



. REFORMULATION OF THE TRADITIONAL SLOVENIAN DISH MATEVŽ FOR OLDER ADULTS WITH HYPERTENSION

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1. CONTEXT OF THE STUDY (target population, studied recipe, etc.)

- Matevž is a traditional Slovenian side dish made from mashed potato and beans; classic recipes are salted and often enriched with cracklings, lard or butter.
- The target group was older adults aged 65 and over with hypertension. They may have a reduced ability to taste and smell food or experience difficulties with chewing certain textures, and they benefit from a lower sodium intake.
- The aim was to redesign matevž so that it is nutritionally better suited to hypertension while remaining familiar, acceptable and culturally recognizable.
- To preserve authenticity, the core identity of the dish was retained: beans, potatoes, onion and garlic.

2. SCIENTIFIC METHODOLOGY

1. Consumer insight collection

1KA questionnaire; assisted completion in a retirement home and online; only complete responses were analysed (n = 11).

2. Literature review

Hypertension, sodium reduction, sensory ageing, and the impact of replacing salt and animal fat.

3. Recipe reformulation

No salt during potato cooking; olive oil instead of animal fat; carrot, pepper, thyme, parsley and MSG.

4. Pilot hedonic screening

Four matevž variants compared on a 9-point hedonic scale for color, appearance, texture and taste.

3. INNOVATIONS LEVERS

Health

Lower sodium and fewer saturated fats.

Flavor

Herbs, spices and MSG rebuilt palatability and umami after salt reduction.

Texture & appearance

A mostly creamy structure was preserved; grated carrot added warmer color and slight crunch.

Tradition

Beans and potatoes kept the recognizable identity of matevž. *KCI was considered but not selected because of potential bitter/metallic notes and uncertainty for older consumers.*

4. MAIN RESULTS

Consumer insight (n = 11)

91%
knew matevž

55%
consume it occasionally

82%
preferred a creamy texture

73%
preferred the traditional
recipe

Respondents showed cautious openness to health-oriented changes, but strong attachment to the traditional look and feel of the dish.

SELECTED PROTOTYPE AND NUTRITIONAL PROFILE

Best pilot sensory profile: the version with carrot + spices + MSG performed best overall for color, appearance, texture and taste.



FINAL ADAPTED RECIPE (4 servings)

400 g potatoes | 200 g cooked brown beans | 50 g onion |
2 garlic cloves | 50 g carrot | 25 mL olive oil | pepper, thyme, parsley, MSG

Approx. per 175 g portion:

233 kcal

6,4 g protein

10 g fiber

0,7 g salt

5. CONCLUSIONS & PERSPECTIVES

- Matevž can be reformulated into a more hypertension-friendly dish without losing its traditional basis.
- Olive oil, herbs/spices and a small amount of MSG helped compensate for lower salt and the removal of animal fat.
- A creamy texture appears well suited to older adults, while carrot improves visual appeal.
- Before implementation in care homes or hospitals, the adapted version should be tested directly with older consumers using hedonic and paired comparison tests.
- Future work: optimize plating, compare bean and potato varieties, and communicate the role of MSG clearly to reduce misconceptions.

Source: Seminar paper by Magdalena Marković, Nina Rojc and Zala Racman
(University of Ljubljana, 2026).