

Hygiene Matters

The SCA Hygiene Report 2008

Hygiene Matters

The SCA Hygiene Report 2008

Contents

Hygiene affects us all	5
Hygiene in a historical perspective	7
Hygiene – a growth engine for global prosperity	11
Hygiene Matters, The SCA Hygiene Report 2008	15
Major and minor hygiene problems	16



Hygiene affects us all

While hygiene is one of the most important questions of our time, it is also an issue characterized by considerable ignorance that breeds myths and is also strengthened by various social and cultural taboos.

This lack of proper knowledge about hygienic problems, and the silence that frequently falls when hygiene issues are raised, makes daily life more difficult for many people all over the world. Poor hygiene affects our resistance and, consequently, our longevity. It is therefore high time that we speak our minds and start to talk about hygiene and the way it impacts us.

The UN has proclaimed 2008 as the International Year of Sanitation. As one of the largest manufacturers of personal hygiene products in the world, SCA has both a natural and commercial reason for seeing that this issue receives proper attention.

Access to personal hygiene products is vital for creating a more acceptable life for people in the developing countries. The International Year of Sanitation sheds light on the fact that it is possible to improve everyday life for many poor people by small means. Diapers, sanitary protection, toilet paper and incontinence protection are both a matter of health and quality of life.

Hygiene is a crucial issue for the developing countries, but people also become sick or die because of insufficient hygiene in the industrialized world. We have therefore chosen to investigate the habits and possibilities of people to take care of their personal hygiene all over the world. The findings of this investigation are compiled in this report.

We therefore hope this report will alert both decision-makers and the general public about the importance of hygiene and put a sharper focus on what is increasingly appearing to become one of the most important public health issues for the people on our planet.

Jan Johansson
President and CEO
SCA Group



Hygiene in a historical perspective

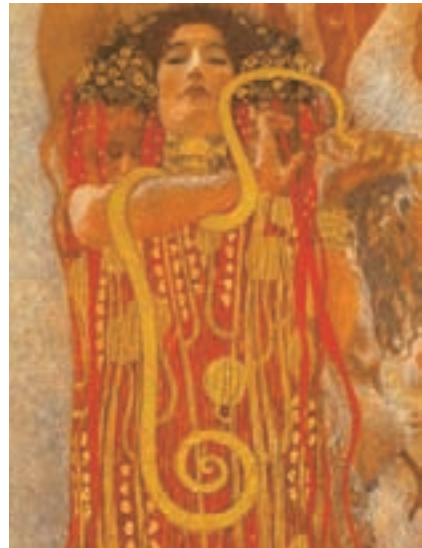
Our attitude towards hygiene and cleanliness has changed over the years. No matter which part of the world that we choose to study, we can easily see that hygienic habits closely follow the tracks of the prevailing culture.

In terms of cultural history, bathing has always had a special influence on the social existence of mankind. For people in many nations, bathing was closely associated with religious cults and was a ritual practice. Cleanliness of the body by bathing was considered to be tantamount to the purity of customs. Religious scriptures required people to take special cleansing baths after performing certain bodily functions, after touching unclean objects or after sickness. More or less the same forms of bathing are described in Sanskrit literature and in the writings of the Persians, Egyptians and other cultures, although their bathing was more a question of washing or taking cold baths than cleansing by bathing.

The Greeks combined bathing with gymnastic exercises and washing in special tubs. A complete Greek bath consisted of heavy sweating induced by exercising the body or heating the premises to increase the temperature (hot-air baths). The actual bathing process started with washing and continued with hot baths in a basin or tub. After that, they rinsed themselves with much water to cool down, followed by scraping their skin with a small curved metal tool and a rubdown with aromatic oils.

Wealthy Romans gradually introduced Greek-style bathing at their country villas. Large public bathing facilities were not introduced until the times of the Roman Empire. These bathhouses fulfilled a social function, providing a place for socializing, discussing politics and gossiping.

Much of the bathing culture of antiquity continued to survive until the Middle Ages. In his collection of essays titled "The Landscape of the Past" (Förflutenhetens landskap), Swedish historian Peter Englund writes that special washing rooms were not unusual, for example, in finer homes. There were many bathhouses open to the general public in Paris in the late 1200s. During this period, bathing was still considered as a ritual, although the hygienic aspects of bathing became more important over time.²



Hygiene is a term which basically means cleaning the body or the immediate environment of people. The degree of cleanliness that may be considered hygienic will depend on the conditions. The term has its roots in the name Hygieia, who was the daughter of Asclepius and the goddess of health, cleanliness and sanitation in Greek mythology. Illustration above: Hygieia in Gustaf Klimt's painting Medicine (Die Medizin), 1901.¹

1 Sweden's National Encyclopedia (Nationalencyclopædien). (1993)
Search word: Hygiene (hygien).

2 Englund, Peter. Förflutenhetens landskap. (1991) Atlantis AB.

"Over the past 100 years, improved hygiene standards have had a decisive impact on social development in the industrialized world"

Hygienic habits were questioned again with the arrival of Christianity. The naked human body had to be covered – because nudity was associated with sin and shame – and public baths were consequently banned. Access to clean water was not a matter of course: water was often considered to be highly suspicious and many people thought it was directly unsuitable to wash in it. Bathtubs and private bathrooms did not regain their positions as status symbols of the upper class until the Age of Enlightenment in the 18th century.

In the 1800s, people became almost infatuated with cleanliness. They aired their homes constantly and prohibited tobacco smoking indoors. Kitchens were separated from drawing rooms and living areas, and private washrooms were built for the first time since the Middle Ages.

Attitudes towards hygiene have changed over the years. Many ethnologists have interpreted our personal hygiene habits as a social notation in which the elevated people of society have always been surrounded by a true or perceptible sweet smell as an effective barrier between social classes.

Over the past 100 years, improved hygiene standards have had a decisive impact on social development in the industrialized world. The possibility to wash and take care of our daily personal hygiene has enabled quality of life for millions of people. Now the populations of the rest of the world are waiting to have the same opportunity.

-
- 3 Roth, Leland M. *Understanding Architecture: Its Elements, History and Meaning*. (1993) First, Boulder, CO: Westview Press.
 - 4 Arab.net
www.arab.net/saudi/sa_miswak.htm
 - 5 Sweden's National Encyclopedia (Nationalencyklopedien). (1993) Search word: The Black Death (digerdöden)
 - 6 Nordiska Museet, Stockholm.
www.nordiskamuseet.se/exhibs/showroom/hygien/
 - 7 Englund, Peter. *Förlutenhetens landskap*. (1991) Atlantis AB.
 - 8 Loudon, Ignaz Phillip Semmelweis' studies of death in childbirth. (2002)
 - 9 Der Struwwelpeter. (2007) Diogenes verlag.
 - 10 Smith, Virginia. *Clean: A History of Personal Hygiene and Purity*. (2007)
 - 11 Sweden's National Encyclopedia (Nationalencyklopedien). (1993) Search word: Soap opera (Såpopera).
 - 12 Björklund, Susanne. *History of the Diaper (Blöjans historia)*. (2003)

The history of hygiene



1340-1740

Due to the ravages of the Black Death in Europe, people start to search for a link between health and hygiene. Clothes are washed mostly in cold water, while people of better standing use hot water for both washing and bathing. Crusaders also brought soap to Europe from the Far East during the Middle Ages.⁵



1700s

The first real water closet, the Bramah Valve Closet, is launched in England towards the end of the 1770s. It consisted of a toilet bowl that held water at a constant level, which was designed to eliminate any offensive smell.⁷

1900-1980

In the early 1900s, hygiene products are designed mainly to kill bacteria. The focus is on cleaning agents and bleaches – products have to smell antiseptic. People do not talk about “sweet-scented” products until the 1970s. Liquid soap, shampoo, cleaners and laundry detergents start to smell more like perfume than cleaning agents.¹⁰



1920s

The soap opera stems from the original daytime dramatic serials broadcast on American radio in the 1920s whose target audience comprised housewives. The shows' sponsors were consequently geared to this group and advertising consisted largely of commercials for soap powders. Thus, the term “soap opera” was coined, with the opera part coming from the fact that the shows were about daily dilemmas and other dramatic situations.¹¹

200 A.D.

The Romans build public baths called *thermae*. A famous bathing facility from this period is the Baths of Caracalla in Rome, built by the emperor of the same name. This bathhouse was a 12 hectare complex that was estimated to hold up to 3,000 bathers.³

600s

Oral hygiene is important to the Muslims and many other civilized nations. The Prophet Mohammed (570-632) was careful to brush his teeth daily and became a model for the followers of his faith. The root of an evergreen shrub (*salvadora persica*) is used (and is still used today) as a toothbrush. The modern-day toothbrush was not introduced in Europe and the United States until the beginning of the 1800s.⁴

1700s

A special bathing culture develops in Northern Europe with the sauna bath. Despite ecclesiastical resistance, it is common for women and men of all ages to take a sauna bath together.⁶

1840s

The importance of hand hygiene for health was unknown for many years. Ignaz Phillip Semmelweis (1818-1865), a physician from Vienna, discovers in the mid-1800s that the spread of disease can be drastically reduced if doctors wash their hands carefully. When physicians, under protest, start washing their hands, the mortality rate for the feared disease called childbed fever (puerperal fever) is reduced from 40 percent to one percent. Interest for hygiene research grows.⁸



1845

Der Struwwelpeter, by German physician Heinrich Hoffmann, is published. The book aims to teach children about basic personal hygiene and grooming. If children did not cut their nails or hair, things could go just as badly for them as for Shaggy Peter.⁹

1957

At the end of the 1950s, the Swedish company Mölnlycke launches the world's first disposable diaper called the Snibb. It is made of defibred pulp that is encased in tissue and absorbent cotton with a perforated net on the outside.¹²



Hygiene – a growth engine for global prosperity

Hygiene issues are gaining in importance in the industrialized world as we change our living habits. We travel more and more, eat more frequently at restaurants and socialize more in public environments. Hygienic conditions vary from country to country. The only thing we know for sure is that improved hygienic conditions have been historically shown to pave the way towards prosperity for a nation.

Today, the limited possibilities of people to take care of their personal hygiene constitute one of the biggest barriers to health and economic improvements in the developing countries. More children die from contaminated water and insufficient hygiene than from war and armed conflicts.¹⁵ According to the World Health Organization (WHO), diseases caused by poor hygiene contribute to the deaths of 4,500 children every day. Calculated on an annual basis, the figures are atrocious: approximately 3.4 million deaths, children and adults, per year. A century ago, similar conditions were also common in Europe, where the average life expectancy was less than 50 years. Today, the average life span of people is 78 in Europe, based on statistics from the UN.¹⁶

We are living much longer today mainly because of medical progress. We have learned to limit the spread of contagious diseases, due largely to improved sanitary conditions. Last year, the esteemed British Medical Journal ranked sanitation as the most important medical advance since 1840. Sanitation even had a higher ranking than antibiotics and anesthesia in terms of its impact on human well being.¹⁷ WHO estimates that 80 percent of all virus infections are directly or indirectly caused by poor hygiene.¹⁸



Only 30 percent of the world's population uses toilet paper. But, it has not been claimed that all hygiene problems would be solved if everyone started using toilet paper.¹³

One gram of human excrement contains ten million viruses, one million bacteria, one thousand parasite cysts and one hundred parasite eggs.¹⁴

¹³ The Restroom Association of Singapore.
www.toilet.org.sg

¹⁴ A guide to investigating one of the biggest scandals of the last 50 years.
Water Supply and Sanitation Collaborative Council (WSSCC).

¹⁵ Progress for children. UNICEF. (2006)

¹⁶ Gabelic, Aleksander. Den tysta katastrofen.
www.sfn.se/news.asp?newsid=763&nodeid=173&iLev=1&iHasChild=0

¹⁷ British Medical Journal. January 2007 issue.

¹⁸ World Water Week.
www.worldwaterweek.org/Downloads/WWW_2007_Press_Kit.pdf



Only seven years remain before the UN's Millennium Development Goals (MDG) are to be achieved by the target date of 2015. Regarding the goal for sanitation, aiming to halve the percentage of people without basic sanitation, it is estimated that the world will miss the target. The UN claims this will also slow down the progress to reach a number of other millennium goals, including gender equality in primary and secondary education, reduced child mortality and economic growth in developing countries.¹⁹

In many areas of the world, the biggest barrier to improving hygiene conditions is not poverty or a shortage of clean water. Instead, the challenge is often a question of breaking taboos and spreading knowledge. An example is going to the toilet on a daily basis which, in most cultures, is a subject surrounded by social taboos. The toilet is therefore a global health issue that is considerably affecting the everyday lives of people. As many as half of the world's population, a total of 2.5 billion people, do not have access to basic sanitary facilities.²⁰

The benefits of improved hygiene are not only a humanitarian concern – they are also an economic issue. Each year, infections stemming from healthcare affect hundreds of millions of patients all over the world, resulting not only in higher costs for those who are affected but also for welfare states at large. Infections also lengthen the time required for patient care and lead to unnecessary deaths.²¹ The UN estimates the economic gains in terms of higher productivity and reduced healthcare costs at USD 8 for each dollar that is invested to improve hygiene.²²

People in the industrialized world also become sick or die because of insufficient hygiene. A current example can be taken from the healthcare sector, where increasingly aggressive and resistant MRSA bacteria often cause the outbreak of infections in hospitals which are difficult to treat. The cause can be largely attributable to poor hand hygiene and inadequate hygiene procedures among hospital staff.

The handling of food, as well as hygiene routines in restaurants, grocery stores and large-scale catering kitchens are other questions requiring increased awareness and new and improved hygiene solutions.



A lack of basic hygiene is a serious problem for women and girls living in the poor, overpopulated metropolitan areas of developing countries. Many have to take care of their personal hygiene under cover of darkness to avoid harassment and threats. In many countries, fewer girls go to school than boys and more quit school because they do not have access to either clean water or separate toilets for boy and girl students.

19 International Year of Sanitation.
esa.un.org/iys/

20 A guide to investigating one of the biggest scandals of the last 50 years.
Water Supply and Sanitation Collaborative Council (WSSCC).

21 WHO guidelines on hand hygiene in health care.
World Health Organization 2006.

22 A guide to investigating one of the biggest scandals of the last 50 years.
Water Supply and Sanitation Collaborative Council (WSSCC).

Hygiene Matters

The SCA Hygiene Report 2008

What do people in different parts of the world think about everyday hygiene? Which environments make us feel insecure? What anxieties and thoughts are associated with an ordinary visit to the toilet? How much time do we spend in the bathroom? What are our views on hygiene – our own personal hygiene and the hygiene of others? Where, when and how are we afraid of being infected by sick people? These are a few of the questions that were answered in SCA's global survey on the hygiene habits of people. A few of the most critical issues are presented in the next section of this report.

The survey was initiated by SCA and carried out by the business intelligence consulting firm United Minds with the assistance of the Cint research company. The survey encompassed nine countries: Sweden, the United Kingdom, France, Germany, Russia, China, Australia, the United States and Mexico. Approximately 500 people were surveyed in each country to achieve a nationally representative distribution between men and women and between different age categories. The survey compiled answers from 4,842 respondents through a web-based survey.



Major and minor hygiene problems

There are striking contrasts between the hygiene problems of different countries and the differences between the everyday situations of people. Many of the hygiene difficulties experienced by populations in the industrialized world can be easily considered to be a luxury problem, especially when they are compared with the basic hygiene shortages prevalent in other parts of the world. However, just as poor people in a developing country find dignity in their ability to take care of their personal hygiene, it is a fact that many people in the wealthier part of the world feel both physically and mentally bad as a result of insufficient hygiene. Personal impressions and experiences affect how we experience the world. Understanding what controls the everyday life of people, and how they view their existence, will constantly be a crucial factor for succeeding in a market for consumer products.

New markets – new consumers

In 2005, the G6 nations – the USA, Japan, the UK, Germany, France and Italy – together accounted for less than one tenth of the world's population – and for almost half of the world's consumption. The consumer markets of these countries have shaped how products are developed, manufactured and marketed. Production of these nations has spread to large parts of the world, enabling several countries to increase their GDP. Despite this, the spending capacity of these nations has remained on a relatively low level and consumer patterns have basically followed a Western-style model.

However, since the last turn of the century, major changes have occurred and more people in more markets have increased their purchasing power. As a result of these changes, these markets are starting, in turn, to put demands on products from a national perspective. Companies are being forced to make a greater effort to understand the local conditions and values that are controlling consumption.

Consumer markets that have accelerated on a serious scale in the past decade are represented best by countries like China, Russia and Mexico. Together with India, Brazil and South Korea, they are usually called the B6 – The Big Six.

”Three out of four people are anxious about getting sick because of insufficient hygiene”

These countries have achieved unparalleled economic growth that has increased the spending capacity of a growing number of people. For example, China is expected to double its per capita income in the next ten years – five times faster than the UK and the USA during the industrial revolution. It is estimated that the consumer markets in the B6 nations will grow an average of 7.4 percent until 2015, three times faster than the G6 countries. By 2025, the B6 nations will also have passed the G6 countries in terms of total spending power, with China in first place and Russia in fourth.

Their incredibly rapid development is what makes these countries particularly interesting examples. Despite rising GDPs and the fact that a growing number of people are receiving increased welfare, many people in these countries still live in very simple conditions, especially with regard to hygiene and sanitation. However, considering the current development rate of these nations, there are strong hopes that their growing prosperity will spread and benefit larger groups of people in these countries.²³

A threatening cloud in everyday life

Even if hygiene in the industrialized world is not a question of life or death in most cases, it does affect our quality of life. Even in cases when insufficient hygiene does not directly cause sickness and physical suffering, it can have serious consequences in the form of anxiety and mental suffering. Anxieties make us feel uncomfortable which cause us, in many cases, to avoid doing natural, everyday things such as riding the bus or using public toilets. Simply put, poor hygiene impacts our everyday life.

There are particularly wide social gaps in some of the countries covered by the survey. Many people in Russia, China and Mexico have achieved a relatively high hygiene standard in a short time, while a large portion of their populations still live in much simpler sanitary conditions. In an existence with these contrasts, well-to-do persons are also being exposed more frequently to hygiene shortages, which may be a clue to why, for example, 61 percent of the people in Mexico are often anxious about becoming sick because of hygiene. The USA is the country with the second highest percentage, with 29 percent of the Americans often being worried about getting sick because of poor hygiene.

Opinions and health risks vary

Three-fourths of the respondents in the survey stated that they have been concerned about getting sick because of poor hygiene. They are mostly worried about insufficient hand hygiene in restrooms.



Which hygienic risks is the world population most worried about?

- | | |
|--|-----|
| 1. Insufficient hand hygiene in connection with toilet visits | 47% |
| 2. Insufficient hand hygiene when preparing food/meals | 45% |
| 3. Improper handling of groceries during food preparation | 38% |
| 4. Risk of being infected through contact with other people | 34% |
| 5. That the kitchen is not cleaned regularly | 26% |
| 6. That the toilet/bathroom is not cleaned regularly or enough | 25% |
| 7. To not shower/bathe on a regular basis | 20% |
| 8. Risk of being infected through contact with animals | 19% |
| 9. Not washing clothes enough | 8% |

²³ The Rise of the Multi-Polar World.
Accenture Policy and Corporate Affairs. (2006)



Bacteria, infections and sicknesses that can be spread from hand to hand

1. Salmonella
2. Staphylococcus
3. Streptococcus
4. Fungal bacteria
5. Food poisoning
6. Gastric influenza/stomach illness
7. Hand, foot and mouth disease
8. Threadworms
9. Chickenpox
10. EHEC
11. Colds
12. Hepatitis A
13. Ringed worms
14. Toxoplasmosis

Source: Swedish Institute for Infectious Disease Control (Smittskyddsinstitutet)

After poor hand hygiene, people are most concerned about insufficient hygiene when food is prepared and during meals. They are also worried about being infected by people in their immediate surroundings.

At the same time there are major differences between countries when it comes to the way people experience health risks. Americans are among those who perceive the greatest discomfort before drinking from someone else's glass or bottle, or when using the same guest towel in bathrooms as other people. Americans also seem to be hesitant about kissing cheeks and hugging when they meet people, while 21 percent said they dislike kissing someone, which was the second highest percentage in the survey. In contrast to this, the USA is far from being the country that ranks infection from people as the greatest hygiene risk, which indicates that cultural factors play just as big a role as hard facts in daily hygiene behavior.

Almost eight out of ten Mexicans feel that poor hygiene during cooking and meals is one of the greatest problems. The Mexicans also believe, more than anyone else in the survey, there are hygiene risks if they do not shower or bathe an adequate number of times. The Russians and Chinese stand out because they think that contact with animals is much more hazardous, compared to the average finding in the survey.

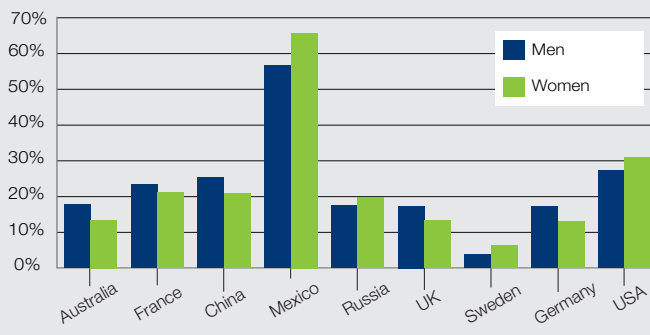
As a whole, Sweden is the country where hygiene and disease are felt to be the least problem. Half of the Swedes in the survey are never concerned about the risk of catching a disease in connection with poor hygiene and only five percent are worried about this on a regular basis.

The infectious handshake

Hand hygiene topped the list of health-related risks among respondents in the survey. However, based on the survey's findings, we are generally rather good at taking care of our hand hygiene. As many as 95 percent said they washed their hands after going to the bathroom. However, women wash their hands much more often than men. As many as 64 percent of the women respondents washed their hands more than six times a day, compared with 48 percent for men.

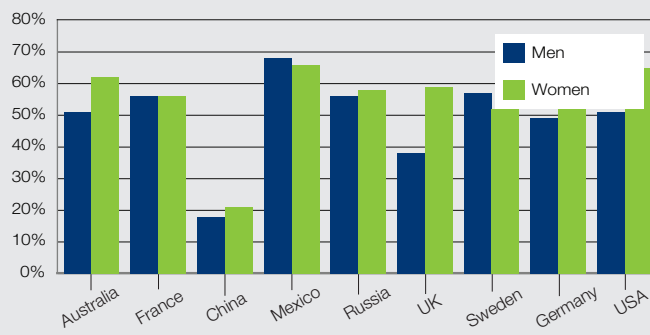
It is interesting to note that people are more careful about hand hygiene at meals in the countries where people are most worried about hygiene risks – in Russia, China and Mexico – where nine out of ten wash their hands before eating, while almost six out of ten people in Sweden are as careful. The USA, along with the UK and Australia, are the countries where most people think it is acceptable to eat with your hands. However, they do not seem to be more careful about washing their hands before meals. The percentage of Americans who wash their hands is the same as the average in the survey.

Often concerned about getting sick because of poor hygiene



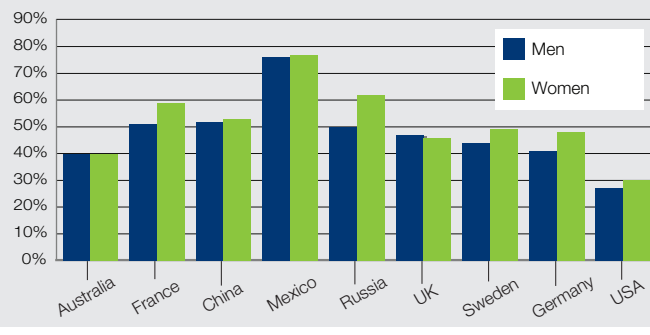
Seventy-five percent of the respondents in the survey have been concerned at one time or another about getting sick because of poor hygiene. People are the most worried in Mexico and the least worried in Sweden, where half of the Swedes are never concerned. We should see the worries from different perspectives, the type of disease that people run the risk of getting in different parts of the world and the most serious hygiene shortages in these countries. The social safety net for people who get sick – or the lack of it – is of course another dimension to the question of what people should take into consideration.

Concerned about poor hygiene when using restrooms



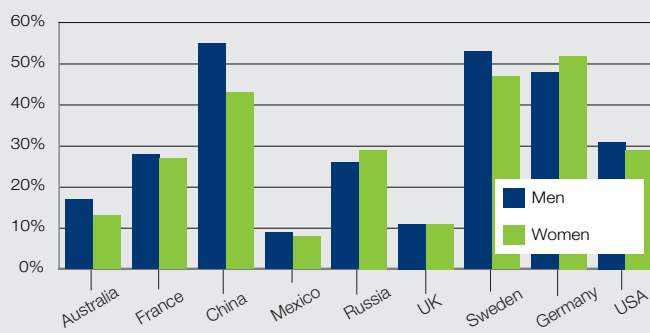
Despite the fact that people in different countries have different views about the risks associated with insufficient hand washing in connection with restroom use, almost everyone (96 percent of the women and 93 percent of the men in the survey) stated that they always wash their hands after using the toilet. The risks they associate with this should give us a hint about reality. We know, for example, that people generally exaggerate when they talk about their hand washing habits (see page 23).

Concerned about poor hand hygiene while cooking and eating



In Mexico, which has a particularly hot climate, almost eight out of ten respondents consider insufficient hygiene during the preparation of food and at meals to be one of the greatest hygiene risks. It is striking that men and women seem to be equally concerned, with the exception of Russia, where twelve percent more women feel this is one of the greatest risks.

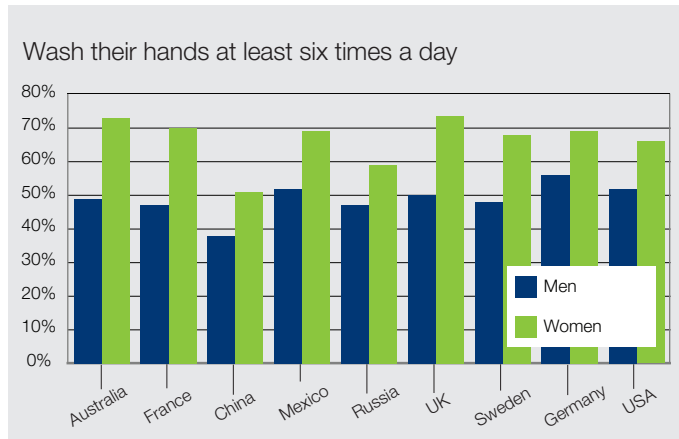
Concerned about being infected in contact with other people



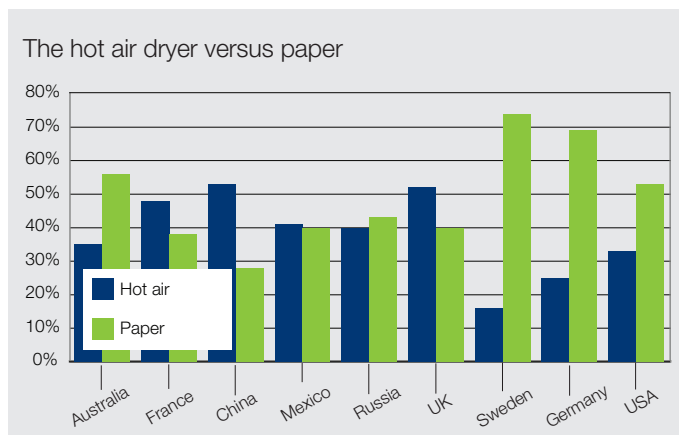
In China – one of the countries ranking the risk of infection through contact with other people as the highest – 30 percent stated that they feel uncomfortable about kissing someone. In Russia, people are more concerned about hygiene risks when they come into contact with animals than people. Russians were the only respondents to state this in the survey.



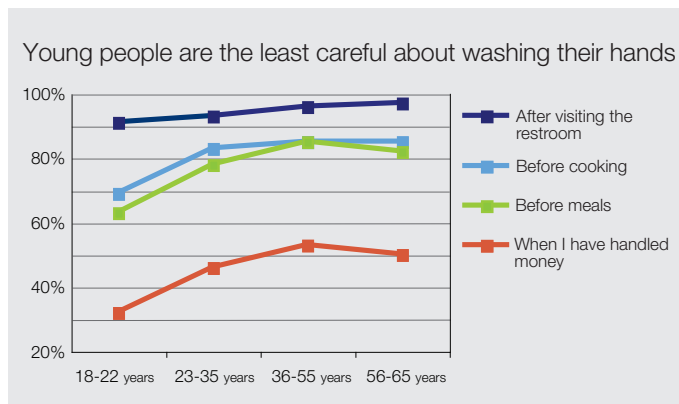
A British study has revealed that using paper towels to dry hands after washing reduces bacterial counts on the hands by an average of 42 percent, while hot air dryers increase counts by 50 percent.²⁴ However, respondents in China, France, the United Kingdom and Mexico stated that the hot air dryer is still the most popular choice for drying their hands after using public restrooms.



Women wash their hands much more frequently than men and people tend to increase their hand-washing frequency as they grow older. People wash their hands the most in Germany, where one out of four people wash their hands more than ten times a day. The greatest differences between the habits of men and women seem to be in the UK, where 24 percent more British women than men wash their hands at least six times a day.



In Sweden and Germany, a clear majority of the respondents stated that they use paper to dry their hands after visiting the restroom.



The fact that young people are the least careful about washing their hands, and that people become more careful with age, can naturally be interpreted that people grow wiser over the years. It can be pointed out at the same time that there is still a need for education and information related to hygiene problems.

²⁴ Hand drying: A study of bacterial types associated with different hand drying methods and with hot air dryers. University of Westminster. (1994)



Hotels and restaurants a concern when traveling abroad

Concerns that hotels do not maintain a high hygienic standard is the most common source of worry when making a trip abroad, following by concerns about poor kitchen hygiene at restaurants. People of different ages generally share the same worries about hygiene problems when traveling abroad, but when it comes to the way people might react to their own personal hygiene behavior abroad, young people are the most anxious. The older people are, the greater their concern about poor hygiene, particularly at hotels and restaurants.

The anxiety-ridden visit to public restrooms

People in most countries feel uneasy about using public restrooms. More than half of the men in the survey and 70 percent of the women often refrain from using a public toilet.

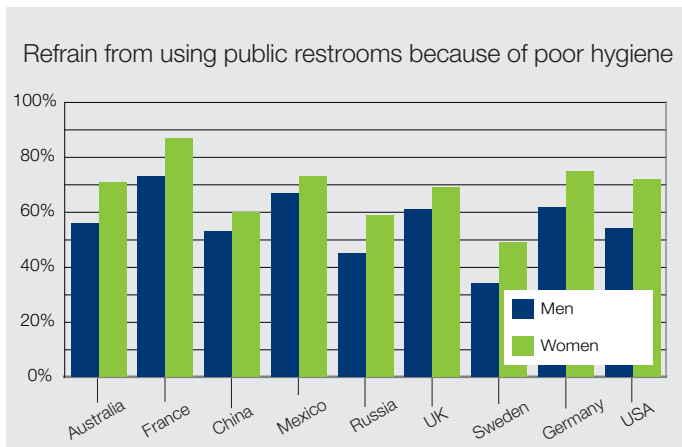
However, the fear of using public restrooms may be exaggerated in many cases. An international study conducted in 2007 investigated hygiene in homes and public environments, discovering that there is often less bacteria in public restrooms than in home kitchens.²⁵ The survey also indicated that more bacteria often collect on the surface of lampshades, door handles and cutting boards than on a public toilet.

Washing hands after using the toilet

An observation study in the USA has shown there is a big difference between what people say and what they actually do. As many as 91 percent stated that they always wash their hands after using the toilet, while the study discovered that only 80 percent actually did it.²⁶ Men were less careful about hand hygiene, with barely three out of four making sure that they washed their hands after doing their bathroom business.

Countries where people have the greatest concerns about using public restrooms

1.	France	80%
2.	Mexico	70%
3.	Germany	65%
4.	UK	65%
5.	Australia	64%
6.	USA	63%
7.	China	56%
8.	Russia	52%
9.	Sweden	41%



25 The Hygiene Council. (2006)

www.hygienecouncil.com/work.shtml

26 Harris Interactive: A Survey of Hand Washing Behavior. (2005)

American Society for Microbiology.

"Incontinence is the biggest social taboo in the hygiene area"

Fear impacts our lives

Almost one-third of the Chinese in the survey frequently refrain from eating dinner at the home of friends for hygiene reasons, while one out of three Americans and Chinese avoid taking public transportation also because of hygiene concerns. The spitting and sneezing of other people are far up the list of things that make us feel uncomfortable. Something as romantic as a kiss can also clearly make people feel uneasy. The survey indicated that three out of ten Chinese feel uncomfortable about kissing someone. The Swedes are the least afraid, with only five percent feeling uneasy about kissing.

Social taboos

Taboos and feelings of shame still influence our hygienic habits to a large extent. Many people feel bad because they cannot speak about their problems, or because they feel uncomfortable when they have to buy hygiene products that not only make their everyday life tolerable but also enhance their quality of life.

No matter whom you ask, incontinence is considered the biggest social taboo in the hygiene area. It is the subject that most people feel is embarrassing to talk about and the most uncomfortable to discuss with others. This issue will also gain importance as the category of seniors grows in society. In its capacity as a world-leading company in incontinence products, SCA has the major task to improve quality of life and give more people a dignified way to age.

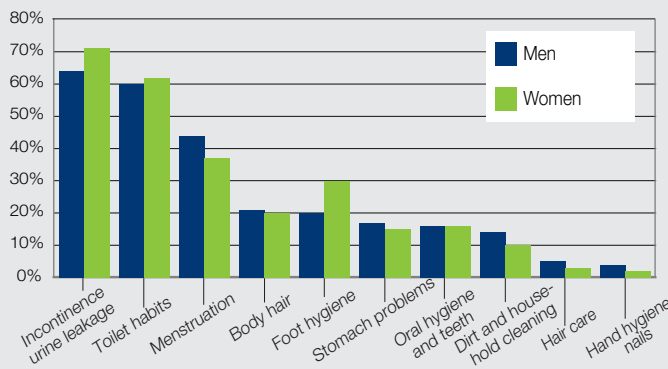
The survey also confirmed that many people suppress their hygiene problems because of social taboos. The United States is a good illustration of the need for additional education and information about these problems in the Western World. One fourth of the respondents in the survey hesitate to talk about their difficulties with a physician.

Cultural differences

Taboo subjects are also impacted by cultural differences. Almost one fifth of the French in the survey could not envision themselves talking about their hair care with someone else, compared with four percent for respondents as a whole. In Mexico, almost half felt it was embarrassing to talk about foot hygiene, and in China it is considered very awkward to talk about body hair. The Germans were the most uncomfortable about discussing hygiene problems with their colleagues.

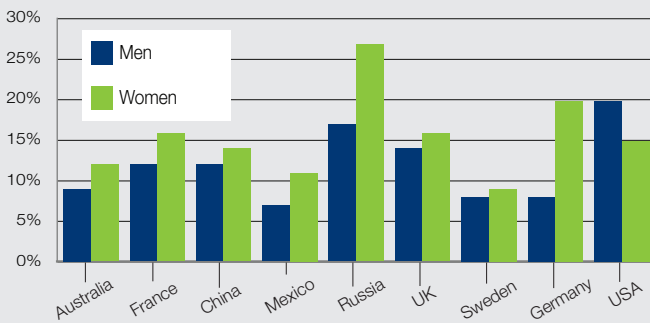
Breastfeeding is still a controversial issue in many parts of the world. Four out of ten Russians do not think it is acceptable for women to breastfeed in public. The corresponding figure is 23 percent for all countries in the survey. Australia is the country most friendly towards breastfeeding, where only seven percent think breastfeeding in public is unacceptable.

Most embarrassing to talk about



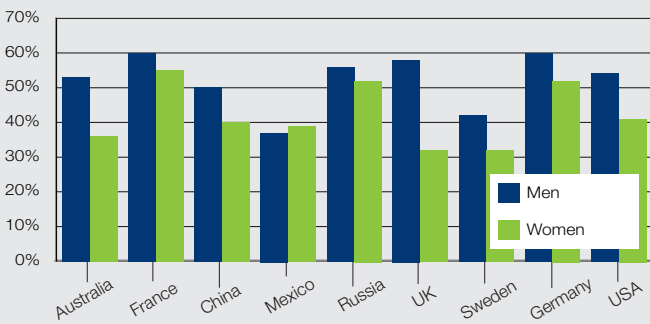
Incontinence was the most sensitive hygiene problem for the respondents and the most delicate subject for women. As many as 71 percent of the women, compared with 64 percent of the men, felt this is a subject that one should absolutely avoid discussing with others. This attitude is actually worth noting, considering that people suffering from incontinence bear no responsibility whatsoever for their problem, compared with oral hygiene or hair care.

Cannot talk to their partner about hygiene problems



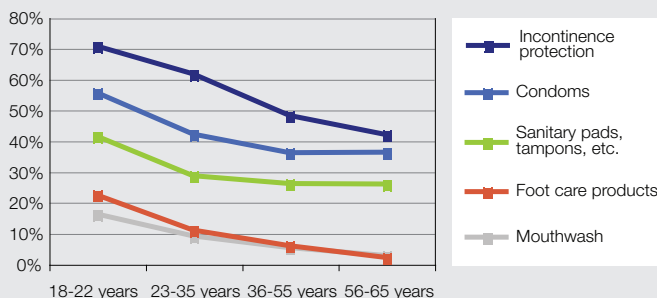
On a country to country basis, one's partner is the preferred person for the respondents to talk hygiene problems with. However, one fourth of the Russian women in the survey felt that they cannot discuss this subject with their partner. The sharpest difference between the answers of men and women was in Germany, where men find it much easier to talk to their partner than vice versa.

Cannot talk to their friends about hygiene problems



Even if friends are often the first people we confide in, almost half of the respondents felt that they cannot talk to their friends about hygiene problems. The French are most silent about this subject, with six out of ten stating that they cannot discuss hygiene with their friends. People in Sweden seem to have a more relaxed attitude about this: more than 60 percent talk about their hygiene difficulties with friends. The greatest difference between the sexes is in the United Kingdom, where twice as many men as women consider it impossible to talk hygiene with friends.

Less embarrassing as people grow older



The trend perceivable from the answers indicates that young people are more embarrassed to talk about buying these hygiene products than older people. There is a clear tendency for the answers, from products like incontinence protection, which most people feel somewhat uneasy about purchasing, to less sensitive products, such as mouthwash and foot care supplies.

In which countries do people clean the most?

1. Mexico
2. China
3. United Kingdom
4. France
5. Australia
6. United States
7. Russia
8. Germany
9. Sweden

What is the most important room to keep clean in a home?

- | | |
|----------------|-----|
| 1. Kitchen | 87% |
| 2. Bathroom | 78% |
| 3. Toilet | 74% |
| 4. Bedroom | 23% |
| 5. Living room | 14% |
| 6. Hallway | 3% |
| 7. Basement | 1% |
| 8. Other rooms | 1% |
| 9. Attic | 0% |

There are also differences between the sexes. While women feel more sensitive about talking about incontinence than men, men find it more difficult to talk about menstruation. Close to half of the male respondents in the survey also felt uneasy about talking about sanitary pads and tampons. Most of the respondents, 85 percent, could still think about talking with their partner about different hygiene problems, while only nine percent could consider discussing this subject with strangers and new acquaintances.

Hygiene-related subjects that are taboo also cause major problems, not least for women in different areas of the world. Many women are prevented from attending school or working during those days of the month when they have their period, due to a shortage of sanitary products.

Hygiene is becoming more and more of a status issue

There is a growing interest in society for the way we look and we are devoting more and more time to our personal appearance and having an attractive and tidy home to show others.

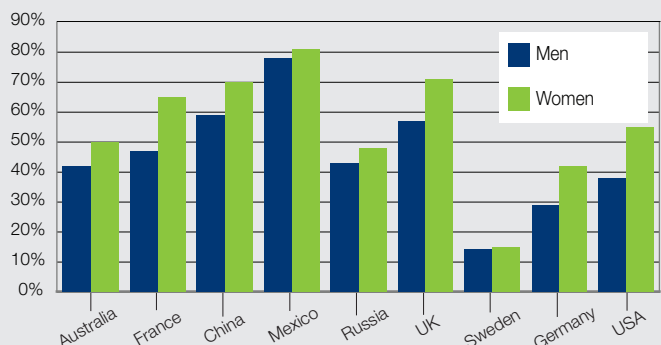
Eighty-five percent of the respondents in the survey said they clean their home at least once a week. The Swedes are the exception: almost half of them clean their homes only every other week at the most.

The infrequent cleaning habits of the Swedish people are a sharp contrast to Mexico, where 80 percent of the households clean at least twice a week. The majority felt that the kitchen is the most important room to keep tidy, followed by the bathroom and toilet. China stands out from the crowd by prioritizing the bedroom as much as the toilet, and the United States for ranking a clean bathroom as the most important thing.

When asked how they experience hygiene in the homes of other people, most of the respondents said that filthy toilets and bathrooms were the most disgusting. In Sweden, people do not like wall-to-wall carpeting. In Mexico, many people think pets are unhygienic, and in Russia, people would gladly avoid dirty floors in other people's homes.

The cleaning habits of men and women differ the most in the United States and France, while they are most similar in Sweden and Mexico. One question that people agree on all over the world is the rooms that are most vital to clean. The answers are remarkably similar – regardless of the country or world region.

Clean at least twice a week







As a hygiene issue, a clean home is more important to women than men. There also seems to be a tendency that, the higher education men have, the less time they spend on household cleaning. Those with a lower level of education put more value on cleaning and cleanliness in their homes but are generally less concerned about the hygiene problems of other people.

Completely clean – depends on how you define it

Cleaning the body and place where you live has been one of the most fundamental and central parts of human culture. In some cultures, the borderline has hovered between cosmetic hygiene and hygiene as a health issue.

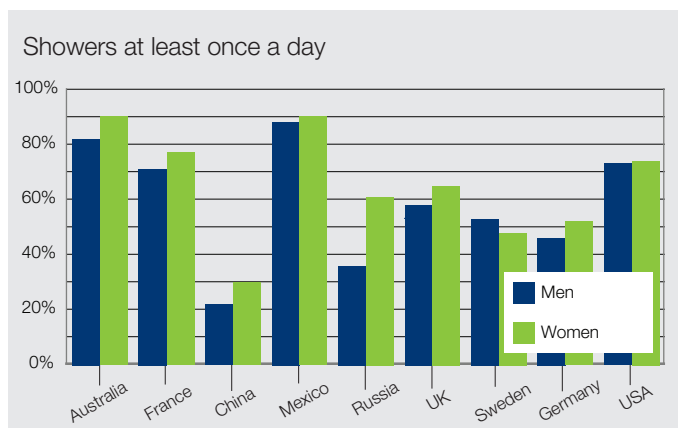
The shower and bath have not always been a matter of course and the differences between countries are still great. Almost half of the Chinese in the survey shower twice a week, while the Mexicans consider the shower to be a key component of personal hygiene. As many as 89 percent shower at least once a day.

Changing sanitary conditions also change the attitudes of people towards hygiene. Public health researchers have noticed, for example, that people in the industrialized world are more sensitive to strong smells. In Russia, China and Mexico, the respondents said that poor hygiene is mainly something that is visible, while people in the other surveyed countries feel that smells are the thing that reveals poor hygiene.

We strive for well-being

There are major differences between the way people value personal hygiene in terms of what they value and how much they value it. Russian women have to contend with the biggest demands for the attributes of beauty – jewelry, makeup and shaved legs – from those closest to them. The survey also indicated that Russian women value these attributes the most for their well-being. The Mexicans spend the most time on getting ready in the morning, while the Swedes and Chinese seem less particular. In Mexico, 74 percent think that men should wear the scent of cologne, compared with only 24 percent in China.

”Women generally shower more often than men”



Generally women shower more often than men but Sweden is an interesting exception. In Sweden a few more men than women indicate they shower at least once a day. How often we shower changes depending on how old we are. In China and the United Kingdom the conditions are quite different comparing to the rest of the countries in the survey. In China the youngest shower far more often than the older. In the United Kingdom it is instead the youngest that shower the least.

The ideal man

When both men and women are asked what the ideal man is:

- | | | |
|----|--|-----|
| 1. | Has short hair | 89% |
| 2. | Has nails cut short | 86% |
| 3. | Is clean-shaven | 82% |
| 4. | Has a natural complexion without the use of creams | 67% |
| 5. | Does not wear jewelry | 55% |
| 6. | Wears cologne | 51% |

The ideal woman

When both men and women are asked what the ideal woman is:

- | | | |
|----|---------------------------|-----|
| 1. | Shaves her legs | 84% |
| 2. | Wears jewelry | 70% |
| | Wears perfume | 70% |
| 4. | Has long hair | 69% |
| 5. | Does not wear her hair up | 55% |
| | Does not wear makeup | 55% |
| 7. | Uses skin creams | 51% |

The survey also clearly showed that people in all countries put much value on their personal well-being. As many as 98 percent consider it important to have fresh breath and 86 percent feel it is essential to smell good.

The well-being of people is also something that is increasingly reflecting trends in hygiene products. Development in this area is based on a complete concept in which hygiene, health and well-being are equally important. It is also a question of comfort, ergonomics and design, as well as medical aspects, of course. For example, products are to take all kinds of allergies into consideration.

An important issue today – and tomorrow

Hygiene concerns us all in different ways. Improved hygiene and sanitary conditions allow people to have dignity, an identity and pride. Good hygiene also reduces the spread of disease in the world and will create better health conditions and stronger social development in the long term.

With increased prosperity, we will have a healthier society that is simpler and more pleasant to live in.

The initiative to conduct this survey is part of the responsibility that SCA takes for solving hygiene problems. By addressing important issues and reporting on the findings of this survey, we hope to open up a dialogue on hygiene and sanitation.



SCA in brief

SCA is a global hygiene and paper company that develops, produces and markets personal care products, tissue, packaging solutions and solid-wood products.

SCA is the world leader in incontinence care products with its global TENA brand. In the personal care area, we also produce and market diapers and feminine care products under the well-known Libero, Libresse, Saba, Libra, Drypers, Nana and Bodyform brands.

In the tissue area, we develop and produce toilet paper, kitchen rolls, handkerchiefs and napkins, together with services, for consumers and the Away-From-Home (AFH) tissue segment. Examples of best-known brands are Tork, Tempo, Zewa, Regio, Velvet and Sorbent.

Our packaging solutions include consumer packaging, industrial packaging, protective packaging and transit packaging. Forest products include publication papers, pulp and timber and the business group is a key part of the Group's raw material flow. SCA is the largest private forest owner in Europe.

Market

Europe and North America are SCA's main markets, although the Group also holds strong positions in, primarily hygiene segment, in Latin America, Asia and Australia. SCA is continuing to expand its operations in mainly Asia, Latin America and Central and Eastern Europe. SCA's ten largest markets, in order of size, are: Germany, the United Kingdom, the United States, France, Sweden, Italy, the Netherlands, Spain, Denmark and Australia.

Environment

SCA products are produced almost exclusively from renewable and recyclable materials. Equal quantities of recovered and fresh wood fiber is used in production.

SCA in figures

- 50,000 employees
- Production in 60 countries
- Sales in approximately 90 countries
- Annual sales of EUR 11.5 bn (2007)
- Percentage of net sales per business area in 2007: Personal Care 21 percent; Tissue 31 percent; Packaging 31 percent and Forest Products 17 percent.

Cover: <http://www.garrisonphoto.org/> - stock.xchang, page 4: Henrik Bonnevier/ linkimage, page 6: Jan Håkan Dahlström/ Bildhuset/Scanpix, page 9 (tv): Lluís Real/AGE/Scanpix, page 10: Skip Nall/Getty images, page 11: Curt Carnemark/ Scanpix Denmark, page 12: Peter Steffen/Scanpix Sweden, page 13: Rui Vieira/ PA PHOTOS/Scanpix Sweden, page 17: Gerry Johansson/ linkimage, page 18: Maria Annas/bildhuset/Scanpix, page 20: Ericka McConnell/Jupiter Images/Scanpix, page 22: Derek Shapton/Masterfile/Scanpix, page 27: Graham French/Masterfile/Scanpix, page 28: Juliana Yondt, page 31: Magnus Mårding/ linkimage.

Production: Prime. Print: Wassberg + Skotte Tryckeri AB, Stockholm. 2008.

SCA contact: Bodil Eriksson, Senior Vice President, Corporate Communications
bodil.eriksson@sca.com

essentials
for everyday life™



www.sca.com