

# PROconcept

Providing advice to care and nursing homes



**FOCUS**

*Elementary  
resource*

WATER

## As valuable as diamonds?

Why water does us good and why we should take care of it.



# How much water do we use and need?

**FOCUS**  
Elementary resource  
WATER

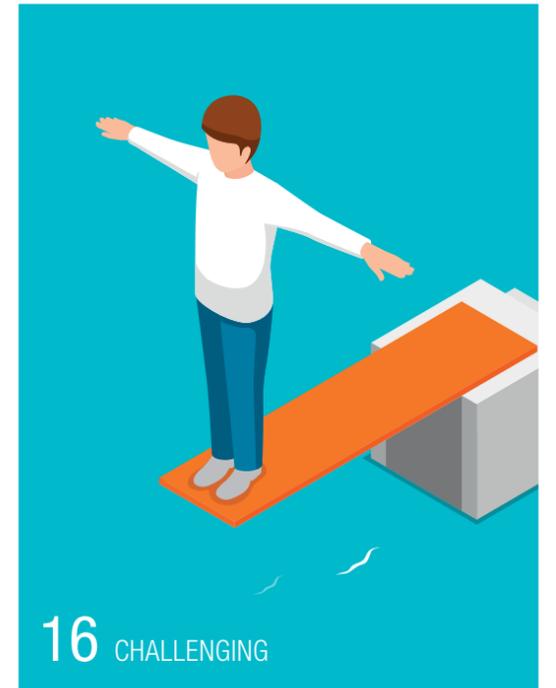
There's no life without water. A plain and simple statement we should take to heart. We in the West are lucky that water is in ample supply and always available. Whenever we turn on the tap, water comes gushing out in a clear and steady stream – usually in potable quality. But that isn't the case everywhere in the world. And water as a resource is even in danger of becoming scarce in Germany. Work is already underway on a national water strategy at the German environmental ministry in order to ensure an affordable supply of water through to 2050. As private households or nursing homes where water is a daily necessity in the care of residents, the onus is on us to use this resource sparingly. In the process, technology and new ideas in urban planning have a key contribution to make. But even just talking about it helps. With a shot of pragmatism in your daily encounters with water, it is possible to achieve more than you ever thought possible. That's why we have devoted this issue to the subject of water and would like to wish you all a good read.

*Andreas Barduna*

Andreas Barduna  
Business Unit Miele Professional  
Director Marketing, Sales, Service

**LEGAL NOTICE**

**Miele & Cie. KG**, www.miele-professional.com | **Project management (responsible):** Jennifer Cavner, Bianca Bergmann | **Production:** TERRITORY GmbH, Carl-Bertelsmann-Str. 33, D-33311 Gütersloh, Tel.: 05241 23480-50, www.territory.de | **Publication manager:** Julia Lempe | **Implementation:** Editors: Sascha Otto (responsible), Stephan Kuhn, Michaela Senger, Renée Tripler | **Graphic design:** Sebastian Borgmeier, Claudia Kuhn | **Printing:** Bösmann Medien und Druck GmbH & Co. KG, Ohmstr. 7, D-32758 Detmold | **Photographs:** AdobeStock: Thomas (P. 1), Jiw Ingka (P. 3, 16–17), Paulista (P. 3), Jag\_cz (P. 4–5), ThamKC (P. 7), Africa Studio (P. 7), Halfpoint (P. 6), New Africa (P. 7), iconicbeastary (P. 18), AlexBlogoodf (P. 19), lilu330 (P. 19), pdesign (P. 19), Jenny Sturm (P. 20); freepik (P. 4–5); Bettina Gierke (P. 16); Heinz Heiss (P. 3, 14–15); Laqa (P. 18); Miele (P. 2); Thorsten Scherz/TERRITORY (P. 3, 8–13) | **Publication schedule:** Spring and autumn



## Contents

**PRACTICAL TIPS**

ELEMENTARY RESOURCE 04  
*Water is precious but unjustly distributed. What you should know about supply and consumption.*

BUILDING BLOCK OF LIFE 06  
*Liquid powers our organism. Why our body needs water.*

A HEAVENLY PLACE 08  
*Garden of the senses at the St. Gerhardus care home does residents a world of good. The central element is water.*

**BECOME BETTER**

THE EFFICIENT USE OF WATER 14  
*The expert Dr. Marius Mohr explains how we can sustainably secure a supply of water.*

**20 INVIGORATING**



**FIT FOR THE FUTURE**

A LEAP INTO COLD WATER 16  
*From staff member to team leader – Is that possible? How to put promising managerial staff on the right tracks.*

IMPULSES 18  
*Have I drunk enough today? How much water do I use? Smart helpers provide the answer.*

# Water – precious, but **unjustly** shared

*There are around 1,400 trillion litres of water on our planet. That sounds like an abundance, but we still have to treat this most vital of resources with respect.*



## THE BLUE PLANET

Around 70% of the earth's surface is covered by water. Of the estimated 1.4 bn km<sup>3</sup> of water on Earth, around 97.5% is in the world's oceans. The remainder is in glaciers, subterranean water, lakes and rivers. Less than 1% of the water is available for use as fresh water.

Source: Münster University

## GLOBAL WATER RESOURCES

Unequal distribution – nine countries (Brazil, China, India, Indonesia, Canada, Columbia, the Congo, Russia, USA) have access to over 60% of the world's fresh water.

## DRINKING WATER IN HOUSEHOLDS

According to the German Federal Association of the Energy and Water Industry, each individual in Germany consumed on average 129 litres of drinking water in 2020. This was four litres more than in the previous year. Working from home, social restrictions, increased demands on hygiene, more frequent and longer hand-washing, greater use of hose-pipes in gardens and cancelled holidays mean that people are spending much more time at home and, as a consequence, using more water.

Source: BDEW water statistics



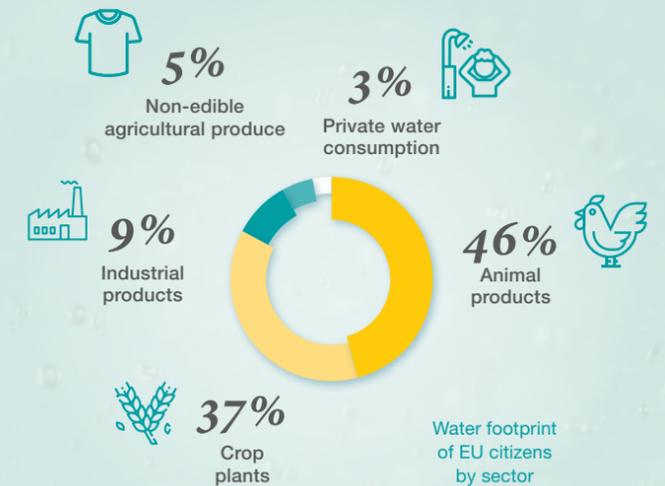
## VIRTUAL WATER

At around 129 l per head, consumption in Germany is well below the European average of approximately 200 litres. This, however, is only the water actually used. Products we buy as we go about our daily lives involve the use of much more water: so-called virtual or embedded water. This is the water in its entirety used in all the various stages of manufacturing a product. Only a very small proportion of this water is actually bound in the product itself.

If we include virtual water in our calculations, per capita water consumption in Germany rises to 4,000 to 5,000 litres of water. By contrast, people in China consume 'only' 2,000 litres per capita.

Several examples:

- 15,000 l for 1 kg of beef
- 1,300 l for 1 kg of cereal grain
- 3,400 l for 1 kg of rice
- 6,000 l for a pair of jeans



Source: AquaPath

## CHANGES IN PERSONAL WATER USAGE

Thanks to more efficient domestic appliances and bathroom fittings and a greater awareness surrounding the use of water, per capita consumption in Germany has dropped considerably since 1990. In the hot summers of 2018 and 2019, in particular, there was a slight rise in demand for tap water as people showered more frequently and watered their gardens. There is, though, no shortage of water in Germany.

Source: BDEW water statistics for domestic households and small businesses; based on 2011 census figures



“According to the German Ministry of Research and Technology, global demand for water is likely to increase by 55% by 2050.”



The DGE, Germany's Food and Nutrition Association, recommends a daily liquid intake of approx. 1.5 l for adults. Less than 1 litre is insufficient.

BUILDING BLOCK OF LIFE

# Water – more than just a liquid

*Water is the body's most important source of energy. It is the key to vitality, health and well-being. Without it, there is no life.*

**W**ater is an essential foodstuff. Our survival depends on a sufficient supply of liquid. Not least because the human body consists for the most part of water – up to 7% in an adult (foetus 100%, baby 85%, elderly person 50%). When ingested in sufficient quantities, water works miracles, dissolving and transporting essential nutrients throughout the body. It guarantees the vitality of the skin, moistens mucous membranes and, in doing so, protects against germs and pathogens. Within as little as 10 minutes of drinking, the supply of blood and oxygen to the skin improves. Liquid exercises the digestive

system and keeps blood fluid, ensuring that organs receive the substances they need.

The consequences of insufficient liquid intake and dehydration can, on the other hand, be severe: After losing only 0.5% of its liquids, the body triggers mechanisms aimed at conserving water; a loss of only 2% reduces a person's cerebral capacity. A 12% deficiency results in acute complications such as shock and coma. A lack of fluid in the body presents as tiredness followed by agitation and mental confusion. This is a common problem in care homes where residents' water intake is often too low. The reasons can be dysphagia (difficulty in

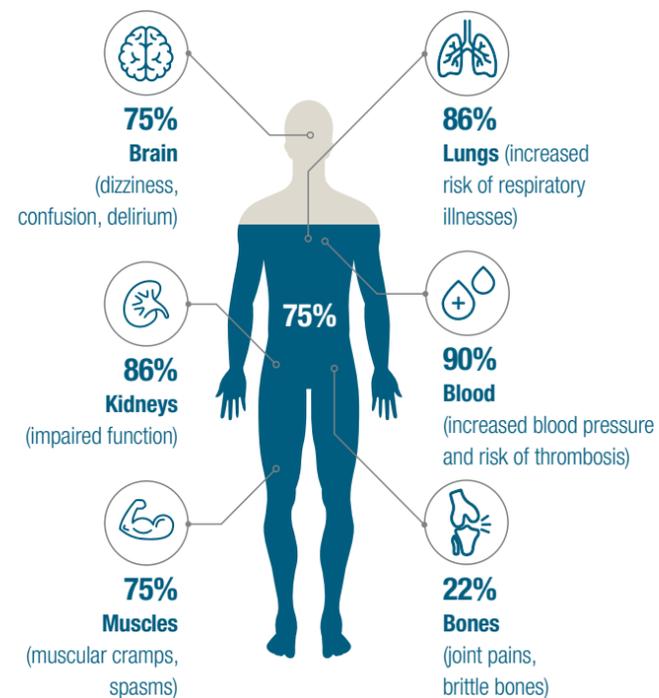
“The noblest of elements is water.”

Pindar, Greek lyricist

swallowing) or a general loss of the sense of thirst associated with old age. Indeed, persons suffering from dementia sometimes forget to drink entirely. This all puts added strain on the generally low fluid reserves of the elderly.

Controlling fluid balance with the aid of fluid intake and micturition protocols is an integral part of such documentation, albeit time-consuming. Digital assistants can provide support and motivate patients and residents to drink, often adopting a playful approach. Let's face it, constant reminders to 'make sure you drink enough' rarely have the desired effect. Studies show that around 40% of persons with mild or moderate dementia unintentionally lose weight. Keeping fluid intake records can help to identify the beverages an elderly person liked to drink in younger years.

Water has an effect not only on the body, but also on the soul. Projects indicate that water fountains and games are instrumental in calming down and taking the pressure off dementia sufferers. //



Water in organs. Low fluid intake can result in deficiency symptoms.

## Four tips on fluid intake



### 1 ADD A SPLASH OF COLOUR

White beakers, cups and mugs and transparent glasses are often difficult for dementia patients to recognise. Hence, it is better to use bright-coloured crockery or serve coloured beverages such as juices, perhaps diluted with sparkling water, or mineral water with a dash of flavoured syrup.



### 2 DRINKING IS ALSO A MATTER OF TASTE

For fluid intake, mineral and tap water are the best options, but many dementia sufferers do not like the taste. Juices and fruit drinks, nectars, slightly sweetened herb and fruit teas and diluted juices are often more palatable but still contribute to fluid intake.

### 3 DOESN'T COME NATURALLY TO PATIENTS

Swallowing is a complex process and liquids are much more difficult to swallow than solids. Patients are more likely to choke while drinking than while eating. If necessary, drinks should be thickened to the consistency of custard, and drinking straws should only be used in exceptional circumstances.



### 4 THE DOSE MAKES THE POISON

Too much water can also be dangerous. Water intoxication is a problem familiar to health professionals. Drinking more than 5 litres in the space of a few hours can wreak havoc with the body's mineral levels: It can lead to heart rhythm disturbances and kidney problems or, when the worst comes to the worst, even result in death.



The large body of water is the central element in the Garden of the Senses. For the home's residents, this place is both meeting place and an area of retreat all rolled into one.



# HEAVEN ON EARTH

*The St. Gerhardus residential home in Drolshagen has created a place of magic. Centrepiece in the Garden of the Senses is a large body of water. For the people here, it is an oasis.*



Kerstin Struwe is a trained elderly care nurse. She first joined Social Services at the St. Gerhardus care home six years ago. Today, she heads the department. Pastoral care is particularly close to her heart.



**D**rolshagen in the hilly Sauerland region of Germany. The town with a population of around 12,000 comes under the jurisdiction of the larger nearby country seat of Olpe. It is what would typically be referred to as a sleepy backwater town. The St. Gerhardus residential home is close to the town centre. A big white collection of buildings. At first sight, it appears nondescript. But at the gates, the eye is caught by a large expanse of water and the park beyond. Sunlight is reflected in the water. It appears as if hundreds of small crystals are competing in a contest to see which one shines brightest. As soon as you leave the building, you find yourself in the middle of a green oasis. An elderly gentleman with a walking stick stands at the edge of the artificial lake, engrossed in his own thoughts. Two Nuns sit together in one of the roofed wicker beach chairs, soaking up the sun. One of the home's employees accompanies a resident on a walk around the garden. She stops when they reach the water and casts in a stone, watching it slowly sink to the bottom. This place radiates a remarkable sense of peacefulness. Above all, this has to do with the water. But why?

The yellow wicker beach seats define the Garden of the Senses. They are located right next to the water and are a popular meeting place for the elderly residents – but equally so for employees of the residential home and the people of Drolshagen.

### Slowing down the pace in a busy world

Even visitors cannot escape the charisma of the place they call the Garden of the Senses. That is hardly surprising: Nature is a counterpole to our everyday life which is often dictated by technology, information overkill, stress and the attending ills of urbanisation. Those wishing to flee traffic and the concrete jungle are invariably drawn to Nature. And, in doing so, discovers



*The residential home is run by the Order of Franciscan Sisters in Olpe. Christian symbolism is a key feature of the Garden of the Senses.*

**FACTS AND FIGURES**

**103** 

residents currently call St. Gerhardus in Drolshagen their home.

**7** 

**machines in use**

- 1 washing machine from the Octoplus range
- 2 Benchmark Performance washing machines
- 1 Benchmark Performance Plus washing machine

- 3 SlimLine dryers
- 1 flatwork ironer

And: The Drolshagen residential home has placed its trust in Miele products since 1994.

**1400** 

**kg of laundry**

This is the amount of clothing reprocessed each week

themselves - an important experience. Listening to that inner voice. Focussing. Countryside escapes are easy for those in the prime of life. But what about the elderly whose mobility is limited as they grow older? And those who often complain of isolation and a reduced quality of life? Does the concept of a Garden of the Senses offer a solution? The employee we saw earlier walking one of the female residents is Kerstin Struwe. She is head of Social Services at the residential home and tries her hand at providing an answer. She is close to the needs of the elderly residents. "This phase of life involuntarily comes with certain impairments. We want to create a place where life can be enjoyed to the full. And our park with its large expanse of water contributes in a major way towards improving the well-being of people". What sounds so simple is in fact a carefully thought-out concept. On one side, the Garden of the Senses exudes spaciousness and openness. This impression is reinforced by the rolling hills in the background which are so characteristic of the region. On the opposite side, tall hedges provide a sense of protection and security as well as creating a natural perimeter. The Garden of Senses as a microcosm. "The paths in the park", Kerstin Struwe explains,

"are designed so that residents can go on circular walks. But all paths return to the water and merge". So what makes the park so special? There isn't the slightest hint of hesitation: "For most of our residents, the Garden of the Senses and, above all, the water has a magical attraction. They all use the space in their own unique ways. There are those in search of a place to be alone and enjoy the peace and quiet. And there are others who see the park as a meeting place and an opportunity to socialise. And, with that, we have achieved our objective. We urge people to exercise. Both physically and mentally".

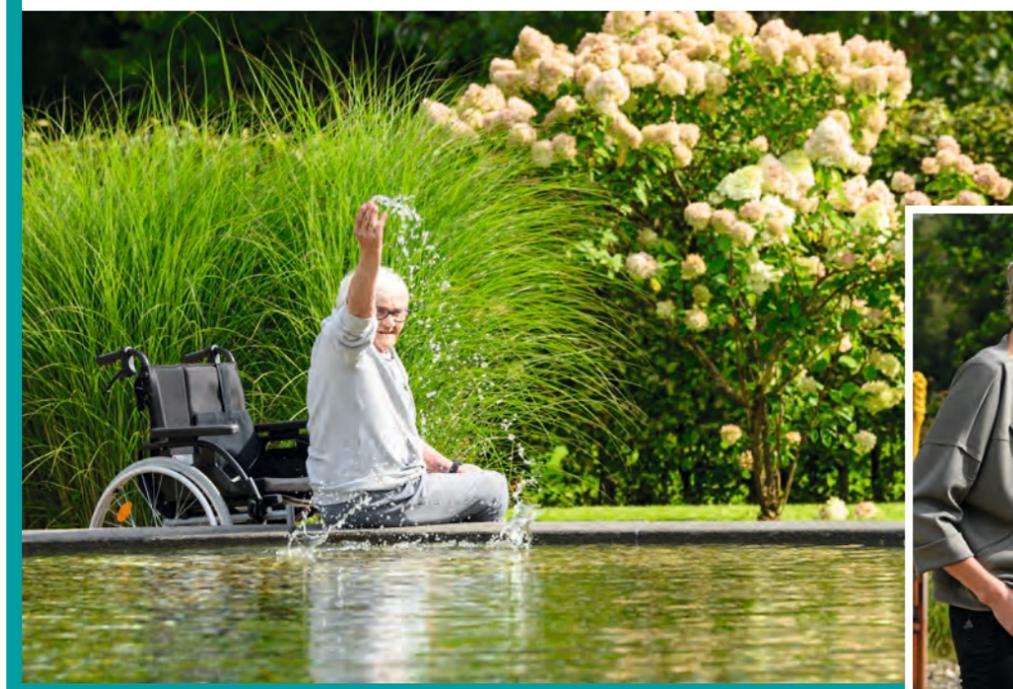
**The Garden of Eden in miniature**

The Garden of the Senses is a place of diversity. There are fruit trees, a small herb garden, and flowerbeds reflecting the seasons and competing with each other with their scents and fragrances. The murmur of the wind as it passes through the tall trees creates a pleasant backdrop. The aim is to stimulate the senses. To top up people's stock of experiences. That is why the entire garden is divided into focus areas. These even include outdoor sports equipment such as pedal exercisers and trainers to improve fitness. The highlight for many are the wickerwork beach seats close to the water which give this part of the garden its maritime flair. These are well received by the elderly ladies and gentlemen. Above all, they are reminiscent of bygone holidays at the North Sea or Baltic coasts. These emotional impulses are particularly important to

A place for all: Sisters Crescentia and Angela meet every day for a chat in one of the beach chairs. They are sometimes joined by the dog belonging to one of the employees. Others, like Heinz-Georg Becker, use the park to exercise.



*"People here cater for their own individual needs. They all find what they need in the Garden of the Senses".*



Open-air pastoral care: Personal discussions, as today with Margot Rottwinkel, during a walk through the Garden of the Senses. In such a setting, many people find it easier to open up.



The head of Social Services encourages residents to go out to the water. The surface of the water is like a mirror which triggers the process of reflection on one's own life. In summer, in particular, elderly residents such as Gisela Schmidt enjoy the refreshing and playful aspects of water.

A feast for the senses: Elderly residents perform simple physical exercises at the stationary apparatus in the shade of big trees. Flowerbeds and greenery remind residents of the gardens they once tended at home.



## EXERCISE

## SMELL



by the founders, together with its chapel, still stands. And the monastery garden was turned into the Garden of the Senses. The complex has a moving history. It has been used for example as a hostel for the homeless and later as a children's home before being converted into a hospital which was eventually repurposed as a residential home, with new buildings continuously added along the way. Today, it serves as a retirement home for 25 Sisters of the Order. They give distinction to the residential home and give the place a spiritual air. More important still is the longstanding tradition of providing help to the needy – the guiding idea behind the institution.

### A place for all – without exceptions

The clue in the plans for the Garden of the Senses is perhaps the most important aspect: The small park-like facility is open and accessible to all. It is both the grounds of the residential home and public garden at the same time. The citizens of Drolshagen come here after work to enjoy the sunshine on the park benches. Others sit by the water and read a book or visit the aviary with their children. The most exciting thing is that this mix makes the Garden of the Senses a vibrant living space. The elderly residents do not feel

the work of Kerstin Struwe: “Naturally, the people who live here experience crises in old age. That is perfectly normal. I accompany many of them into the garden, to the water, and reach out to them. My impression is that people open up out here, reflect on their own lives and find peace with themselves. And that is our desire: to give residents in their twilight years living out their lives here a sense of peace and satisfaction. And the Garden of the Senses helps us achieve this in a big way each and every day”.

The topic Kerstin Struwe is alluding to fits in perfectly with this place. In 1895, 126 years ago, the Convent of Franciscan Sisters was established here. The building erected

“Crises in old age are commonplace. The garden helps our residents to find peace”.

cut off from the rest of the world. They are right in the middle of life. And they know it. Kerstin Struwe confirms this impression and even goes one step further: “This place belongs to all. I know that many of our own employees also come here to take a breather and recharge their batteries. But it also attracts many friends and relatives. Many go through difficult spells, for example when the health of a resident takes a turn for the worse. In such sad circumstances, the garden provides a place of solace and strength and a moment of peace”. Difficult to put it more aptly! Some say the Garden of Senses in Drolshagen represents the best of nature in miniature format. Others say it is a heavenly place. Heaven on Earth. In the beautiful Sauerland region. //

“All the people here use this place. They are all drawn to the water”.



## TOUCH



## SOUND

Stations along a walk through the Garden of the Senses. A stop at the small aviary is a must. Some of the elderly even come out every day to count the birds. Along the way, there are numerous wooden boxes filled with a variety of materials. Touching and feeling stimulates the senses.



# “The efficient use of water pays its way”.

*In order to sustainably safeguard our supply of drinking water, we should use water sparingly. Where are the potential savings in care and nursing homes? An interview with Dr. Marius Mohr from the Fraunhofer Institute provides answers.*

**WATER EXPERT**  
Dr. Marius Mohr heads the water technologies and material recovery field of innovation at the Fraunhofer Institute for Interfacial and Bio-Process Engineering (IGB) in Stuttgart.



Comparatively speaking, we live in a water-rich country. Should we have pangs of conscience when we leave the tap running for too long?

Yes and no. Compared with many other countries, here in Germany we have no problems providing the volumes of drinking water needed. Nevertheless, water occurrence varies considerably, depending on the region, with the result that there are big seasonal differences in the levels of significance attached to conserving water. Consequently,

many water utilities are rightly fearful for their drinking water reserves. Added to this, there is an increased need for irrigation in areas in northern and eastern Germany where the soil is sandy.

**How easy is it to save water in our daily lives?**

Quite generally, we in Germany are careful in the way we use water. State-of-the-art water-saving taps and fittings, for example, are the norm in many households. Conser-

ving hot water, in particular, pays double dividends as both energy and water costs are reduced. And, with energy consumption, CO<sub>2</sub> emissions are cut, too.

Increased attention is also being paid to green infrastructures. But what does this mean?

One example: In urban areas, most surfaces are sealed, channelling runoff into sewers and preventing rainwater from being absorbed by soil and green areas. Reason enough for the Fraunhofer Institute and others to work on viable concepts to make better use of green roofs in urban spaces. These soak up rainwater like a sponge and cool their environs through evaporation and by releasing steam. They also help mitigate the effect of weather extremes such as heavy downpours or scorching heat.

**What potential do you see in care and nursing homes for the improved use of water?**

Installing green roofs is relatively simple and easily done. In order to reduce the consumption of drinking water, rainwater could be used to water lawns or flush toilets. To store the volumes required, cisterns and tanks are a good choice.

The most suitable rainwater is taken straight from a gutter or a downpipe as this is least soiled. It is important,

## “The quality of care should not suffer from water conservation”.

though, not to be overly dependent on rainwater and to ensure access to tap water to tide you over prolonged periods without rain.

**How can water be sustainably managed in institutions where hygiene is of key importance?**

First and foremost, it is important to be aware of the areas where savings can be made without impairing the quality of care. A water audit would be a first step towards a responsible approach to water. If this reveals that water consumption in certain areas is excessively high, it then makes sense to pinpoint potential savings and perhaps ask yourself: How far do I open the tap? How long do I let the water run?

**Isn't it reasonable to a certain extent to let the water flow for hygienic reasons?**

Of course it is! Particularly on hotter days, legionella can even pose problems in cold water pipework as non-flowing water with a temperature above 25°C presents an ideal breeding ground for bacteria. That is why regular automatic high-pressure flushing is vital in inducing circulation, even if lots of water is used in the process.

**Can waste water be reused?**

As water hygiene in care and nursing homes play a key role in guaranteeing health and well-being, the use of grey water is not possible without prior cleaning – not even for washing laundry or flushing toilets. Suitable reprocessing systems are unfortunately expensive and require personnel to operate and maintain them. //

### WATER STRATEGY

#### Preventing water shortages in Germany

Climate researchers warn that hot, dry summers as experienced in 2018 and 2019 will be regular occurrences in 30 years' time in Germany and could result in water shortages. With a national water strategy,

Germany's Ministry of the Environment aims to ensure a sufficient supply of high-quality yet affordable water through to 2050. This involves cleaning up underground water, lakes, brooks and rivers and preventing any overexploitation of water resources. Furthermore, they plan to share the costs of sewage and waste water treatment more justly according to the polluter-pays principle. The ministry's objectives also include the following: Create incentives to align water usage with availability. Together with federal states, rules on who will be given preferential treatment in times of scarcity are to be drawn up.

# A leap into cold water

*From employee to line manager. Is that even possible? Yes. And are there are good reasons for doing this.*

There is a managerial position vacant in your company. Searching for suitable candidates on the job market is time-consuming. But perhaps the perfect fit has been around for a while? The benefits are obvious: The new manager will know the company inside out and be familiar with internal processes. Often, those promoted from within a company's own ranks enjoy standing and respect in their team whose members see promotion as being well-deserved. But what measures can be implemented to prepare employees for a managerial role? And how can they establish themselves in their new roles? An overview.



## 3 questions to Bettina Gierke

Personnel developer and communication trainer

**I am a recently promoted manager.**

**What is your advice: What should be the first steps I take?**

*I would urge you to take a pro-active approach to your new role. Start the way you mean to go on and engage with your team members. Ask what they expect of you but make it perfectly clear what your own expectations are. Continue these discussions in a set format. This helps you to get to know each other and establish your role.*

**What else is important in the initial period?**

*Free up space and allocate fixed times to managerial tasks to settle into the new role and put structures into place. And naturally: Delegate tasks which are not managerial in nature.*

**How should I treat my employees?**

*Set an example – be reliable, authentic and consistent. Practice what you expect from your team. And, most importantly: Take decisions. This is a sign of strong leadership. This, paired with the ability to develop new goals with your team, helps strike a healthy balance in daily work.*

<https://bettina-gierke.de>

# 1

### MENTOR WANTED

Do you believe in the potential of employees and aim to promote them? Then listen carefully. They are in a position to report first-hand on what managers in companies need to pay attention to. On what everyday life is like. What expectations go with positions. If you find this approach too personal, why not ask experienced colleagues from other departments to adopt this role? Or bring in an external coach? But beware: A sense of insecurity and self-doubt often follows hard on the heels of a promotion. In this phase, above all, encouragement and good advice is of the essence.



# 2

### INVEST

Stepping up the career ladder is a big move. The demands on a manager are completely different to what employees were previously used to. You have a natural interest in the decision you arrive at contributing to your own success. Make sure potential candidates get the further training they need for promotion. The more targeted, the better. Ensure that the necessary competencies and skills for the new job are acquired.



# 4

### LISTEN INTENTLY

People born to be leaders don't fall out of the sky, and there is no formula saying how many years of employment with a company make a good boss. Anyone facing the daunting task of choosing a future team leader from among co-workers should set aside plenty of time for talks. If your diary is too full, postpone any exchange until a more convenient date. Your interlocutor deserves your full and undivided attention. And, what's more, you will also profit from the refreshing views of your employees on the team, processes and room for improvement. Use this exchange of views as an opportunity to reflect on ways of thinking and patterns of behaviour which have become habits. It's certainly worth it!

# 3

### GRANT FREEDOMS

If there is anyone who should be allowed to make early mistakes it is a person embarking on a new phase in their career. Give your new managerial staff the necessary space to gain new insights because managers must grow into personalities able to carry responsibility. Setbacks and coming to terms with them is part of the job. Step back in order not to take the reins out of the hands of your employees as a result of your own unbridled drive as a mover and shaker.

# 5

### CREATE A CULTURE

Your mindset defines the way you approach the work of your employees? Appreciation of performance is the key to a positive atmosphere and job satisfaction at work. Based on this, putting an existing employee in a vacant position sends out an important signal: Promotion is indeed possible in this company! This is an often under-estimated motivational factor. This way, a new manager leads by example.

**134**  
LITRES

of mineral water and water from medicinal springs were drunk, on average, by Germans in 2020. Back in 1970, the annual consumption of mineral water was only 12.5 l per capita. (Source: Statista)



## THE VALUE OF WATER

According to the 2021 UN World Water Development Report, 2.2 bn people lack access to safe drinking water; a further 4 bn are affected each year by water scarcity. By 2023, the United Nations (UN) intend to guarantee access to clean water for all. At the same time, the global water consumption of a growing population is increasing by 1% year by year. Consequently, the report demands that greater significance be attached to this resource, as well as more efficient use of water infrastructure and greater investment.

NEW APPROACH  
TO HYDRATION MANAGEMENT

## LAQA SMARTCUP TAKING THE STRAIN OFF CARE STAFF

In the non-domiciliary care of the elderly, hydration is a topic of huge importance. In old age, a person's sense of thirst goes into steep decline. Monitoring the drinking behaviour and fluid intake of elderly persons in care and a quick response in the event of dehydration is a big ask given the pressures on care workers and the extent of documentation needed. Laqa GmbH from Munich has developed a hydration management system comprising a smart beaker and intelligent software to analyse the drinking patterns of individuals. Their SmartCup also prompts users to drink using light, sound or vibration. Patients' data is SSL-encrypted for data protection. Above all, the SmartCup aims to prevent the cluster of symptoms associated with dehydration, such as fatigue and headache. On the other hand, the system is designed to reduce the workload of elderly care nurses as the time and effort involved is done away with by automating the documentation of intake data.



## Modern technology helps **with** **conservation**

### Digital and connected bathroom fittings

Giving prominence of place to water and promoting greater sustainability in its use is the objective of the Blue Responsibility Initiative of the German sanitary facilities industry within the German Association of Mechanical Engineers (VDMA). Thanks to new technologies, consumers are supported in using less water in their daily lives – without even noticing it! This is made possible by intelligent water management systems which meter and control water discharge from drinking water taps and fittings around the home. Many individual smart products are already available and their number is steadily growing: Smart kitchen fittings regulate the volume and temperature of water flow into a pan, preventing unnecessary wastage before the water reaches the ideal temperature. Similar options are afforded by intelligent showers: They heat water instantaneously to the desired temperature or use LEDs to indicate to users how sparingly they shower.



INTERACTIVE MAP OF SEA LEVELS

## COASTAL TOWNS COULD BE UNDER WATER BY 2050

Faced with a continued rise in sea levels, entire cities are threatened by submersion in the not-too-distant future. Climate Central, a non-profit organisation bringing together American scientists and journalists, has produced an interactive online map of the world showing which coastal regions are under threat of being submerged over the coming decades. [www.climatecentral.org](http://www.climatecentral.org)



## JELLY DROPS

### Life-saving 'water bombs'

They look like fruit gums – but are, in fact, small edible 'water bombs'. Jelly Drops contain 95% water and are intended to help persons with illnesses to take in enough fluid. This is the brainwave of the British student Lewis Hornby, whose own grandmother suffers from dementia and was rushed to A&E with life-threatening dehydration. Jelly Drops are already available in Great Britain.

# HOT & FRUITY

A warming fruit punch –  
perfect for the winter season

Cloves and cinnamon give this alcohol-free toddy its Christmas charm. A perfect match for gingerbread and spicy cakes. And: This deliciously fruity punch tastes just as good served cold.

**For 6, you will need:**

0.5 l apple juice, 0.5 l red grape juice,  
1 cinnamon stick, 3 cloves, 1 untreated orange

**Preparation:**

1. Place all ingredients except the orange in a saucepan on slow heat.
2. Meanwhile, halve the orange, press and put the juice to one side. Cut the orange peel into 8 thin slices.
3. Once the punch begins to boil, switch off the hob and add the orange peel. Leave to stand for approx. 10 minutes.
4. Finally, remove the cinnamon stick, the cloves and the orange peel from the punch and stir in the orange juice.