

# Snacks: what would the patient like to eat?

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## Aim of the study

During disease changes in taste can occur, possibly resulting in diminished food intake.

The aim of this study was to assess:

- 1) Food preferences during hospital admission in general
- 2) Appreciation of snacks consumed by patients with malnutrition (risk).

## Methods

The study consisted of two parts and was performed in a 6-week period at 4 wards.

Part 1: Patients' preferences on taste and food structure were assessed using a questionnaire twice on three day interval. On each of those days the questionnaire was assessed in the afternoon and again in the evening.

Part 2: Patients were screened for malnutrition risk with the Malnutrition Universal Screening Tool (MUST). Snacks were offered to patients with a MUST-score of >1. Appreciation of these snacks was assessed using a questionnaire and with interviews.

## Results

Part 1: Data of 116 patients were analysed. Of the 464 (4 x 116) questionnaires applied, 282 were returned (61%). Results are presented in table 1.

Part 2: 755 snacks were offered to 70 patients, of which 536 (71%) were accepted. Patients consumed 69% of the accepted snacks. The main reasons for non-consuming were: the patient is full (25%), nausea (12%), no appetite (17%) and too large volume of the snack (10%). Sweet products, both cold and hot, were preferred most. Overall appreciation of the snacks was good with a mean score of 7.0 (6.6-7.9). Ice cream was the most favourite product (table 2).

## Conclusions

When asked for taste preferences, patients prefer salty products above sweet products. However, when snacks are actually offered to the patient, patients prefer sweet products. Overall appreciation of snacks is good. Possible reasons for the discrepancy: different patient populations (all patients vs. patients with malnutrition (risk), measurement problems (difficult to express taste preference without mentioning products), and the reality of the process of product selection (the stimulating role of the catering service in combination with the visibility of the snacks. Further research is needed to determine the effect of snacks on the nutritional intake and nutritional status.

**Table 1**

Food preferences categorized by food characteristics

Temperature		Taste				Structure					
Afternoon (n=158)		Evening (n=124)		Afternoon (n=154)		Evening (n=123)		Afternoon (n=155)		Evening (n=121)	
Cold	44 %	Hot	40 %	Salty	44 %	Salty	53 %	Solid	56 %	Solid	60 %
Hot	30 %	Cold	38 %	Sweet	23 %	(Fresh) sour	18 %	Liquid	25 %	Liquid	21 %
No preference	27 %	No preference	22 %	No preference	17 %	No preference	16 %	No preference	19 %	No preference	20 %
				(Fresh) sour	13 %	Sweet	14 %				

Total percentages are not similar to 100%, due to rounding off.

**Table 2**

Top 5 of most preferred snacks consumed by patients (n=536)

Snacks	Frequency (n)
Ice cream	119
Mini pancakes	61
Apple pie (foam paste)	54
Chocolate bar (milk)	41
Chocolate bar with nuts	38

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