

Module 1, Session 3

Slide 1

Introduction to managing drop off of my food, supplies, and inventory.

Slide 2 - Session 3

Session 3 is devoted to food and beverage production planning principles in food service, focusing on reducing waste. The training will explain food service production planning and why it is crucial, especially in reducing food waste. In addition, the presentation will cover strategies and learning techniques to align menu planning with the goals of reducing waste in food service.

Slide 3 - Planning

Planning is the process of setting goals and appropriate actions to achieve them. It is the design of the future, achieved by setting goals and objectives and predicting the conditions of action, as well as the means and ways of their most favorable implementation, within certain time limits.

In the planning process, executives get answers to questions:

What, where? When? How? and at what cost?

Slide 4 - The main objectives of planning

The main objectives of planning include, first of all:

- Reduce uncertainty: by preparing for different scenarios and reducing risks
- Optimize resources by effectively managing time, finances, personnel, and other resources
- Ensure consistency of activities by coordinating between different departments or teams,
- The facilitation of control allows you to assess whether the activities are as intended and, if necessary, make adjustments.

Slide 5 – Types of plans

Due to the organizational level, a distinction is made between strategic plans developed at the highest management level and those that include long-term goals and general directions for the company's development. It is such a plan for the future, outlining paths of conduct and implementation. Tactical plans are created at the middle management level by managers of the various departments in the organization and include activities that support the implementation of the previously planned strategy. There is also a distinction between operational, detailed, and short-term plans, which deal with activities at the lowest management level. By function and areas of application, a distinction is made between financial plans, which focus on managing the company's budget, costs, and revenues. They include analyzing expenses, forecasting revenues, and setting investment and savings strategies. Production plans, on the other hand, deal with production-related processes. They include determining the need for raw materials, production schedules, and the organization of manufacturing processes, allowing for efficient use of resources and minimizing



downtime. Marketing plans refer to strategies for promotion, sales, and building relationships with customers. They include activities related to market research, creating advertising campaigns, and strengthening the brand's position in the market. Personnel plans, on the other hand, focus on human resources management. They include activities related to recruiting, training, and motivating employees to increase their efficiency and job satisfaction.

Slide 6 - Types of plans

About the implementation time horizon, plans are distinguished:

Strategic covers 5-10 years and involves implementing strategic activities and goals.

Long-term plans, which cover a period of 2 - 5 years, are plans for specific projects to achieve the organization's overarching goal.

Medium-term plans cover a period of a few months to one year. This is the transitional stage between long-term and short-term plans, and it answers the question of what needs to be done to achieve the long-term plan.

Short-term plans cover several months and focus on day-to-day operational activities, specifying short tasks to be performed by teams.

On the other hand, ongoing plans are created daily or weekly, such as times and dates for service delivery, execution of specific activities during the organization of a special event, etc.

Slide 7 - Types of plans

Regarding the level of detail, a distinction is made between General Plans, which are characterized by a high degree of flexibility. These plans describe goals and objectives more clearly without indicating how they will be achieved. These plans are useful in situations that require openness to change or dynamic adaptation to circumstances. In contrast, detailed plans include precise instructions for accomplishing specific tasks. They take into account precise deadlines, responsibilities, and methods of execution. They are crucial for projects that require a high level of coordination and predictability. Concerning the stability criterion, permanent (continuous) plans are distinguished and used for a long time. They are characterized by stability and little change during their implementation, such as standard operating procedures at the premises. On the other hand, one-time plans involve ventures or projects, and their implementation ends when a specific goal is achieved. These plans continue beyond the future, such as introducing a new seasonal menu or a promotional campaign for opening a new establishment.

Slide 8 - Production planning

Catering production planning refers to organizing and coordinating food (food and beverage) preparation activities within a catering business, such as restaurants, bars, cafeterias, or catering companies. Its purpose is to ensure the efficient operation of the kitchen, optimization of resources, and satisfaction of customer expectations. It encompasses a range of activities, such as predicting demand, developing menus, managing raw material inventories, scheduling kitchen staff, and implementing quality and food safety standards.

The primary goal of production planning in food service is to optimize resources, minimize waste, and provide high-quality food service to economic assumptions and consumer expectations.



Slide 9 - Stages of the process of planning the offer of catering services

The process of planning food service offerings involves several stages, namely:

1. Market and customer analysis involve studying potential customers' needs and expectations, analyzing foodservice trends and consumer preferences, assessing the competition, and identifying market niches.
2. Stage 2 determines the objectives to be pursued by the planned offering. For example, will it be to increase sales, attract new customers, or promote a seasonal menu? We answer the questions: *What do we want to achieve? When and where?* It's important to align the goals with the establishment's business strategy.
3. Next, an important planning step is identifying the problems to solve. We answer questions about what kind of offer should be planned and who it will target.
4. At a further planning stage, we look for alternative solutions—we plan the menu. For example, we choose the type of food, cuisine, cooking techniques, and methods, considering the availability of raw materials for production and the range of additional services that will increase the offer's attractiveness. We also evaluate the qualifications of the personnel, the capabilities and technical equipment of the establishment, and other conditions necessary for production.
5. Finally, we evaluate the consequences of the developed plan - we conduct a cost and logistics analysis. Costing includes calculating the ingredients, labor, and logistics of preparing dishes. Setting prices in a way that ensures profitability while taking into account competitiveness. Cost-based pricing techniques include cost-plus, food cost, target price, margin calculation, and break-even analysis. Logistics and procurement analysis is concerned with planning supplies, selecting appropriate suppliers, and establishing delivery schedules to ensure the freshness of ingredients.
6. The final step in planning a food service offering is to conduct trial tastings and verify the quality of the finished dishes. Customers must be informed about the offer through various promotional channels when marketing it. Finally, all that is left is monitoring and evaluating the offer, i.e., tracking sales results, analyzing customer feedback, and making any changes and improvements based on the collected sales data.

Slide 10 - How does planning affect the quality of services, customer satisfaction and cost optimization?

Effective production planning in food service affects various aspects of the business, including **1. Quality of Service:**

- Planning ensures the quality of food and beverages by maintaining the freshness and quality of ingredients. Anticipating the need for raw materials allows purchasing the right products, reducing the risk of out-of-date or loss of quality. Planning also includes creating accurate recipes and preparation standards, allowing for repeatability, and maintaining consistent quality regardless of the person preparing the dish.
- Planning optimizes food and beverage preparation processes. Thoughtful work organization, such as assigning tasks to specific people and establishing a production schedule, reduces food preparation time, preventing food from going cold or waiting too long for service.

- Planning allows for controlling the hygiene and safety of food production by current standards. For example, proper HACCP procedures and regular checks on food production ensure that all dishes are prepared according to food safety standards.
- Planning allows for quick response to changes and problems, considers emergency procedures, and allows for adaptation to unforeseen circumstances, such as a sudden increase in orders or issues with suppliers. This reduces the negative impact on dish quality.
- Processes are optimized, and products are fresh and well-prepared, resulting in customer satisfaction and positive feedback.

Efficient production planning in food service also affects **Customer satisfaction**. Better teamwork organization allows the restaurant to serve customers faster and more efficiently, reducing waiting time and minimizing errors. Scheduling provides flexibility to adapt to customer expectations and adjust the offer to seasonal products or culinary trends. As a result, customers feel better served and are more likely to return or recommend the restaurant to their friends.

Slide 11 - Effective production planning in the catering industry.

Effective production planning in food service also affects the optimization of **business costs**. Scheduling, among other things, helps effectively manage staff time and optimize production processes. Planning work schedules allow you to hire the right number of employees during peak hours and optimize their work during less busy periods, reducing costs associated with overtime or overstaffing. With a well-planned workflow, the kitchen runs more efficiently. Eliminating unnecessary steps and inefficient activities in the food preparation process speeds up work and reduces energy, water, equipment, or food waste costs.

Planning helps avoid wasting raw materials, resources, and processes, reducing operating costs. By standardizing portion sizes, restaurants can better control ingredients, reducing overuse and raw material costs. Better planning also avoids situations where products must be overpriced or excess meals and must be prepared that may not be sold, reducing financial losses.

Effective inventory management, or avoiding overstocking, helps minimize raw material storage costs. Anticipating ingredient requirements helps maintain minimal inventory, positively impacting the business's storage costs and profitability and eliminating expired food loss.

Effective production planning in food service also **reduces uncertainty**. Planning helps prepare for different scenarios and minimize the risk by Anticipating seasonality and trends: A restaurant can analyze data from previous years to predict increased demand during holiday seasons or weekends. For example, if a restaurant knows that ice cream sales increase during the summer, it can order adequate supplies to avoid shortages. Prepare for unexpected changes: Planning allows a restaurant to create procedures in case of sudden problems, such as delays in deliveries or increases in ingredient prices. This allows the restaurant to have alternative products or suppliers, reducing the risk of stock shortages or raising customer prices. Planning for reserve resources: A well-planned restaurant can have backup supply sources for key products. For example, if a major fresh fish supplier can't deliver the product, planning involves working with an alternative supplier and avoiding product availability problems on the menu.

Effective food service production planning also affects **Ensuring consistency in operations**. Planning facilitates coordination between different departments or



teams through scheduling teams. Planning allows you to establish work schedules that meet the needs of other departments. For example, the kitchen team can prepare dishes according to a schedule, and customer service personnel can be appropriately assigned to handle peak hours. This ensures that everyone works consistently and that customers are served without delay. Procedures and standards, such as customer service and food preparation, are established during planning. For example, if a restaurant has procedures for serving food and serving guests, all employees will follow the same guidelines, ensuring consistency in service quality. Similarly, regular team coordination meetings allow for discussing current tasks, goals, challenges, and plans for the coming days or weeks. This keeps the kitchen department, customer service department, and managers in the picture and allows them to act in line with company priorities.

Slide 12 - Planning to reduce food waste in a catering establishment

Reducing waste in food service requires a thoughtful approach that includes analyzing processes and implementing specific actions at each stage of the business. Planning to reduce food waste in a food service establishment comprises, among other things, an Analysis of Demand and the current situation. This includes monitoring waste and identifying which products and processes generate the most waste. Among the wastes generated in a food establishment, the following are distinguished: organic waste, packaging waste, chemical waste, unusual and hazardous waste (e.g., glass, used equipment, etc.), process waste (production losses), water and liquid waste (leftover beverages), and customer service waste. This table shows the characteristics of organic waste (so-called bio-waste) from food.

Slide 13 - I. Demand Analysis

Understanding seasonality and trends in food service allows you to adjust your offerings better and plan your resources and purchases for the appropriate periods. Demand analysis, therefore, helps answer the question: *what factors influence demand in a food service establishment?* Here are some **factors that affect demand** and help adjust restaurant operations:

First Seasons and seasonality of ingredients - for example. During the summer, customers are likelier to choose salads, light dishes, seafood, and cold drinks such as lemonades and cocktails. In the colder months, soups, one-pot dishes, hot chocolate, and mulled wine are ordered more often, as customers prefer warming dishes. In gastronomy, Seasonal ingredients are available; seasonal vegetables and fruits are usually more available and cheaper at certain times of the year, affecting restaurant menus. For example, in Poland, restaurants may feature dishes with pumpkin, apples, or mushrooms in autumn.

Another factor taken into account when analyzing demand is Special events and holidays. During holiday periods, such as Christmas and Easter, demand for holiday dishes or special catering offers increases. Restaurants may then serve traditional dishes popular in the region, such as carp, borscht, and dumplings. On Valentine's Day and Women's Day, restaurants often prepare special offers and romantic menus for couples. The increase in dinner reservations prompts diners to plan and prepare more to serve more guests. Similarly, Local events and festivals, such as concerts, festivals, or sports competitions in the area, can increase the number of restaurant customers. At such times, it is worthwhile to anticipate greater demand for fast food and beverages and ensure that adequate resources are available.



Changing food preferences and culinary trends also influence demand for and use of restaurant services. For example, the popularity of plant-based and gluten-free diets means that many customers are looking for vegan, vegetarian, or gluten-free dishes, which may prompt restaurants to diversify their offerings to include such options, especially when this trend grows stronger in a given season or year. Similarly, more and more people are paying attention to whether ingredients are of local and organic origin. Restaurants can adjust their offerings to offer seasonal and regional products, which attracts environmentally conscious customers. With the rise in popularity of social media and cooking shows, restaurants can introduce seasonal novelties inspired by trends, such as Asian street-food cuisine in the summer or comfort food dishes in the fall.

The analysis of gastronomic demand also considers periods of increased tourist traffic. Particularly in tourist destinations, such as seaside resorts, mountains, or the centers of large cities, the number of visitors can increase significantly during the holiday season. Restaurants can prepare for higher demand by offering popular, easy-to-prepare dishes. Similarly, during International Events, such as the Olympics, conferences, and congresses, restaurants may see an increase in customers from different countries and cultures, providing an opportunity to offer a more diverse menu. Considering these factors in planning allows restaurants to better tailor their offerings to customers' needs during a given period and manage resources efficiently, resulting in greater customer satisfaction and cost optimization.

Adapting to customer preferences in food service requires regular analysis of demand. By using various methods of analysis, restaurants can better understand the needs of their guests and effectively adjust their offerings, which increases the chance of satisfying customers, increasing sales, and building long-term relationships with service recipients. Among the **methods of demand analysis** in the restaurant business are:

1. Sales analysis helps determine which dishes and drinks are most frequently ordered and which are less popular. Restaurants can then focus on highly popular dishes and replace less popular items with new offerings. For example, by analyzing sales, a restaurant may notice that Italian dishes are popular, prompting it to introduce more Italian specialties.
2. Customer surveys and research can provide detailed information about customers' preferences and expectations. Such surveys can be conducted in person, online, or through social media. For example, a restaurant can ask customers which new dishes they want to see on the menu or their preferences regarding portion sizes and seasoning levels.
3. Analyze social media reviews and online reviews. Nowadays, many people share opinions about restaurants online. Analyzing reviews on platforms such as Google, TripAdvisor, or Yelp allows you to understand what customers appreciate about a restaurant and what needs improvement. Example: A restaurant may learn that customers praise the main courses but point out that the wait time for service is too long, allowing it to improve the service process.
- 4 Reservation data analysis. Data from reservation systems can help determine the most popular times and days of the week, allowing you to better prepare for increased traffic at certain times. Example: If reservation analysis indicates higher occupancy on weekends, a restaurant can hire additional staff or introduce special promotions on less busy days.
- 5 Seasonality analysis. Tracking the popularity of dishes at different times allows better preparation of seasonal menus. This can include, for example, selling more ice cream



and cold drinks in the summer and hot drinks in the winter. Example: A restaurant can introduce a winter menu with warming soups and beverages in the fall and winter and light, fresh salads in the summer.

6 Marketing research and benchmarking. Market and competitor research can provide insight into what dishes are popular with other restaurants' customers and what promotions attract customers. Benchmarking allows you to compare yourself with your competitors and understand what factors go into attracting customers. Example: A restaurant may notice that nearby establishments offer attractive lunch promotions and decide to introduce its lunch offer tailored to customer preferences.

7 Analyze industry trends. Monitoring trends in the restaurant industry, such as through industry reports, allows you to introduce innovations before they become widely expected by customers. Example: If analysis shows that Asian cuisine is gaining popularity, a restaurant can introduce Asian items to its menu to attract customers interested in new flavors.

Adapting to customer preferences in food service requires regular demand analysis. Various analysis methods allow restaurants to understand their guests' needs better and effectively adjust their offerings. This increases the chance of satisfying customers, increasing sales, and building long-term relationships with service recipients.

Analyzing **historical sales data** in food service is a key component of effective planning, as it provides detailed information about demand trends and customer preferences over time. It involves analyzing data over a longer period (e.g., months, years) to identify seasonality, popularity of particular products, and correlations with other factors. This historical analysis allows for long-term planning. Analyzing this data will enable you to forecast future demand, optimize inventory, plan menus, and better manage your staff. Below, I provide details on the importance of analyzing historical sales data and examples of its application:

Methods of analyzing historical sales data include:

Trend analysis - detecting patterns and seasonality in sales over an extended period.

KPIs (Key Performance Indicators): Monitoring key indicators such as product turnover rate, average bill per customer, or number of orders per day.

Correlation analysis studies the relationship between sales and other factors (e.g., weather, neighborhood events).

Regression analysis, however, allows one to forecast future sales performance based on historical data.

The last method, Customer segmentation, means classifying customers based on their preferences, which allows you to tailor your offerings to different groups of customers. Segmenting the customers of a food service establishment involves dividing customers into groups according to certain criteria to better match the offer to their needs and preferences. Here are examples of **Customer Segmentation** in foodservice:

1. Demographic segmentation—dividing customers by age: young adults (20-35), families with children, and seniors. The restaurant can prepare special menus or promotions for each group, such as student discounts, special children's menus, or healthy and digestible dishes for seniors.

2. Psychographic segmentation—a division according to lifestyle and interests: health-conscious people, gourmets, fast food lovers, vegans, and vegetarians. Introducing special dishes or sections on the menu, such as vegan options, dietary dishes (e.g., gluten-free, low-calorie), or gourmet tasting menus.

3. behavioral segmentation, or segmentation by frequency of visit: regular customers, occasional customers (e.g., weekend visitors), and tourists. Loyalty programs for



regular customers, special weekend promotions for occasional visitors, and menus or seasonal offers aimed at tourists.

4 Geographic segmentation, i.e., local customers and those from further afield. A restaurant can offer takeaway promotions for local customers and different marketing campaigns targeting people from outside the region, such as social media ads for people coming to town for the weekend.

5 Segmentation by occasion - refers to visitors to the establishment for various occasions, such as business meetings, family celebrations, dates, and dinners with friends. Special offers for larger bookings, various table arrangements, an intimate date atmosphere, or special group menus.

6 Segmentation by price sensitivity - these are price-sensitive and premium customers. Introduce cheaper lunch sets for price-sensitive customers and exclusive, more expensive dishes or tasting menus for premium customers looking for a unique dining experience.

Each of these segmentations allows for more effective tailoring of offerings so that food service establishments can attract various customers and increase customer satisfaction by matching their preferences and financial capabilities.

Therefore, analyzing historical sales data in food service is essential for effective planning. It allows an accurate understanding of market needs and more informed operational decision-making to adjust production volumes to meet demand and eliminate waste.

Slide 14 - II. Effective Inventory Management Plan

Reducing food waste in a food service establishment includes planning Effective Inventory Management. An effective inventory management plan should include:

- Purchase planning based on sales forecasts and product turnover.
- Planning offerings using the FIFO (First In, First Out) system.
- Planning for freshness monitoring: developing a system for marking and recording products (labeling or stock cards can be used).
- Developing an inventory monitoring system: regularly checking stock levels and cold storage.
- Planning minimum and maximum stock levels
- Analyzing waste and developing a residuals management system
- Training staff in inventory management.

Slide 15 - III. PLAN OF THE MENU OFFER AND PRODUCTION PROCESS

Creating menus with food waste reduction principles in mind is a challenge that requires precise planning and management of raw materials and processes. When creating menus, therefore, consideration should be given to:

Whole-product use, waste reduction, and reuse according to the zero waste philosophy. The zero waste philosophy is based on minimizing waste by consciously designing, producing, consuming, and managing resources to allow them to be used and reused for as long as possible. This philosophy aims to achieve a state where waste does not end up in landfills or incinerators, and the circulation of resources in the economy is as sustainable as possible. Know and follow the "5R" Principles, i.e.

1. Refuse - give up things that are not needed.
2. Reduce (reduce) - reduce the amount of goods consumed.



3. Reuse—use products repeatedly. For example, vegetable peels can be used for broths, and fruit peelings for syrups or decorations.
4. Recycle (recycle) - recycle raw materials.
5. Rot (compost) turns organic waste into compost, which you can use to grow vegetables and fruits in your garden.

Slide 16 - III. PLAN OF THE MENU OFFER AND PRODUCTION PROCESS

When creating your menu, you should also consider the Versatility of ingredients, so-called "cross-utilization," i.e., using the same ingredients in different dishes to avoid overusing unusual products. For example, if avocado salad is on your menu, consider other avocado dishes, such as toast or spreads. Another element to consider when creating a menu is the availability of seasonal produce. Choosing ingredients available in season allows for better freshness, greater availability, and thus cheaper purchases. The shelf life of products is also important: Priority should be given to including ingredients with shorter shelf life on menus of the day or promotions. It's worth developing dishes that can be stored for longer periods (e.g., soups, sauces, pickled vegetables), which allows for better inventory management and reduced risk of waste. Ingredients with a short shelf life (such as vegetables or fruits) can be used to prepare preserves or marinades.

When developing menus, it is worth developing ways to process leftovers. Leftover raw materials can be used in new dishes, such as cream soups, sauces, vegetable tarts, or baked goods.

When designing a menu, consider its flexibility depending on availability or if demand changes. It's a good idea to design dishes that can be modified according to the availability of ingredients and the amount in stock. Creating a flexible menu in which certain dishes or ingredients can change helps reduce waste. For example, you can offer a "dish of the day" based on ingredients that must be consumed quickly.

When preparing menu offerings, also consider the simplicity of recipes. Avoid complicated dishes that generate large amounts of production waste (such as processing waste).

Finally, dish portioning should be planned accordingly. Designing portions to fit customers' standard appetites or the ability to order a smaller portion minimizes leftovers on plates and reduces waste.

Slide 17 - Other elements of planning the offer taking into account the reduction of food waste:

Activities in planning to reduce food waste in a restaurant establishment are also included.

4. planning staff training (i.e., scope, budget, training methods and location)
5. planning the supply of raw materials by the production plan, which takes into account, among other things, forecasts, historical analysis of sales data, and analysis of the supplier market; also includes planning the frequency of orders, i.e., daily, weekly, or monthly deliveries depending on the shelf life of the products; and includes standardization of delivery and order monitoring.
- 6 Planning ways to recycle, compost, or donate surplus production to food banks for needy people.

7 Setting quality standards by Creating written quality standards for each dish, production, and procurement processes; Developing a Hazard Analysis Critical Control Points (HACCP) system; Developing recipes and instructions for food and beverage preparation; Establishing regular trial and control tasting periods for dishes (called tasting); Establishing *checklists* for each shift (e.g., checking cleanliness, inventory status, equipment verification). Planning inventory rotation policies; Developing an emergency action plan; Planning staff training on adherence to quality standards; Planning systematic customer satisfaction surveys; Planning the use of digital quality monitoring systems (e.g., temperature recording systems or automated process monitoring); Planning quality control and monitoring (i.e., audits, feedback from staff and customers, monitoring of regulatory changes and trends).

Slide 18 - Learning strategies and techniques

Aligning menu planning with waste reduction goals requires a conscious approach, appropriate action strategies, and learning techniques. Here are some suggestions to consider in this area:

The first strategy you can apply in your establishment is EDUCATION AND AWARENESS, which involves EXPANDING your knowledge of food waste and its environmental impact.

You can use the following learning techniques: online training or workshops, such as courses on waste management and sustainable nutrition; case analysis, i.e., studying the success stories of chefs, restaurants, or even households in minimizing waste; and educational videos and documentaries, such as on the global problem of food waste and how to reduce it.

Another strategy in this area will be ANALYSIS AND EVALUATION OF ACTUAL PRACTICES, which involves identifying the sources of all waste and understanding where (in which category) the greatest losses occur. The following Research Techniques can be used here, such as:

- ✓ Kitchen audit - where you will analyze food scraps and their sources in the kitchen.
- ✓ Observations and reports - during which you can record what is thrown away and why.
- ✓ You can also develop a Pareto Diagram, a chart showing which ingredients are most often wasted and in what quantities.

Slide 19 - Learning strategies and techniques

Another strategy will be the ability to PLAN MENU about SEASONALITY AND AVAILABILITY of raw materials, optimizing the menu by choosing seasonal and local products. Here, you can apply the following Techniques. You can develop:

- ✓ A list of seasonal products, that is, prepare a shopping schedule according to the seasonal calendar.
- ✓ You can develop a List of local suppliers and establish a Collaboration with them, which will allow you to understand supply cycles and product availability.
- ✓ You can also design a modular menu, using the same ingredients in different dishes to avoid throwing away unused raw materials.



Another strategy to reduce food waste in the kitchen is to **OPTIMIZE THE PORTS AND RECEPTORS** of the food and beverages offered, which involves avoiding excess by adjusting portion sizes to meet the needs of the restaurant's customers. You can apply the following Techniques, such as:

- ✓ Portion testing - where you can experiment with different portion sizes to determine the optimal amounts.
- ✓ You can offer so-called "half portions" to customers, i.e., develop smaller versions of dishes.
- ✓ You can also collect feedback from your customers by consulting with them about their preferred portion size or sending out portion size satisfaction surveys at the end of the service.

Slide 20 - Learning strategies and techniques

Another strategy is to learn to **use leftovers and surplus food** and create dishes based on using by-products. You can use the developing technique.

- ✓ Creative recipes include chips made from peelings or broth made from leftover vegetables.
- ✓ Cross-utilization, or ways to use one ingredient in several dishes.
- ✓ Or develop so-called "day" offerings, i.e., dishes prepared using surplus products in the kitchen.

It is also worth taking advantage of **TECHNOLOGIES SUPPORTING WASTE REDUCTION** and looking for digital tools to monitor and optimize waste reduction. You can use the available.

- ✓ Inventory management applications that, among other things, record product expiration dates.
- ✓ Waste tracking systems identify key areas of loss throughout the entire stage, from production to customer consumption.
- ✓ Or food calculators to help you plan purchases, recipes, and portions accurately.

Slide 21 - Learning strategies and techniques

IMPLEMENTING TEAM HABITS is also an important learning strategy, involving the entire team (staff) in reducing waste. You can introduce :

- ✓ Regular team meetings - discussing results of waste reduction and suggesting improvements.
- ✓ Reward system - motivating employees for innovative ideas.
- ✓ Setting common goals - reducing waste by 20% in a month.

The last key learning strategy is to **MONITOR AND CONSTANTLY IMPROVE** the processes involved in producing and selling food and beverages on the premises. It involves Constantly observing the results and adjusting actions depending on the situation. To this end, you can apply such techniques as:

- KPIs (Key Performance Indicators) - are performance indicators that help measure how well an organization achieves its goals. In the context of waste, KPIs can include a variety of metrics, such as the amount of waste generated per unit of production, the efficiency of recycling, the level of material recovery, or the percentage of waste reduced by innovative processes. These indicators help assess progress in waste management and identify areas for improvement.

- Dashboards are visual tools that present data in an understandable and accessible way. They can show the current status of waste reduction, progress toward sustainability goals, data on segregation and recycling, and comparing results with previous periods. They can also provide a quick assessment of how an organization handles its waste problem.
- Feedback loops, or feedback loops, are processes in which performance information (e.g., waste levels, effectiveness of reduction activities) is used to modify and improve operations in the future. This means that data on waste generated or the effectiveness of recycling activities is analyzed and used to improve processes. This may include changes in production procedures, the introduction of new technologies, or changes in waste management policies.

In summary, these tools help organizations effectively monitor, evaluate, and improve their waste management activities.

Reducing food waste in food service requires continuous process monitoring and the introduction of appropriate technological and organizational solutions. Effective waste management saves money, improves operational efficiency, and reduces environmental impact.

Slide 22 – Good practices around the world

- Planning for households: <https://www.youtube.com/watch?v=iaCKhXS-LD0>
- Planning and other waste reduction tips:
<https://www.youtube.com/watch?v=8NCm2Q1rZOM>
- Production: Preparing food, using peelings, drying vegetables, etc.:
<https://www.youtube.com/watch?v=vbOGCSTd6Mg>
- 9 Ways restaurants can reduce food waste:
<https://www.youtube.com/watch?v=8LFIPiZy-Xw>

Slide 23 – Thank you

Thank you for your attention.

