, internal audit)
- Food waste monitoring reduction strategies



5. Building an effective training course: some preliminary activities to develop in future

- **MAKE YOUR TARGET AWARE OF THE PROBLEMS (HOLES) ALONG THE PROCESS**
- **MAKE YOUR TARGET IN THE CONDITIONS OF NOT CREATING HOLES INTO THE FOOD PROCESS**

EXERCISE	WHO	WHERE	WHEN/HOW MUCH TIME?	WHY	COMPETENCES?
Realize a menu for your family	A student	At home	In two different moments (how far, what happens in the middle?)	To make the students aware of the holes in the system and make the student able to prevent and manage properly the food waste	

ACTIVITIES/LAYERS:

- Shopping list
- Shopping (tracking the cost)
- Storage
- Preparation (weight food waste)
- Plating
- Waste management (weight food waste)

USE OF VIDEO AS A DIARY:

- ...
- ...
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EXERCISE	WHO	WHERE	WHEN/HOW MUCH TIME	WHY	COMPETENCES?
Realise a menu for your class or a small catering	A group (how many?)	In the school kitchen/laboratory	In two different moments (how far, what happens in the middle?)	To make the students aware of the holes in the system and make the student able to prevent and manage properly the food waste	

ACTIVITIES/LAYERS:

- Shopping list
- Shopping (tracking the cost)
- Storage
- Preparation (weight waste)
- Plating
- Waste management (weight waste)

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