

# Matspill á LS

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Landssjúkrahúsið

## Hospital food waste and portion sizes

– An evaluation of patient meals on a medical ward

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**Background**  
Tons of hospital food is being thrown away annually around the globe. Food waste programs are becoming a top priority for numerous hospital administrators. Other than the substantial financial costs, food waste results in patients not getting the food they were intended to. Rather than just throwing it food as a service, hospitals are starting to consider nutrition as part of treatment. In 2012 a national research study was conducted on a medical ward at Landspítali – the National Hospital of Iceland. The study is called “Kodurkætan á BP”. The study evaluates whether an improved food service including an increase in energy density, has any effect on nutritional status and outcomes of hospitalized patients. The prevalence of inappropriate nutrition in patients is high, many patients do not meet individual nutritional requirements while hospitalized. The previous status of nutritional status has been mentioned in Faro Islands.

**Aim**  
To better understand the reasons for inadequate nutritional intake, this study evaluates portion sizes and waste of hospital food. The results will indicate what changes are needed in the food service system during phase 2 of “Kodurkætan á BP”.

**Materials and methods**  
The study of food waste was carried out during five consecutive days of one medical ward.  
1 During the study period, the amount of food produced at lunch were weighed and nutrient composition was calculated.  
2 On return from the ward, food waste was weighed and recorded by kitchen staff.  
3 The amount of food eaten per patient was compared to the portion sizes that were produced in the kitchen.

**Results**  
During the study period of five days data was collected from 76 patient meals.  
• A total of 91 lunch servings were ordered by the ward of which 76 were served to patients.  
• In total, 53% of the food produced by the kitchen was wasted.  
• A mean of 724 ± 40 g of food per patient per lunch meal was produced by the kitchen. One portion accounted for a mean of 730 kcal and 20 g of protein per day.  
• A mean of 414 ± 91 g (57%) was eaten per patient, which accounted for an average of 417 kcal and 11 g of protein.  
• The amount of food served, but not eaten and thus wasted was 310 g (43%) per patient.

**Conclusions**  
The standard lunch serving sizes produced by the kitchen provide adequate amounts of energy and protein. However, most patients did not consume complete meals and a great proportion of food was wasted. As a result the patients are not meeting their recommended intake. It may be concluded that the calculated portion sizes are too large and need to be adjusted. The energy density of the food needs to be increased accordingly. Following this study portion sizes have been reduced to a mean of 621 ± 43 g. Once additional improvements in the food and catering service have been implemented, food waste will be investigated once more.

For more information contact: [allourwebpage@www.landspitali.is](mailto:allourwebpage@www.landspitali.is) or scan QR code

# Dögurði

53%

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## 53% av dögurðanum fer til spillis


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## Nátturði



49% av nátturðanum  
fer til spillis

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## Hvønn breyðfóða vit?



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## Hvønn breyðfóða vit?



Mett verður, at  
30-40% av  
sjúklingum  
hava fòðslutrot

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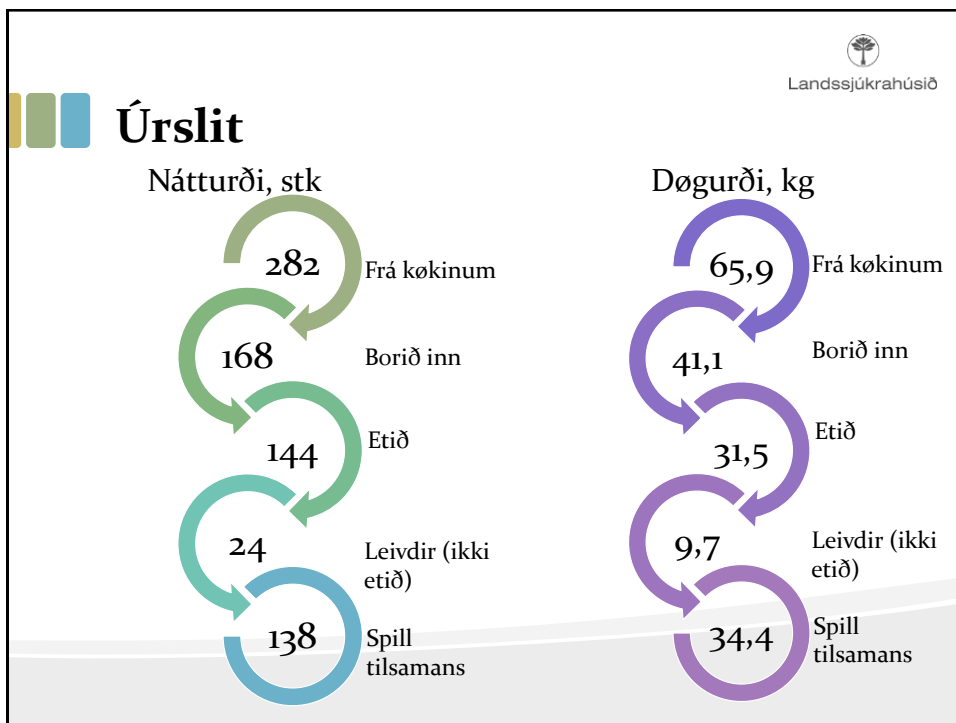
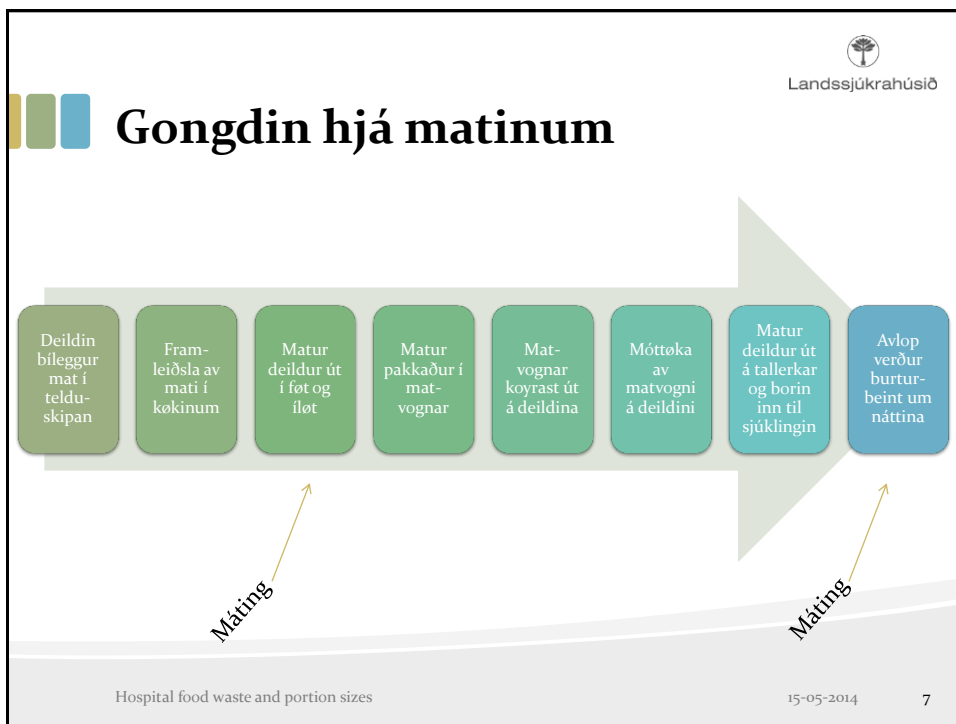
## Kanningin av matspill

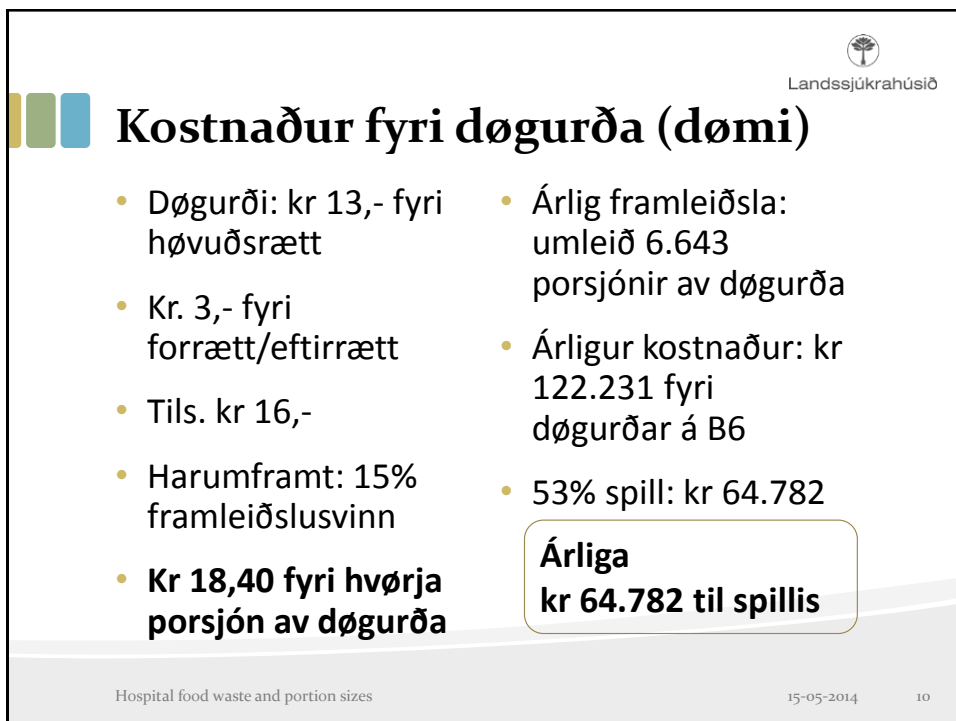
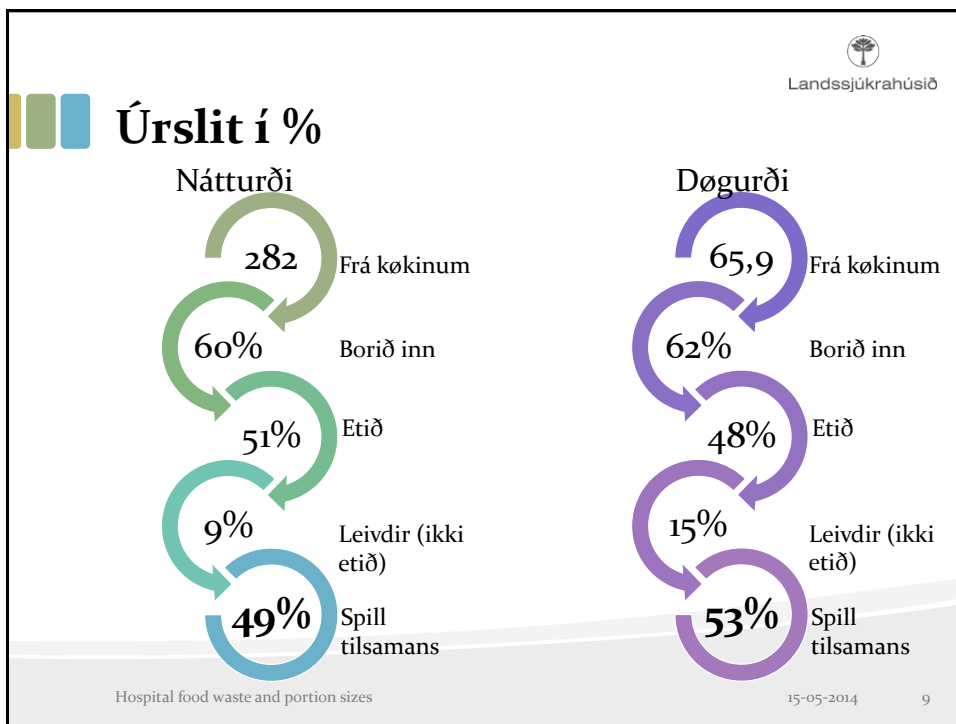
- Medisinsk deild B6
- 5 dagar í september 2013
- Døgurði og nátturði vigaður
- Døgurði bílagdur til 91 sjúklingar, tilsamans 76 sjúklingar ótu døgurða
- Nátturði bílagdur til 94 sjúklingar, tilsamans 69 sjúklingar ótu nátturða


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## Kostnaður fyri nátturða (dømi)

- Kr 3,- pr. breyð
- Framleiðsluvinn: 15%
- **Kr 3,45 fyri hvørja hálva breyðflís**
- Árlig framleiðsla: umleið 20.586 hálv
- Árligur kostnaður: kr 71.021
- 49% spill: kr 34.800

**Árliga  
kr 34.800 til spillis**

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## Samlaði kostnaðurin (dømi)

**Døgurði + nátturði =  
kr 99.582 árliga til spillis á B6**

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## Avmarkingar og validitetur

- Bert ein deild er kannað
- Bert tvær máltíðir
- Bert 5 dagar
- Kostnaðurin er bert ein meting
- Treytað av líka nógvum bíleggingum restina av árinum
- Arbeiðstíð er ikki íroknað (serliga smyrjibreyð er tíðarkrevjandi)
- Dietar eru meira orkukrevjandi, sum eitt nú diabetes matur, dialysu matur



## Loysnir

- Køkurin á LS gjørði líkn. kanning í 2005
- Kostverkætlanin á B6 varpar ljós á
- Seta í verk kanningar av orsökum
  - Øðrvísi matartilboð, porsjónsstøddir, bíleggingarskipanin, samskipti millum køk og deild, kostscreening, undirvísing,
- Loysnir frá øðrum sjúkrahúsum?

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## Føðslutrot kostar



Ókent tal av  
føroyskum  
sjúklingum  
hava føðslutrot

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## Takk fyri

 Felagið Føroyskir Sjúkrarøktarfrøðingar 