

# **CONCLUSIONS MARKET RESEARCH**

RESEARCH ON THE FEASIBILITY OF THE SRS SYSTEM APPLICATION WITHIN  
NURSING AND CARE & HOSPITAL CARE

ENPROS INTERNATIONAL B.V.  
NIEUWERKERK AAN DEN IJSSEL, THE NETHERLANDS, AUGUST 2009

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without permission of the publisher.

## Description of the product offered

The SRS system consists of a suction spout for cups and bottles that seals hermetically and is leakproof when it is not being drunk from. The SRS system is useful for people with impaired motility, but also for sportsmen/women or children. If the bottle or the cup falls over or is accidentally knocked over then it will not leak. The product is protected by international patent.



The invention comprises a spout. This will be utilized in the drinks industry on disposable bottles, sports bottles and non-spill cups. The spout is suitable for both cold drinks (carbonated or otherwise) and hot drinks (coffee, tea, hot chocolate).

The invention's objective is to provide direct and simple access to the fluid without the bottle having to be opened. All that may be required is to remove the dust cap, if this has been put on (in accordance with one's own preference). The spout does not leak, irrespective of whether one squeezes the bottle, or whether the bottle contains a high-pressure liquid (such as carbonated drinks) and regardless of the position in which one drinks from it. Even fluctuations in temperature do not influence the system.

### The most important benefits of the SRS system one by one:

- does not leak under any circumstances (e.g. if you rotate the bottle, regardless of your position whilst drinking from it and in the event of fluctuations in temperature);
- the bottle does not have to be opened;
- can be used for drinks that are carbonated or still;
- carbonated drinks will not leak and as soon as one stops sucking the spout the bottle will be hermetically sealed, thus preserving fizz.

### Models for the SRS system

The SRS system can be used on various models. One model for disposable bottles and sports bottles and two models for non-spill cups. The cup or bottle models may be modified in due course. This is dependent on the preferences of the buyer.



Children/Elderly care cup



Sports bottle



Baby bottle/cup



Disposable bottle

The SRS system consists of a spout, a perforated membrane and a valve in a housing, which is screwed on with a cap on a disposable bottle, sports bottle or a cup. A straw can be used for all models and applications. An extra benefit is that the bottle or cup can also be drunk from upright (vertically). One does not have to move the head backwards.

## ***The research***

In order to ascertain whether there is a need for the SRS system, Enpros International B.V. carried out market research.

The market research focussed on two sectors within the care sector, namely the (children's) hospitals and nursing and care homes in the regions of Rijnmond, Dordrecht, Delft and Westland, The Hague, Leiden, Utrecht and Midden Holland. This approximates to the cities of Rotterdam, Delft, The Hague, Leiden, Alphen aan den Rijn, Utrecht, Zoetermeer, Gouda, Dordrecht and their surrounding areas.



**Schematic map of the above-named regions**

### (Children's) hospitals

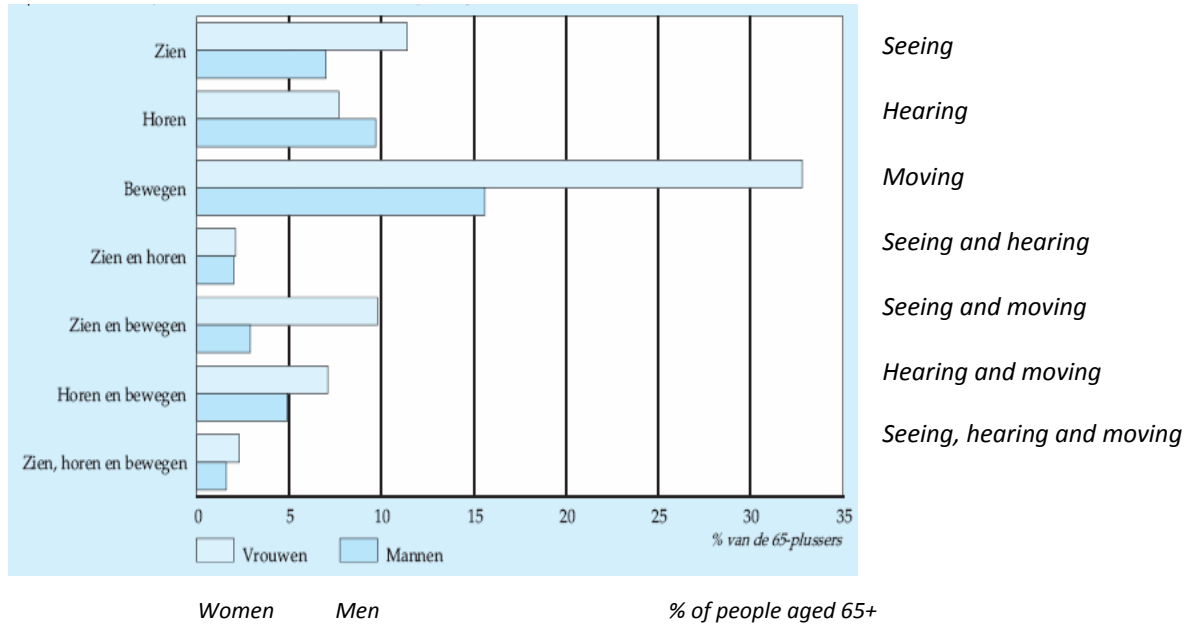
In 2008 there were a total of 142 hospital sites and 52 outpatient clinics, organized into 93 organizations, 8 of which are teaching hospital institutes. 21 organizations are established in the regions above, including 6 university hospital institutes, all of which will be approached. The 21 organizations in the above-named regions contain a total of 50 hospital sites and 11 outpatient clinics.

### Nursing and care homes

In total in the Netherlands there are 284 nursing homes and 1157 care homes and care homes with a point-of-care. In the above-named regions a total of 358 sites of nursing and care homes have been established. These are organized into 43 organizations. Furthermore, these organizations also offer housing complexes for life, service residences, etc. In addition to this, most organizations also offer home care.

Buyers within hospital care can be characterized as a heterogeneous group. Characteristics, like sex, age, etc., cannot be established. What can be concluded is that, for various reasons, this group of people has problems drinking (temporary or otherwise). The group of buyers within the nursing and care homes can be characterized as a homogeneous group. They will primarily be chronically ill elderly persons, aged 55+ with restricted motility as a result of which they find drinking difficult.

People 65 or older with one or more limitations, 2004- 2006



Source: CBS (Health and care in figures 2007)

It can be concluded from the table above that most people aged 65+ are most restricted in terms of ‘moving’ their bodies. Of this group, more than 30% are women and a little over 15% are men. Among women, problems with ‘seeing’ come second and ‘seeing and moving’ third. Among men, problems with ‘hearing’ come second and ‘seeing’ third.

### Buyers’ need

In order to test whether there is a need for the SRS system a survey was set up. One for nursing and care and one for hospital care. The questions in the surveys were identical for both target groups apart from one question. In the hospital care survey it was not asked what kind of drinking cups are being used at present. Unsurprisingly, this answer cannot be determined from the results.

In order to ensure that the results from the survey be representative, we first found out who is responsible for the cups within the organization. Many hospitals are extremely big. This makes it awkward to ascertain who is responsible there. Mostly it also involves several people from different departments or the care managers. Even the purchasing department sees a few cups coming through.

Within nursing and care, it is the departments of occupational therapy and speech therapy that are mostly using the cups. Whenever the nursing ward identifies a problem, they consult with these departments. They often make the decision as to which cups will be used together.

The percentage of response within nursing and care is 53.5%. The percentage of response within hospital care is 52.4 %.

## Nursing and care

It is evident from the results of the survey within nursing and care (see appendix 1) that 60.9% had heard of a kind of similar product to the SRS system. 78.3% use modified cups within the organization. Of this 78.3%, 56.5% state that these cups are not sufficiently leakproof and 21.7% state that the cups are sufficiently leakproof.

For each organization, the use of types of cup could be called different, though use of the Heidi cup and use of a spout cup are found most often. Most organizations use more than one type of cup. The cups used are reused by 78.3%. Of the interviewed, 26.1% spend €10-15 on a cup, 21.7% spend €5-10, 8.7% spend €0-2.50, 8.7% spend more than €15 and 34.8% did not give an answer to this question.

21.7% of the organizations surveyed do not use modified cups. Of this group:

- 5.9% use spout cups (with straw)
- 5.9% use cups with nose recess
- 4% use normal cups
- 4% use the Handycup (with 2 handles)
- 1.9% use a bed cup (e.g. the Flo-trol)

Of the 21.7% using the drinking methods above, 13% state that they spend €0-5 p.p.p.d. and 8.7% gave no answer to this question.

To the question as to whether there is a need for the SRS system, 56.5% state that there is a need for the product in view of the characteristics mentioned and 43.5% state that there is no need for the product. The following reasons for this were given:

- if people are bedridden, they generally have to have help with drinking;
- the product is not suitable for the patients;
- sucking on a spout requires too much effort for many people (dependent on the patient's condition).

From the reactions from the survey and over the telephone, it is evident that the use of the suction spout is suitable for patients with the following conditions:

- muscular diseases, such as Parkinson's, ALS (amyotrophic lateral sclerosis), MS (multiple sclerosis);
- elderly patients growing demented;
- patients with Huntington's disease;
- patients that have had a stroke (CVA, cerebrovascular accident);
- hospital patients (after an operation) that are very tired.

Of the 56.5% stated that there is a need for the SRS system, 43.5% state they are willing to spend €5-7.50 on the product, 8.7% will spend €2.50-5 on it and 4.3% state they are willing to spend more than €10 on it.

The added value of the SRS system that is most important to the different organizations can be seen below. The aspects are in order of importance:

1. Patients that are able to drink independently
2. Patients that are able to drink both upright and lying down
3. Clean environment (no spots)
4. Work productivity (less cleaning of bedding, less washing)
5. Convenience

Finally we asked what they thought of the product's image. More than 30% state that the image of the SRS system does not appeal to them. 24.3% think the SRS system looks simple.

## Hospital care

It is evident from the results of the survey within hospital care (see appendix 2) that 72.7% had heard of a kind of similar product to the SRS system. Unsurprisingly, 72.7% use modified cups within the organization. Of the 72.7%, 45.5% state that the cups are not sufficiently leakproof. The cups used are reused by 63.6%. In addition to this, 45.5% spend €0-5 on a cup, 18.2% spend €5-10, 9% gave no answer to this question.

The remaining 27.3% state that they do not use sealable cups within the organization. They use:

- normal porcelain cups;
- disposable spout cups (with large and small openings);
- normal spout cups.

Of the 27.3% using the drinking methods above, all organizations spend €0-5 p.p.p.d.

To the question as to whether there is a need for the SRS system, 63.6% state that there is a need for the product in view of the characteristics mentioned and 18.2% state that there is no need for the product. The following reasons for this were given:

- The system seems difficult to clean
- They like the current disposable cups. Naturally this was dependent on the pricing for the SRS system.

In addition to this, 18.2% gave no answer to the question.

Of the 63.6% that stated that there is a need for the SRS system, 36.4% state that they have €0-2.50 left for the product, 9.1% have €2.50-5 left for it and 18.2% state they have €5-10 left for it.

The added value of the SRS system that is most important to the different organizations can be seen below. The aspects are in order of importance:

The aspects 'patients that are able to drink independently' and 'patients that are able to drink both upright and lying down' share 1<sup>st</sup>/2<sup>nd</sup> place.

3. Clean environment (no spots)
4. Work productivity (cleaning bedding less often, less washing)
5. Convenience

Finally we asked what they thought of the image of the SRS system. Most hospital organizations think the cap looks simple.

## Conclusion

The results from the survey within nursing and care are different. 56.3% state that there is a need for the product in view of the characteristics mentioned and 43.5% state that there is no need for it. This can be explained by the fact that it depends for which patients the cups will be used. This refers to the patient's condition. In some organizations the SRS system will not add anything, since the patients are unsuited to it. If one has trouble swallowing then a normal cup will be used and the patient will generally have to have a lot of help. The SRS system is suitable for people that have (for example) Parkinson's disease or other conditions without risks associated with swallowing (as described above) and that are also able to function independently still. Unsurprisingly it cannot be concluded that there is no need for the product. The majority see possibilities for the SRS system within nursing and care.

It is evident from the results within hospital care that 63.6% state that there is a need for the SRS system. It is difficult to ascertain for which target group the modified beakers are being used, since the organizations are huge and several people make decisions on this. It can be established that modified cups are being used on the neurology nursing ward and on the paediatrics ward. What is striking is that the aspects of the SRS system deemed most important are ranked in the same position within nursing and care and hospital care.

## Appendix 1: Survey results nursing and care

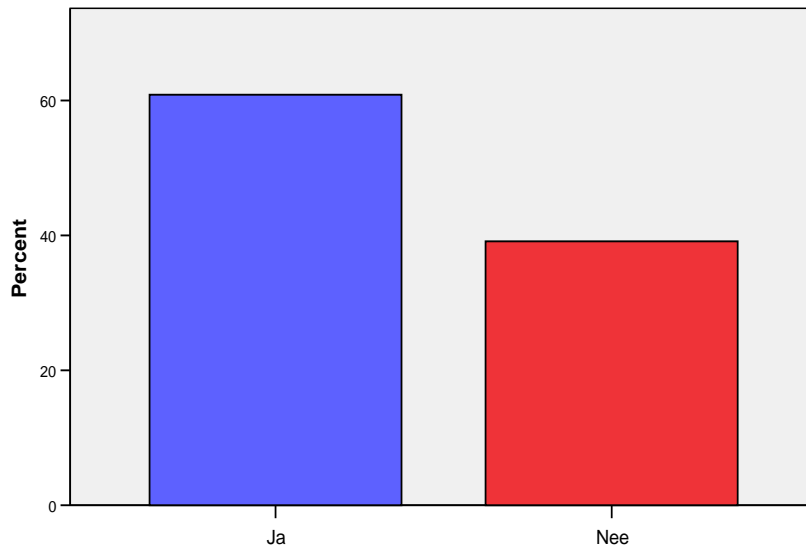
Question 1:

Have you heard of the existence of a similar product?

Heard of the existence of a similar product

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	14	60.9	60.9	60.9
	No	9	39.1	39.1	100.0
	Total	23	100.0	100.0	

Bestaan van een vergelijkbaar product



*Existence of a similar product*

*Percent = percentage Ja=Yes Nee=No*

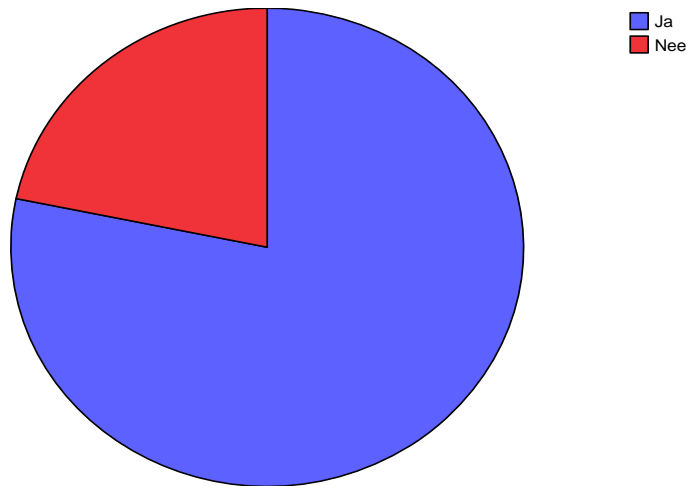
Question 2:

Are sealable cups used in your organization at present?

Using sealable cups

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	18	78.3	78.3	78.3
	No	5	21.7	21.7	100.0
	Total	23	100.0	100.0	

**Gebruik van afsluitbare drinkbekers**



*Use of sealable cups*

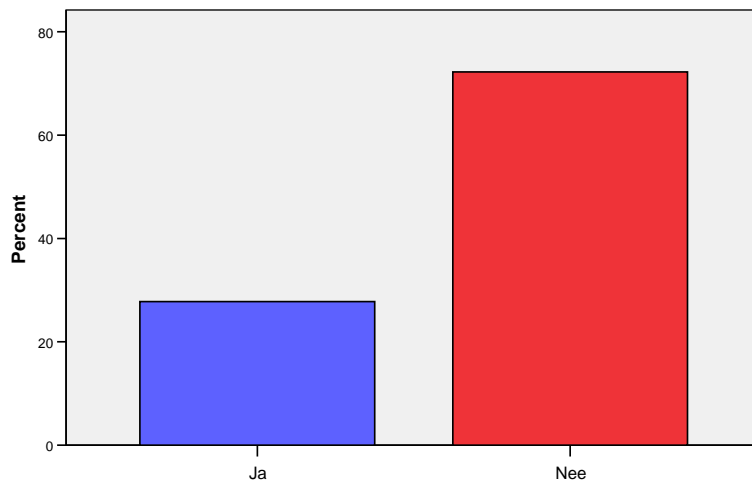
Question 3:

Is this cup sufficiently leakproof? (If more than one type of cup is used, base your answer on the drinking method most similar to that of the SRS.)

**Cup completely leakproof**

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	5	21.7	27.8	27.8
	No	13	56.5	72.2	100.0
	Total	18	78.3	100.0	
Missing	System	5	21.7		
Total		23	100.0		

**Geheel lekvrij**



*Completely leakproof*

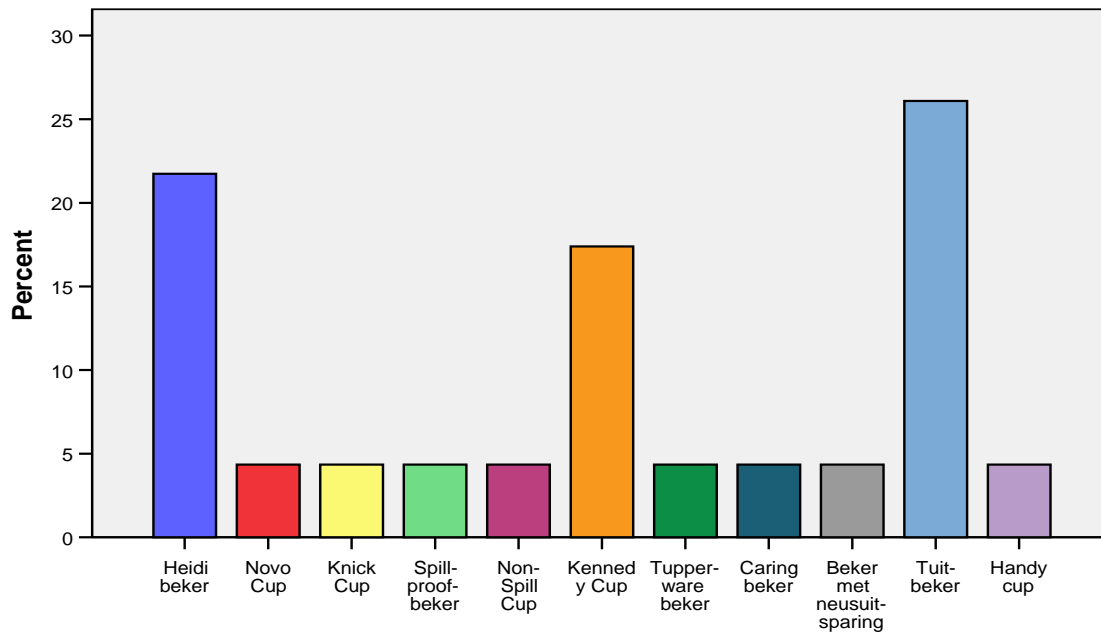
Question 4:

What is the name of this cup or could you provide a short description of the cup?

Current use of cups

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Heidi cup	5	21.7	21.7	21.7
	Novo Cup	1	4.3	4.3	26.1
	Knick Cup	1	4.3	4.3	30.4
	Spillproof cup	1	4.3	4.3	34.8
	Non- Spill Cup	1	4.3	4.3	39.1
	Kennedy Cup	4	17.4	17.4	56.5
	Tupperware cup	1	4.3	4.3	60.9
	Caring cup	1	4.3	4.3	65.2
	Cup with nose recess	1	4.3	4.3	69.6
	Spout cup	6	26.1	26.1	95.7
	Handycup	1	4.3	4.3	100.0
	Total	23	100.0	100.0	

Huidig gebruik van drinkbekers



Current use of cups

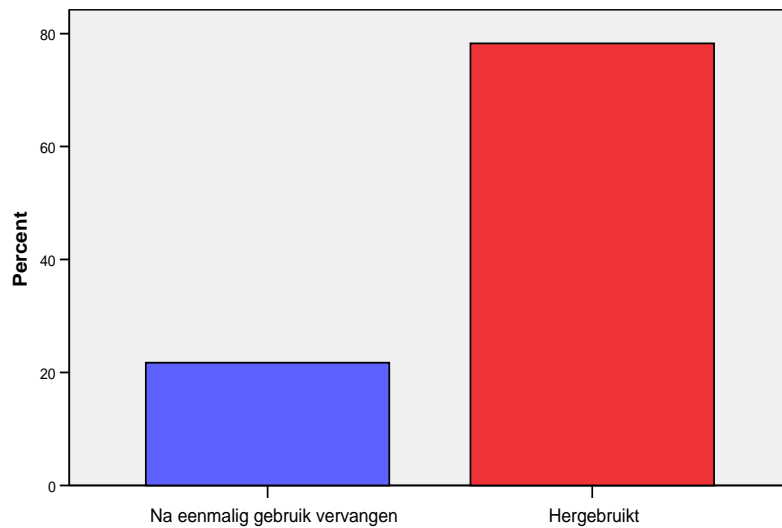
Question 5:

Is the cup reused or replaced after having been used once? (Once again, please base your answer on the drinking method most similar to that of the SRS.)

Reuse

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Replaced after being used once	5	21.7	21.7	21.7
	Reused	18	78.3	78.3	100.0
	Total	23	100.0	100.0	

Hergebruik



Reuse

*Replaced after being used once*

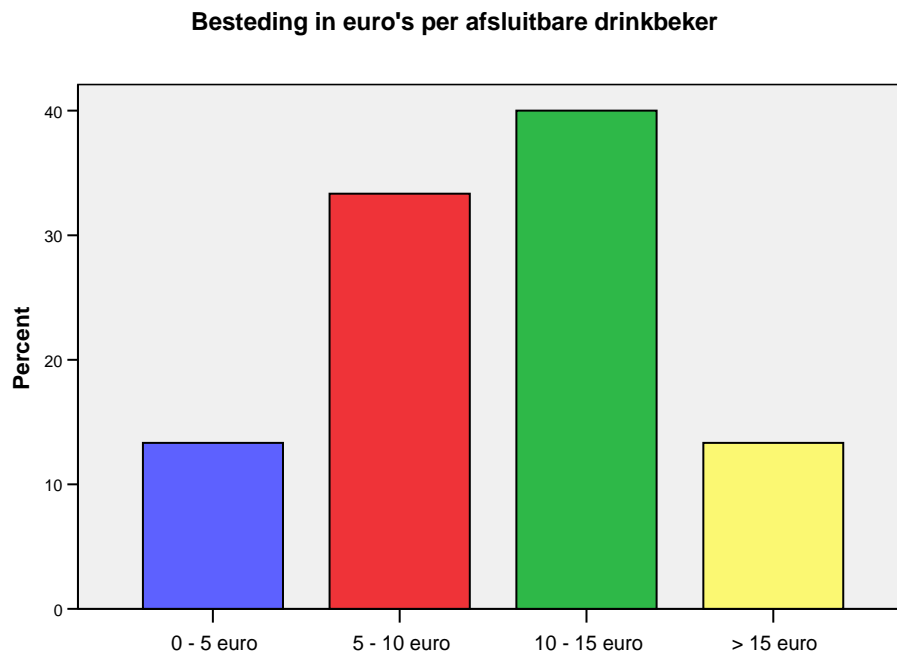
*Reused*

Question 6:

In your organization, how much is spent per item on sealable cups? (Proceed to question 10.)

Expenditure in € for each sealable cup

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	0 - 5 Euro	2	8.7	13.3	13.3
	5 - 10 Euro	5	21.7	33.3	46.7
	10 - 15 Euro	6	26.1	40.0	86.7
	> 15 Euro	2	8.7	13.3	100.0
	Total	15	65.2	100.0	
Missing	System	8	34.8		
Total		23	100.0		



*Expenditure in € for each sealable cup*

**Question 7:**

You state that you do not use sealable cups. Which drinking method(s) is/are used within your organization?

21.7% of those surveyed do not use modified cups. Of this group:

- 5.9% use spout cups (with straw)
- 5.9% use cups with nose recess
- 4% use normal cups
- 4% use the Handycup (with 2 handles)
- 1.9% use a bed cup (e.g. the Flo-trol)

**Question 8:**

In your organization, how much is spent on these drinking methods p.p.p.d.?

Of the 21.7% using the drinking methods above (see question 7), 13% state that they spend €0-5 p.p.p.d. and 8.7% did not give an answer.

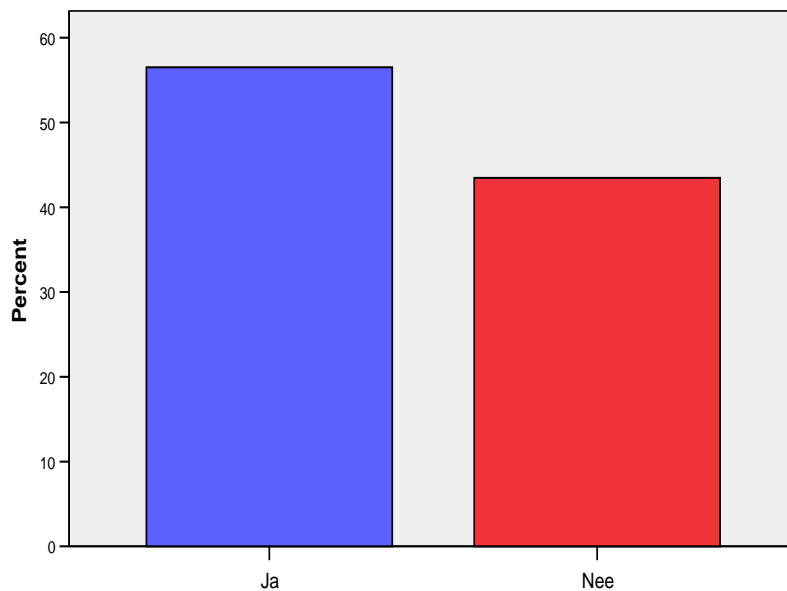
Question 9:

Do you think that there is a need for the SRS system within your organization in view of the characteristics mentioned?

Need for the SRS

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	13	56.5	56.5	56.5
	No	10	43.5	43.5	100.0
	Total	23	100.0	100.0	

Behoeftte aan het SRS- systeem



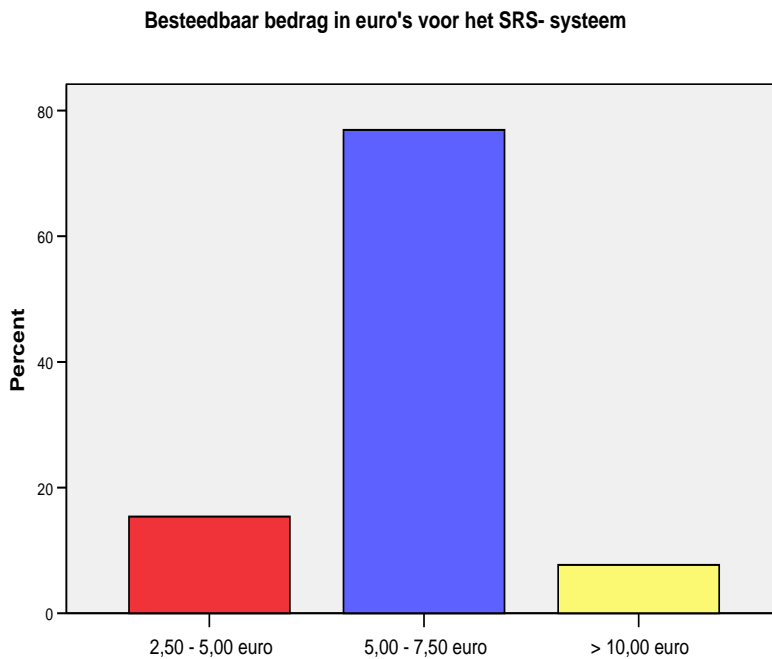
*Need for the SRS system*

Question 10:

Could you provide an estimate as to the maximum amount your organization would be willing to spend on the SRS per item?

Disposable amount in € for the SRS system

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	2.50 - 5 Euro	2	8.7	15.4	15.4
	5.00 - 7.50 Euro	10	43.5	76.9	92.3
	> 10.00 Euro	1	4.3	7.7	100.0
	Total	13	56.5	100.0	
Missing	System	10	43.5		
Total		23	100.0		



*Disposable amount in € for the SRS system*

**Question 11:**

Could you indicate which added value the SRS system could offer is most important to your organization by placing them in order from 1-5? (Proceed to question 14.)

1. Patients that are able to drink independently
2. Patients that are able to drink both upright and lying down
3. Clean environment (no spots)
4. Work productivity (cleaning bedding less often, less washing)
5. Convenience

**Question 12:**

If no, for what reason(s) do you think there is no need for it?

- if people are bedridden, they generally have to have help with drinking;
- the product is not suitable for the patients;
- sucking on a spout requires too much effort for many people (dependent on the patient's condition).

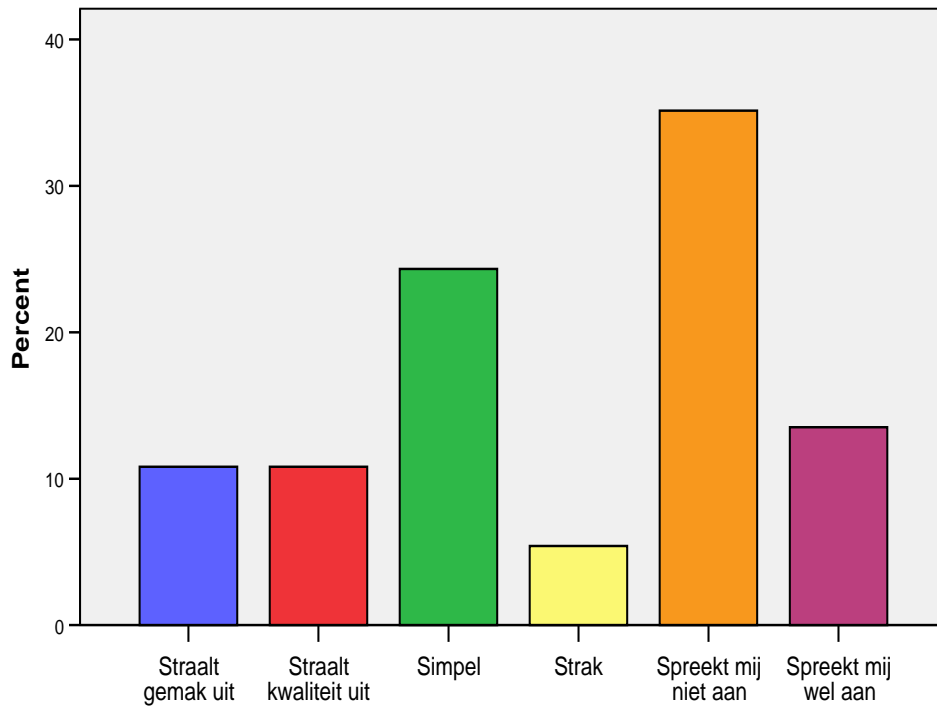
Question 13:

What do you think of the SRS system's image (please see pictures from the e-mail or on the website)?  
 (Several options possible.)

Image

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Exudes convenience	4	10.8	10.8	10.8
	Exudes quality	4	10.8	10.8	21.6
	Simple	9	24.3	24.3	45.9
	Solid	2	5.4	5.4	51.4
	Doesn't appeal to me	13	35.1	35.1	86.5
	Does appeal to me	5	13.5	13.5	100.0
	Total	37	100.0	100.0	

Uitstraling



Image

Exudes convenience    Exudes quality    Simple    Solid    Doesn't appeal to me    Does appeal to me

## Appendix 2: Survey results hospital care

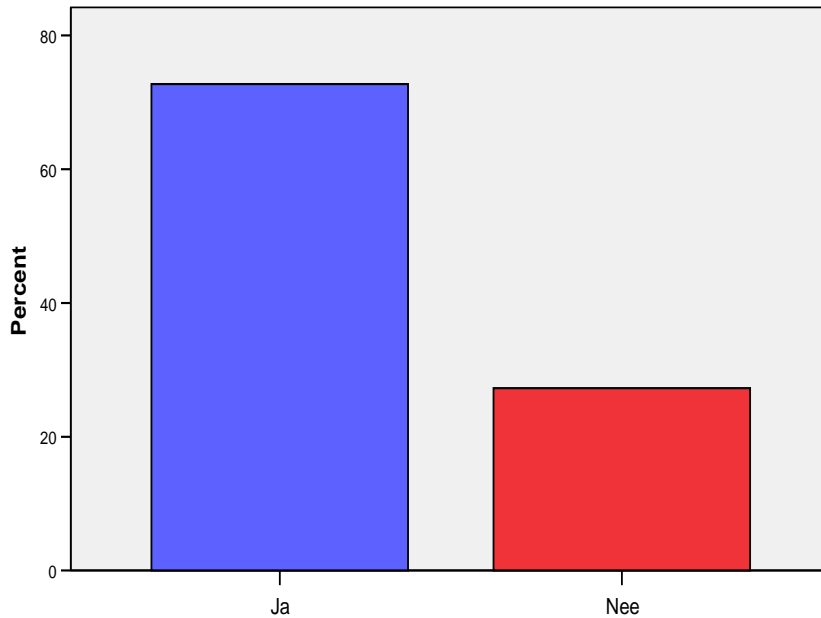
Question 1:

Have you heard of the existence of a similar product?

Existence of a similar product

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	8	72.7	72.7	72.7
	No	3	27.3	27.3	100.0
	Total	11	100.0	100.0	

Bestaan van een vergelijkbaar product



*Existence of a similar product*

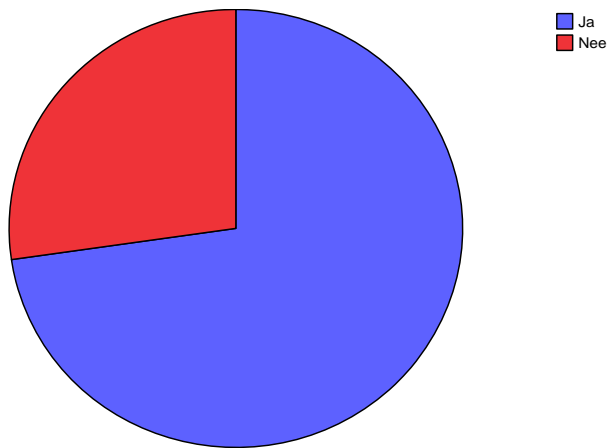
Question 2:

Are sealable cups used in your organization at present? (If not, please proceed to question 6.)

Using sealable cups

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	8	72.7	72.7	72.7
	No	3	27.3	27.3	100.0
	Total	11	100.0	100.0	

Gebruik van afsluitbare drinkbekers



*Using sealable cups*

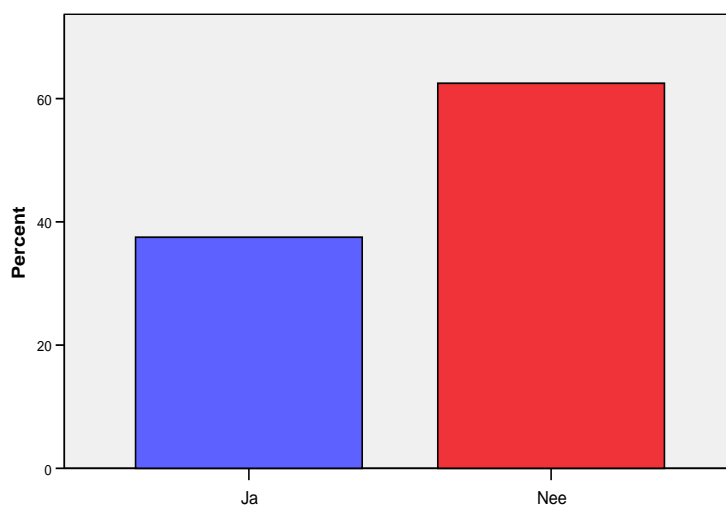
Question 3:

Is this cup sufficiently leakproof? (If more than one type of cup is used, base your answer on the drinking method most similar to that of the SRS.)

Cup completely leakproof

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	3	27.3	37.5	37.5
	No	5	45.5	62.5	100.0
	Total	8	72.7	100.0	
Missing	System	3	27.3		
Total		11	100.0		

Drinkbeker geheel lekvrij



*Cup completely leakproof*

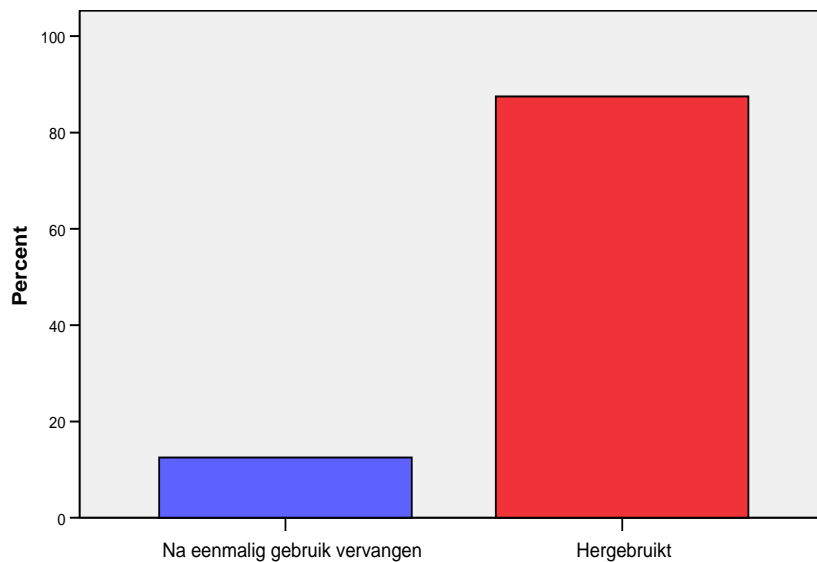
Question 4:

Is the cup reused or replaced after having been used once? (Once again, please base your answer on the drinking method most similar to that of the SRS.)

Reuse

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Replaced after being used once	1	9.1	12.5	12.5
	Reuse	7	63.6	87.5	100.0
	Total	8	72.7	100.0	
Missing	System	3	27.3		
Total		11	100.0		

Hergebruik



Reuse

Replaced after being used once

Reused

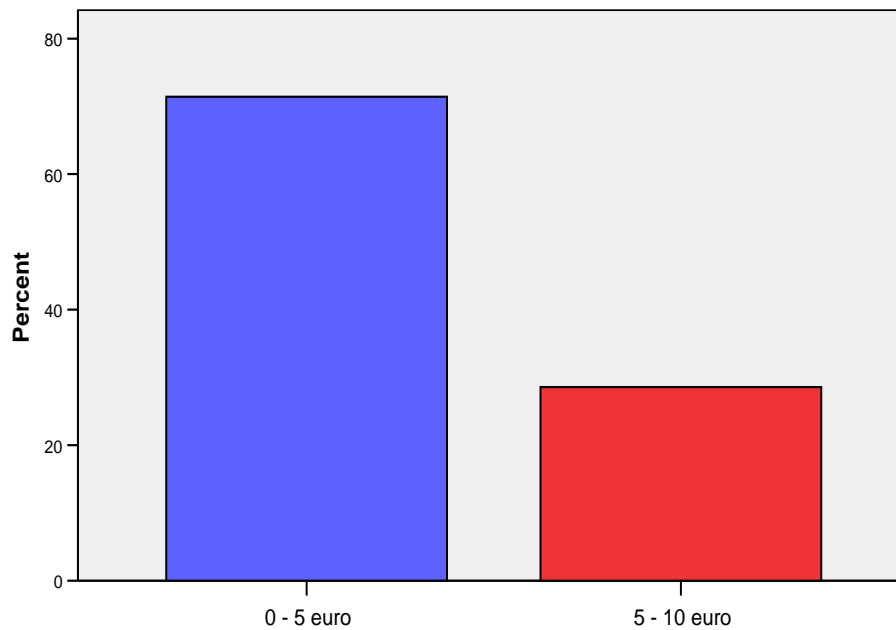
Question 5:

In your organization, how much is spent per item on sealable cups? (Proceed to question 8.)

Expenditure in € for each sealable cup

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	0 - 5 Euro	5	45.5	71.4	71.4
	5 - 10 Euro	2	18.2	28.6	100.0
	Total	7	63.6	100.0	
Missing	System	4	36.4		
Total		11	100.0		

**Besteding in euro's per afsluitbare drinkbeker**



*Expenditure in € for each sealable cup*

**Question 6:**

You state that you do not use sealable cups. Which drinking method(s) is/are used within your organization?

27.3% state that they do not use any sealable cups within the organization. They state that they use normal porcelain cups, disposable spout cups (with large and small openings) and normal spout cups.

**Question 7:**

In your organization, how much is spent on these drinking methods p.p.p.d.?

All organizations are spending €0-5 p.p.p.d. on these drinking methods.

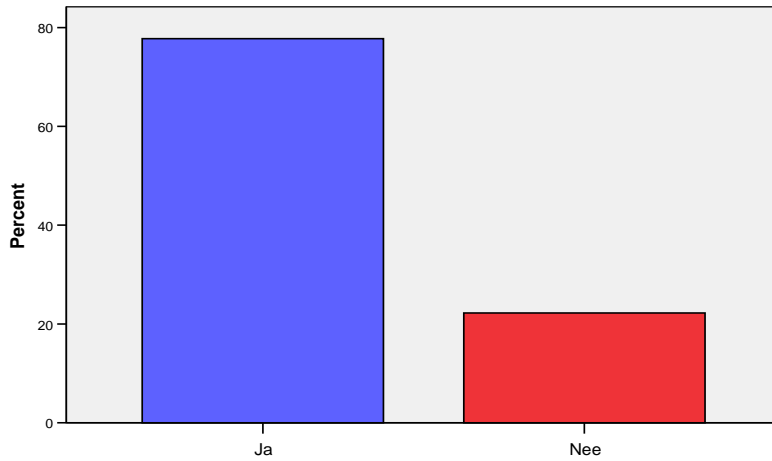
**Question 8:**

Do you think that there is a need for the SRS system within your organization in view of the characteristics mentioned?

**Need for the SRS system**

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	7	63.6	77.8	77.8
	No	2	18.2	22.2	100.0
	Total	9	81.8	100.0	
Missing	System	2	18.2		
Total		11	100.0		

**Behoefte aan het SRS- systeem**



*Need for the SRS system*

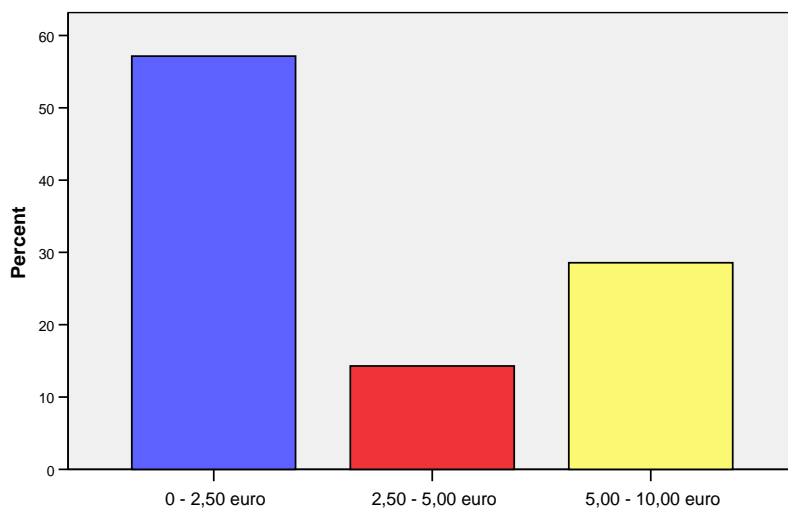
Question 9:

Could you provide an estimate as to the maximum amount your organization would be willing to spend on the SRS per item?

**Disposable amount in € for the SRS system**

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	0 - 2.50 Euro	4	36.4	57.1	57.1
	2.50 - 5 Euro	1	9.1	14.3	71.4
	5 - 10 Euro	2	18.2	28.6	100.0
	Total	7	63.6	100.0	
Missing	System	4	36.4		
Total		11	100.0		

**Besteedbaar bedrag in euro's voor het SRS- systeem**



*Disposable amount in € for the SRS system*

Question 10:

Could you indicate which added value the SRS system could offer is most important to your organization by placing them in order from 1-5? (Proceed to question 14.)

Question 11:

If no, for what reason(s) do you think there is no need for it?

- The system seems difficult to keep clean;
- We like the current disposable cups. Naturally this is dependent on pricing.

Question 12:

What do you think of the SRS system's image (please see pictures from the e-mail or on the website)? (Several options possible.)

Image of the SRS system

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Exudes convenience	2	18.2	20.0	20.0
	Exudes quality	1	9.1	10.0	30.0
	Simple	3	27.3	30.0	60.0
	Solid	2	18.2	20.0	80.0
	Doesn't appeal to me	2	18.2	20.0	100.0
	Total	10	90.9	100.0	
Missing	System	1	9.1		
Total		11	100.0		

Uitstraling van het SRS- systeem

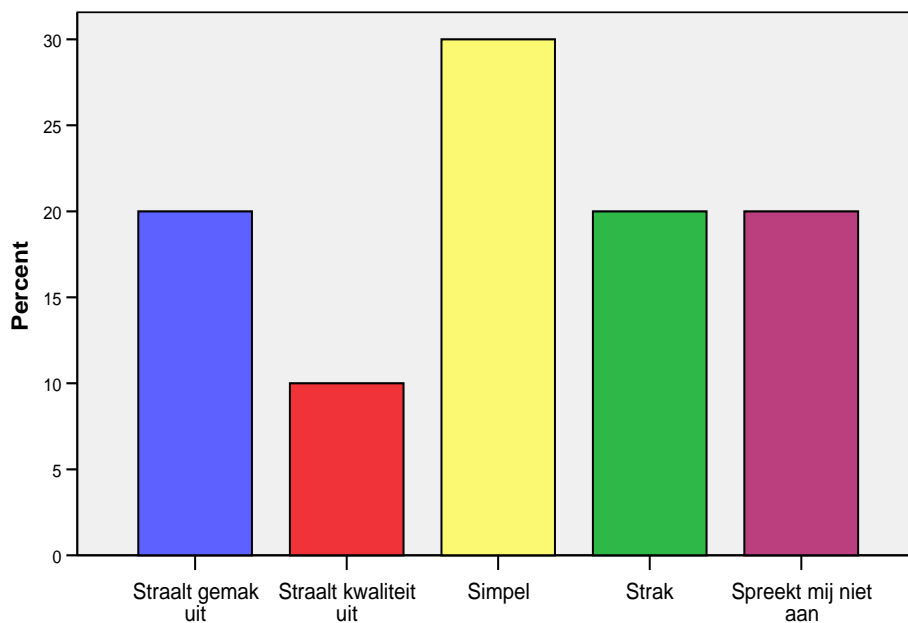


Image of the SRS system

Exudes convenience

Exudes quality

Simple

Solid

Doesn't appeal to me