

# Test weighing: determining precision using a 'double-check weighing' method

No registrations found.

<b>Ethical review</b>	Not applicable
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON25516

### Source

NTR

### Health condition

breast feeding

Keywords:

English

-Test weighing

-breastfeeding

-Milk intake

-Precision

NL:

-Test wegen

-Borstvoeding

-Intake

-Precisie

## Sponsors and support

**Primary sponsor:** VieCuri Medical centre

Tegelseweg 210

5915 BL Venlo

**Source(s) of monetary or material Support:** VieCuri Medical centre

Tegelseweg 210

## Intervention

### Outcome measures

#### Primary outcome

precision of test weighing, using a double-check weighing method for 2 scales in 2 groups: intake up to 20cc and 20cc and more

#### Secondary outcome

-Accuracy of test weighing, using a double-check weighing method for 2 scales in 2 groups: intake up to 20cc and 20cc and more.

-accuracy and precision including and excluding infants with monitor leads or intravenous lines

-Accuracy and precision including and excluding infants who vomited, or where milk was spilled.

-The influence of the child's state on accuracy and precision of test weighing.

-The influence of the pre feed weight on the precision of test weighing.

-The influence of the intake as a continuous variable on the precision of test weighing.

## Study description

#### Background summary

Rationale: test weighing is used extensively to assess intake in breastfed infants. Data regarding its precision however differ and are contradictory. There is discussion about the technique and scales used. Our goal is to use a double check weighing procedure on 2 different scales and determine precision in a large group of newborn infants.

Objective: to determine the precision of test weighing on 2 different scales in 2 different intake groups: feeds up to 20 cc and feeds of 20cc and more.

Study design: diagnostic accuracy study in a cohort of newborn infants.

Study population: All exclusively bottle or nasogastric fed infants in the neonatal ward are

deemed eligible.

Intervention: infants are weighed twice before and twice after a feed in a standardized way by an independent investigator, unaware of the amount drunk. The weights before, as well as the weights after feeding, have to be within 5 grams. Otherwise a third weight has to be obtained. The difference between the averaged weights before and the averaged weights after feeding is taken to reflect intake in cc. The actual amount drunk will be determined by weighing the bottles before and after feeding.

Main study parameters/endpoints: precision will be calculated by determining the standard deviation of the mean of the difference between the test weighing amount and actual amount drunk.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness: Risks are negligible. Weighing is a routine procedure done in all neonatal wards. Weighing will be done in infants who are about to be fed, so it will not interfere with sleep or resting.

### **Study objective**

Test weighing using a double-check weighing method is precise in determining infant intake: in more than 90% of weighings test weighing will be within 5ml of the actual amount drunk

### **Study design**

not applicable.

### **Intervention**

none

## **Contacts**

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## Eligibility criteria

### Inclusion criteria

- Admission in the neonatal ward.
- Bottle or fully nasogastric fed infants

### Exclusion criteria

- If the treating pediatrician finds the infant to be too unstable for the extra weighing.
- If, according to the treating pediatrician, the infant requires minimal handling.
- If the parents or caregivers speak insufficient Dutch to be able to give informed consent

## Study design

### Design

Study type:	Observational non invasive
Intervention model:	Factorial
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

## Recruitment

NL  
Recruitment status: Pending  
Start date (anticipated): 05-01-2014  
Enrollment: 40  
Type: Anticipated

## Ethics review

Not applicable  
Application type: Not applicable

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register	ID
NTR-new	NL4542
NTR-old	NTR4685
Other	: ABR48368

## Study results

### Summary results

Haase, B., et al., The development of an accurate test weighing technique for preterm and high-risk hospitalized infants. Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine, 2009. 4(3): p. 151-6.<br>

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Savenije, O.E. and P.L. Brand, Accuracy and precision of test weighing to assess milk intake in newborn infants. Archives of disease in childhood. Fetal and neonatal edition, 2006. 91(5): p. F330-2