



## Sustainability assessment of out of-home meals: potentials and obstacles applying indicator sets NAHGAST Meal-Basis and NAHGAST Meal-Pro

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### Introduction

To enable significant, sustainability-oriented improvements in the out-of-home catering, e. g. to reduce the material footprint by factor 2 (Lukas et al. 2016), meals have to be assessed. Hence, we developed an assessment tool with two modules: NAHGAST Meal-Basis and NAHGAST Meal-Pro. This Excel-based tool covers several qualitative and quantitative indicators and calculates a total score as well as scores on the levels of single indicators und sustainability dimensions.

### Methods

The tool is realized as an Excel file and consists of two modules: NAHGAST Meal-Basis and NAHGAST Meal-Pro. NAHGAST Meal-Basis primarily contains qualitative indicators like the use of organic ingredients, NAHGAST Meal-Pro chiefly comprises quantitative indicators like carbon footprint.

Users have to enter the amount of the single ingredients and attributes for certain indicators (usually yes/no), while for other indicators, specific values based on a databank are linked with the ingredients so results are calculated automatically.

Aside from the fact that measuring sustainability is always complicated and vulnerable, the availability and validity of data and belong to the major challenges we have to deal with so the assessment results are still seen as preliminary.

### Results

The assessment's results are generated and presented in three ways and on three levels: as a score (3, 2, 1), a colour (green, yellow, red) and a verbal information (recommendable, restrictively recommendable, not recommendable) each as a total, a dimension's and an indicator's result. Economic indicators are part of the tool, but have not been assessed yet.

Indicators	Recommendations	Scores
Fairtrade products:	restrictively recommendable	1
Animal products:	not recommendable	1
Energy amount:	recommendable	3
Fibre amount:	not recommendable	1
Fat amount:	recommendable	3
Carbohydrates amount:	recommendable	3
thereof sugar:	recommendable	3
Salt amount:	restrictively recommendable	2
Material Footprint:	recommendable	3
Carbon Footprint:	recommendable	3
Water demand	recommendable	3
Area required	recommendable	3
Popularity		0
Cost coverage		0
	<b>Recommendation</b>	<b>Score</b>
<b>Total result:</b>	restrictively recommendable	<b>2,4</b>
	<b>Recommendations</b>	<b>Scores</b>
<b>Dimensions:</b>		
Social dimension	not recommendable	1,0
Health	recommendable	2,5
Ecology	recommendable	3,0
Economy		0,0

Source: Own figure

### Conclusion

After integrating ecological, health-related, social, and economical indicators into a meal assessment tool, which consists of two sets – NAHGAST Meal-Basis and -Pro – and after testing the instrument on a large number of meals, results will show e.g. highlights of the meal assessment (dish categories, specific meals, ingredients) and also more challenges for a widespread implementation in practice. However, the faced challenges will dominate the development process within the project phase and onwards.

### References

Lukas M, Rohn H, Lettenmeier M, Liedtke C (2016) Assessing Indicators and Limits for a Sustainable Everyday Nutrition. International Journal on Food System Dynamics, 299–313.

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