

# Food and drink management as part of medication administration safety

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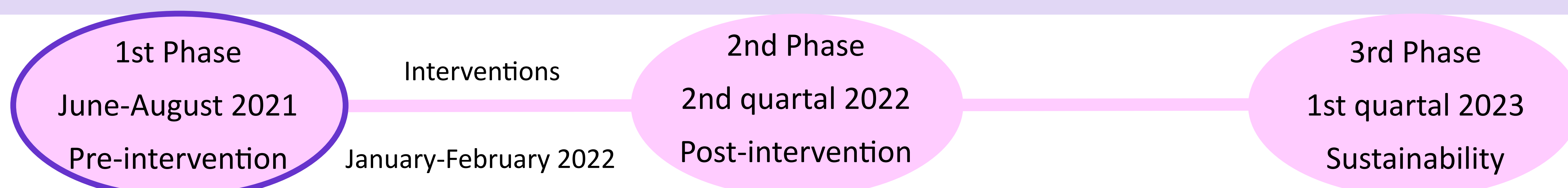
## Background

Food or drink could affect a therapeutic value of a drug, but little is known about food and drink management in order to drug administration in a professional health care setting such as a hospital in the Czech Republic and its potential consequences for drug administration safety, efficiency and efficacy.

## Objectives

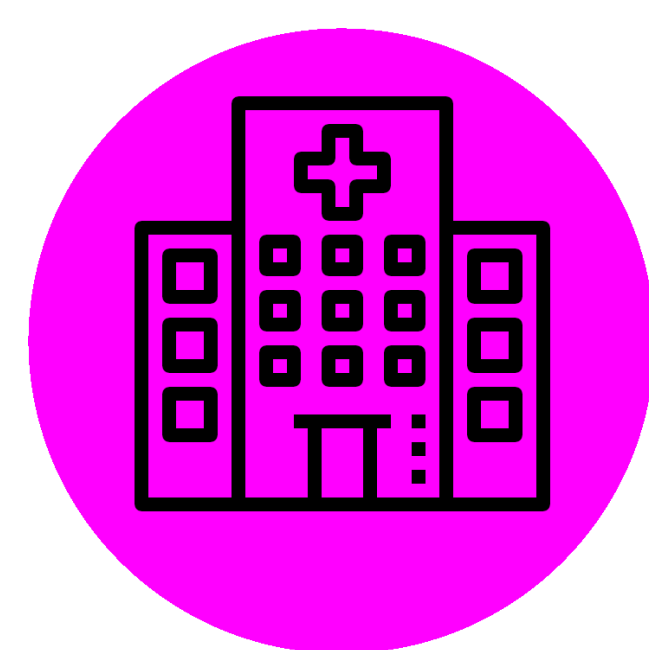
1. To explore food and drug administration timing.
2. To explore the type of drink used for drug ingestion.

## Methods



- ✓ Part of large 3-phase study.
- ✓ Medication administration safety.
- ✓ Direct observation of a nurse.
- ✓ 4 hospitals of South Bohemia.
- ✓ Detailed web database form.
- ✓ Multidisciplinary team of observers.

## Results



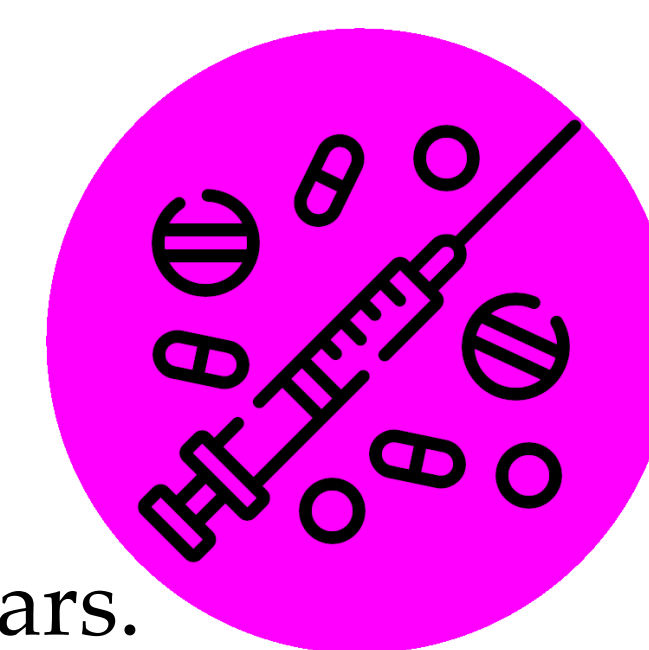
- ✓ 4 hospitals.
- ✓ 3 ward/hospital: internal, surgical & follow-up.



- ✓ 58 nurses.
- ✓ 94,8 % female.
- ✓ Mean age: 35,8 ± 11,67 years.



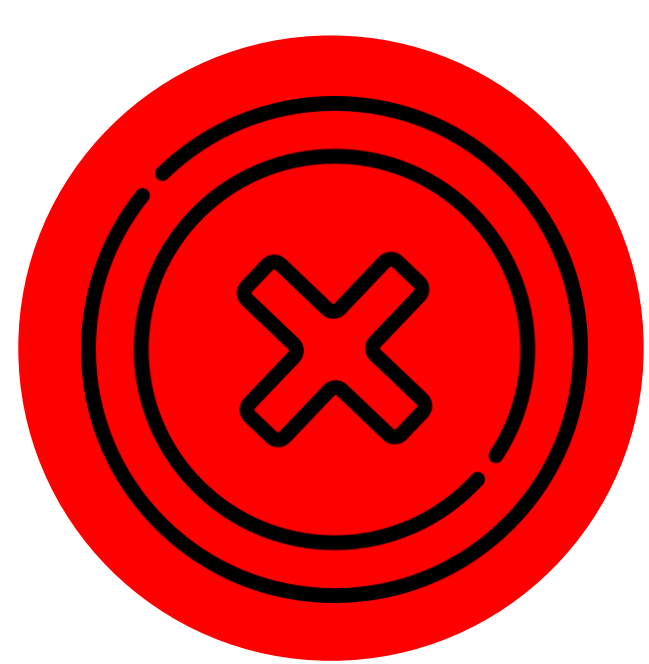
- ✓ 334 inpatient
- ✓ 55,4 % female.
- ✓ Mean age: 72,2 ± 13,63 years.



- ✓ 6535 prescribed doses.
- ✓ 85,0 % oral solid form.
- ✓ No. doses/patient/day: 8,69 ± 6,17.

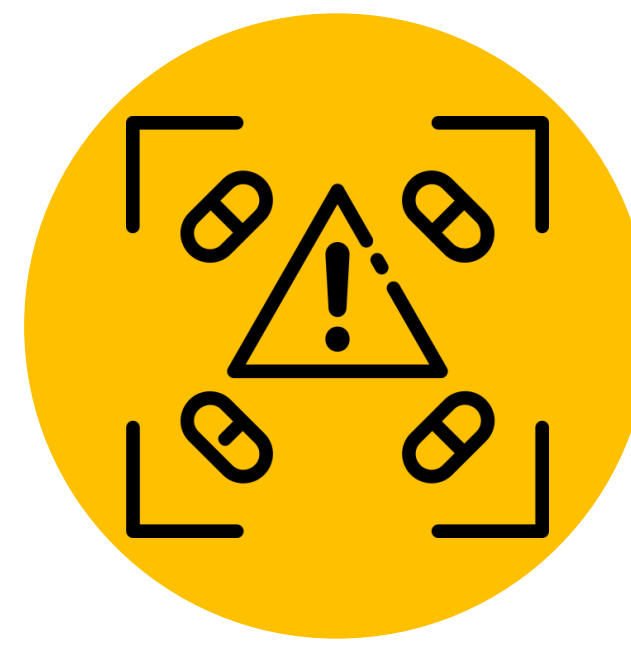
### Medication administration errors

- ✓ 6,84 % at least one error
- ✓ 28 wrong drug (0,43 %)
- ✓ 132 wrong dose (2,62 %)
- ✓ 3 wrong patient (0,05 %)
- ✓ 78 wrong time (1,19 %)
- ✓ 68 omissions (1,04 %)
- ✓ 15 unordered dose (0,23 %)
- ✓ 106 inappropriate use (1,62 %)
- ✓ 29 deteriorated drug (0,46 %)

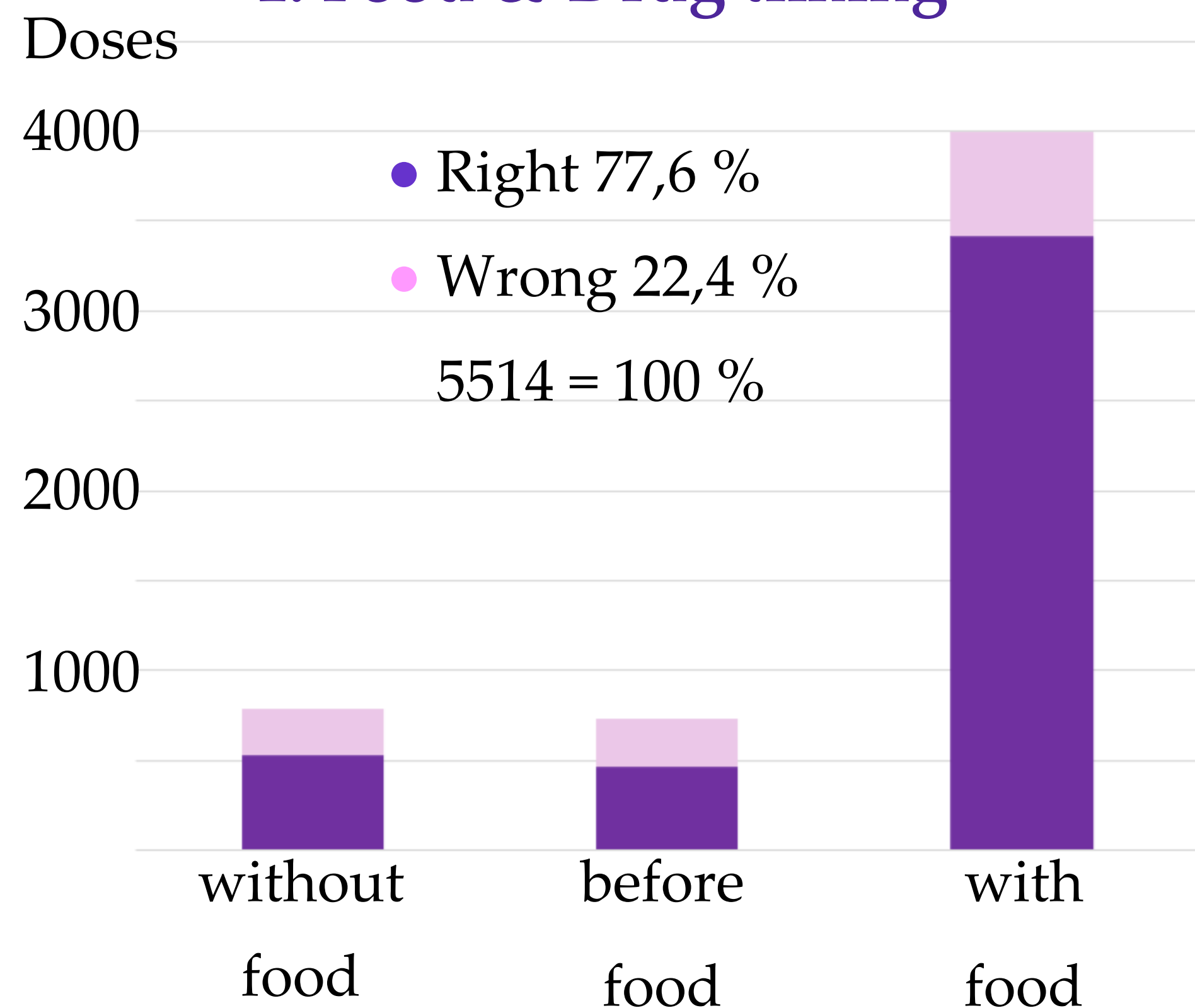


### Potential unsafe practices

- ✓ 40,49 % no patient identification
- ✓ 50,59 % inappropriate hand hygiene
- ✓ 7,93 % generic drug substitution
- ✓ 22,82 % no drug usage check
- ✓ 27,38 % splitting or crushing error



### 1. Food & Drug timing

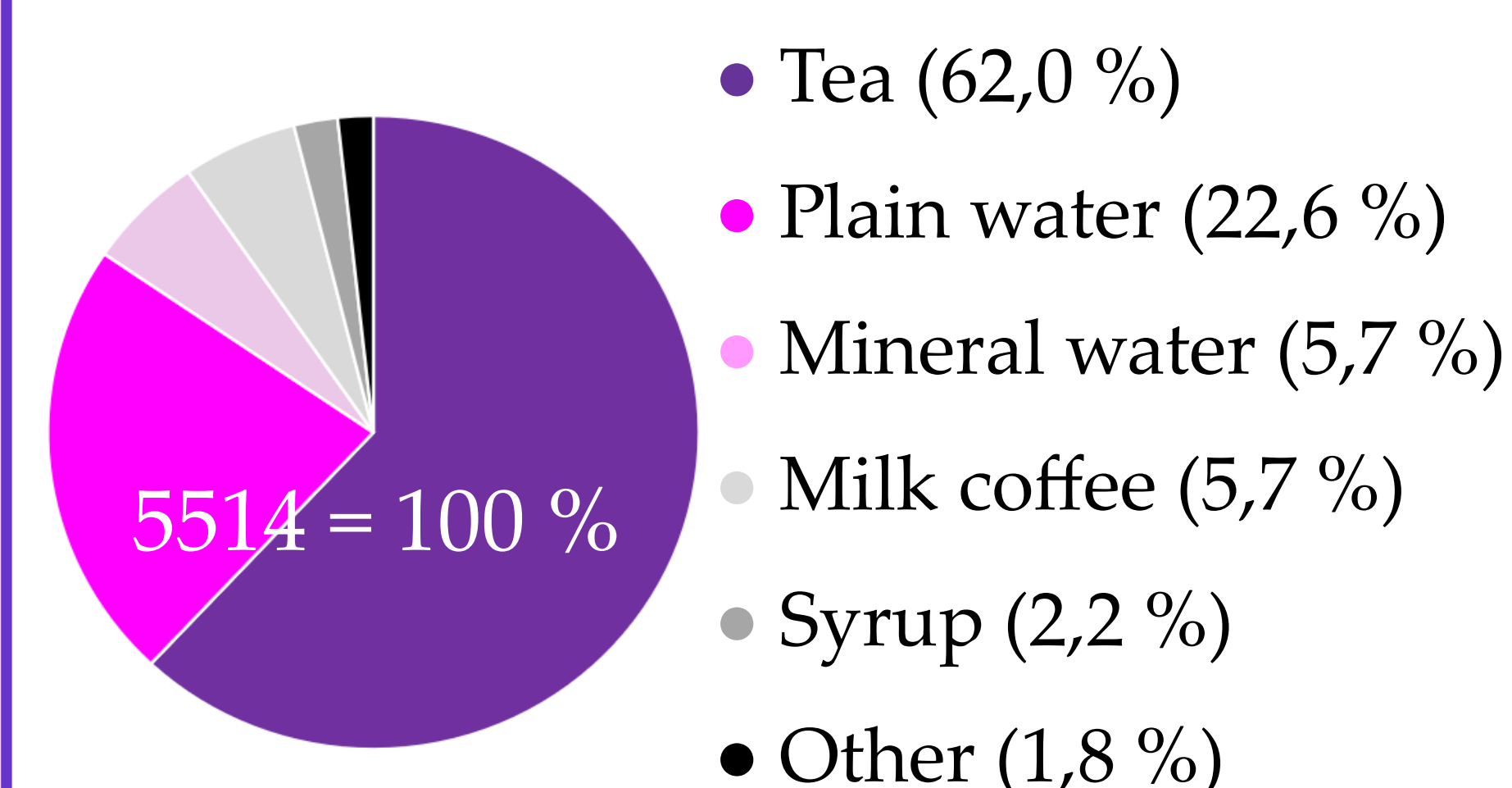


### Conclusion

- ✓ Insufficient attention & non-systemic approach to food and drug timing.
- ✓ No attention to drink type at all.
- ✓ Minimal attention to potential food-drug or food-drink interactions.

Interventions were implemented and will be evaluated in next two study phases.

### 2. Drink type



## Dedication

The project was supported by a grant from Ministry of Health of Czech Republic No.: NU20-09-00257 and by a grant of Charles University No.: SVV 260 551.