

HANDOUT 3, pages 1-2

Calculation Task

Zero-Waste Carrot Dish – planning, cost, and creativity

Task 1: Calculate the cost per portion (searching prices and doing the math)

- Go to your local grocery store or online store website (e.g. Selve, Rimi, Maxima, etc.).
- Find all the necessary ingredients for this recipe.
- Calculate the approximate total cost of the recipe (for 6 portions).
- Calculate the cost per portion (total divided by six).
- Write down all prices, weight units, and how you did the calculations (e.g. if you buy 1 kg of carrots but only use 600 g).

Read the definition of calculation

What does "calculation" mean? Calculation – precise (economic) accounting, computation (*Estonian Explanatory Dictionary*)

In the context of catering, calculation refers both to determining and computing the required raw materials, and to calculating the cost price and selling price of a prepared product (dish or drink).

In a catering business, the calculation of food ingredients and pricing can be viewed as a unified process. One option is to let creativity flow and calculate the portion price of the finished dish starting from the raw materials and their quantities (see Diagram 1). Another option is to begin with the desired outcome and calculate the prerequisites necessary to achieve the expected product (see Diagram 2). Intermediate and combined approaches are also possible.

Read about calculation process

Food units and weights

Looking around a bit, it's clear that different sources use quite a range of units for expressing food quantities—pieces, cups, deciliters, tablespoons, and so on. However, in catering establishments, recipes must always deliver the same end result, which means such "imprecise" units like “a piece” or “a glassful” cannot always be trusted.

The measurement units used on cost calculation cards are kilograms, liters, and pieces (for ingredients sold by unit). An egg, for example, appears on the cost card as **gross in pieces and net in kilograms**, i.e., unit: pcs/kg.

If other units are used to describe ingredient quantities, they must be converted into kilograms or liters. The rule is: **liquids are measured in liters**, and **solids in kilograms**. To avoid confusion, it's best to follow the units used by the product's manufacturer.

There are several types of conversions needed when preparing calculation cards. Here's a list of conversions one should know how to perform:

- Smaller units into base units (milliliters → liters)
- Base units into larger units (grams → kilograms)
- Pieces into weight units (1 onion → 60 grams → 0.060 kg)
- Household volumes into standard volume units (glass → liters)
- Units from other measurement systems into local units (ounces → grams/kilograms)
- Percentages into decimals or fractions (50% → 0.5) or vice versa
- Fractions into decimals or percentages ($3/5$ → 0.6 → 60%)

Example of a table:

Ingredient	Quantity (in recipe)	Store Price (unit)	Calculated Cost
Carrot	600 g	€1.20/kg	€0.72
Mascarpone	60 g	€2.40/250 g	€0.58
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