

INTERNATIONAL

PROconcept

Providing advice for care and nursing homes

IN FOCUS

*The power
of the senses*

SMELL



Does it smell or is it fragrant?

How our sense of smell affects
our thoughts, actions and memories.



Why is our sense of smell so important?

IN FOCUS

The power of the senses

SMELL

The sweet smell of success

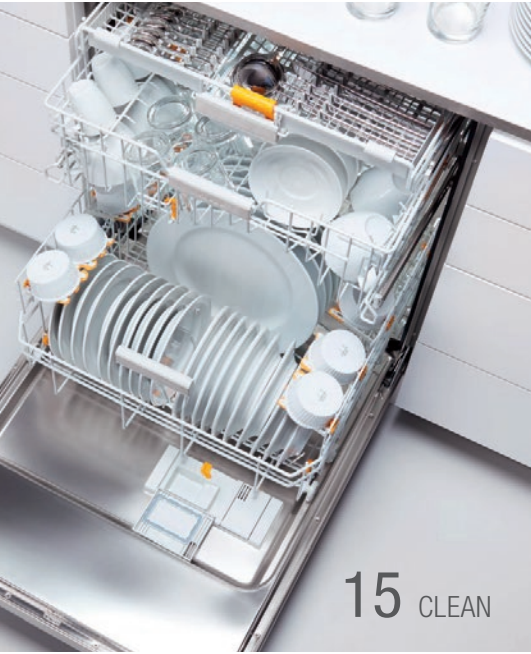
What has smell actually got to do with Miele? A lot more than you might expect. When we say that something is clean, we do not just mean the visual impression that it makes but also how it smells to us. The perfect example is freshly washed laundry, which usually smells much better when we have done it ourselves than if it has been done by a commercial laundry service. When it comes to things like this, we all have our own idea of what constitutes a clean and pleasant smell. And it is exactly the same principle in our daily dealings with one another. Whether we like it our not, smells control how we think and act. They can even trigger memories and strong emotions in us. In a nutshell: smells wield an enormous amount of power. And yet their impact is frequently underestimated. That is why we wanted to show you in this issue how having a good nose for things can bring all kinds of success in everyday life – for your own personal benefit and, of course, for the benefit of your career.

Andreas Barduna

Head of Professional Sales, Service,
Marketing business unit

IMPRINT

Miele & Cie. KG, www.miele-professional.com | **Project management (legal responsibility):** Johannes Baxpöhler, Nadja Lüdke | **Production:** TERRITORY Content to Results GmbH, Carl-Bertelsmann-Str. 33, 33311 Gütersloh, Tel.: 05241 23480-50, www.territory.de | **Issue manager:** Julia Lempe | **Implementation:** Editors: Sascha Otto (lead), Michael Bieckmann, Lothar Schmidt, Michael Siedenhans | Graphic design: Sebastian Borgmeier, Claudia Kuhn | **Print:** Hermann Bösmann Medien und Druck GmbH & Co. KG, Ohmstr. 7, 32758 Detmold, Germany | **Photo credits:** Adobe Stock: mates (pp. 1, 11, 20), Madeleine Steinbach (p. 3), Mara Zemgaliete (pp. 3, 10), Login (pp. 4, 5, 6, 7, 8), Ruckszio (p. 6), Dennis (p. 6), Anja Kaiser (p. 6), BigNazik (p. 6), Massimo (p. 6), Africa Studio (p. 6), Krafia (p. 6), Anja Kaiser (pp. 6, 7), Sergey Chayko (p. 8), Pavlo Kucherov (p. 11), New Africa (p. 11), Lunipa (p. 18), Maya Kruchancova (p. 19), dule964 (2x p. 19), Viktor (p. 19), sljubisa (p. 19), 4luck (p. 19), Floydine (p. 20), Digitalpress (p. 20); Miele: pp. 2, 3, 15, 18; TERRITORY: p. 16, 17; Thorsten Scherz/TERRITORY: pp. 3, 12–14 | **Frequency of publication:** spring and autumn



Contents

LATEST NEWS

THE WORLD OF OUR SENSES	04
<i>The number of human sensory organs and how they change with age</i>	
THE POWER OF SMELLS	06
<i>The sense of smell is chronically underestimated: and for historical reasons</i>	
THE SWEET SMELL OF SUCCESS	10
<i>How to get your nose in tip-top shape through consistent training</i>	

BECOME BETTER

A FRAGRANCE CONCEPT FOR NURSING HOMES	09
<i>How fragrances can have a positive impact on the elderly and improve their quality of life</i>	
THE CAPACITY TO SMELL IN OLD AGE	12
<i>Perfumer Marc vom Ende explains why it is so important to be able to smell well in old age</i>	

FIT FOR THE FUTURE

7 TIPS FOR A FRAGRANT WORK CLIMATE	16
<i>What you need to know to avoid a bad atmosphere in the workplace</i>	

PRACTICAL TIPS

SMELLS INSIDE THE DISHWASHER	15
<i>The effective way to prevent nasty smells inside the dishwasher</i>	

The world of our **senses**

From aromatic coffee and chats with colleagues in the corridor through to very hot rooms – our brain processes eleven million stimuli per second. This is all down to the sensory organs that we use to detect them. Here we take a look behind the scenes of human perception.

HOW MANY SENSES DO WE HAVE?

When we predict something before it happens, we often put it down to the proverbial seventh sense. But do we really have that many senses? The exact number is hotly debated today. More than 2300 years ago, the Greek philosopher Aristotle defined a total of five: sight, hearing, smell, touch and taste. The one that Aristotle missed is our sense of balance, without which we would have no spatial awareness or physical balance. That is why neuroscientists now talk about our having six senses.

The seventh sense has always posed a conundrum for scientists.

Esotericist Rudolf Steiner went considerably further than this. In his treatise on the senses, published in 1917, he distinguishes between a total of twelve senses. In addition to the five posited by Aristotle, he also explores senses relating to the external world and the immaterial, spiritual world. Steiner also incorporates human communication into his model of the senses. But what about the seventh sense that we refer to so often in our everyday lives and which almost seems supernatural? This has always posed a conundrum for scientists. One conjecture is that our subconscious mind is capable of registering when processes, behaviours or impressions of our environment start to deviate from the norm and it sends a signal to say “Watch out! Something is different. Be on your guard!” If something then actually happens, we think to ourselves “Wow, I saw that coming!”

WHAT IS THE HIERARCHY OF THE SENSES?

Not only did Aristotle define the five senses; he also put them in order of importance. He regarded sight as the primary one. However, this order cannot be universalised. A study by the Max Planck Institute for Psycholinguistics in Nijmegen has revealed that it really depends on the culture as to which sense is viewed as the most important.

Humans find it hard to describe smells.

During the investigation, participants from 20 different cultures were asked to put their various sensory impressions into words. This produced a diverse set of results, with participants from English-speaking cultures finding it easiest to express what they had seen in words. For numerous other cultures, such as inhabitants of Laos, it was taste that ranked right at the top. What nearly all participants had in common was that they experienced difficulties when describing smell. The only exception was a group of hunter-gatherers native to Australia. These people rely heavily on their noses in their everyday lives. In light of this, they also found it easier to describe smells.

HOW DO OUR SENSES CHANGE THROUGHOUT OUR LIVES?

Around 48 million people in Germany wear glasses or contact lenses at least occasionally. Our age also has a role to play in this statistic. As we get older, one of the things that happens to the lenses of our eyes is that they lose elasticity. This is the factor that forces people to start reaching for a pair of reading glasses, mainly when they hit their mid-forties.

Our ability to sense sweet flavours remains intact, even into old age.

Our hearing also diminishes with age. This particularly affects the high-frequency sounds that occur during speech in sibilants such as “F” and “S”. As a result, similar sounding words can become more difficult to distinguish, with those affected frequently blaming it on unclear pronunciation. Old age also takes its toll on our senses of taste and smell. Due to a reduction in the number of taste buds we have, it becomes harder for us to perceive salty, bitter and sour flavours as we get older. It is only our ability to sense sweet flavours that remains largely intact.

A TRIP DOWN MEMORY LANE

The **power** of smells

The importance of smell is completely underestimated. And yet it has a major impact on our lives. Our sense of smell affects how we think and act. Here are some reasons why we should trust our noses more often and some tips for achieving the sweet smell of success in our everyday lives.

Isn't it strange that when we were still hunter-gatherers – i.e. were not too far removed from the animals – we saw our sense of smell as vital to our survival? It helped us to tell friend from foe and played a key role when tracking down something to eat. Nowadays, the idea of smell is laden with problems. Phrases such as “he's a stinker” or “stop hanging around like a bad smell” illustrate how negative associations abound as far as smell is concerned.

And, if the never-ending market for perfumed care products is anything to go by, we don't seem to have very much confidence in the smell of our own bodies, either. The desire to express our own individuality and set ourselves apart also has a role to play here. But how exactly did we get to this point? One possible answer lies buried in 18th century Europe. “Perfume”, the global best seller by Patrick Süskind provides a spectacular description of

ed the human sense of smell to the sidelines. In 1879, French neuroanatomist Paul Broca discovered that, after allowing for brain size, the olfactory centre was smaller in humans than in animals, which have a very keen sense of smell. And given that the people of the time were only too happy to distance themselves from animals, this was a good enough answer for them.

Do the elderly really smell bad?

The fact is that research into the human nose and its capabilities was neglected for a very long time. It has only recently been discovered that the size of the olfactory centre provides no indication of how many nerve cells it actually contains. Similarly, it used to be thought that humans could only detect around 10,000 odours. Nowadays, scientists believe that we are capable of identifying a trillion smells.

“Smell is an expression of our individuality and sets us apart.”



society back then: set in 1738 in Paris (described as the city where “the stench was foulest”), the novel tells the story of a misfit with an exceptional sense of smell who is literally prepared to commit murder to get his hands on the perfect fragrance. It was around this time that society began to divide. The members of the upper class claimed that they were the civilised ones in stark contrast to the great unwashed, who lived on streets that stank. It was also the era of devastating diseases such as the Plague, which turned the victim's body into a putrid and foul-smelling mass. Body odour became frowned upon. And people tried to mask it. The perfume business began to boom. And the scientific world relegat-

The question currently occupying the minds of the scientific community is: What biological and social information is contained within body odour? And how does this odour change with age? Researchers at the Monell Chemical Senses Center in Philadelphia have studied this and, in the process, have debunked a common myth. For the purpose of their investigation, the researchers took odour samples from three age groups: the young (20 to 30-year-olds), the middle-aged (45 to 55-year-olds) and the elderly (75 to 95-year-olds). These samples were given to a group of “sniffer” subjects, who had to match the smell to one of these three age groups. The astonishing result was

that the vast majority had no trouble classifying the body odour of the “elderly” age group correctly. Even more astounding was that the odour from the elderly was rated as the most pleasant and least intensive when compared with the samples taken from the young and middle-aged people. The researchers believe that the olfactory context has a crucial role to play. If the testers had known that they were sniffing the odour of old people, the result would have probably been different. But the result does reveal that, from a purely biological perspective, it is true to say that older people have a different smell from younger people for all sorts of reasons. At the same time, the sweeping statement that they smell “bad” is incorrect.



“Old people smell the nicest of all.”

Harnessing the power of smells for everyday life

Both history and science teach us that smells are always present. They grab our attention because we cannot get away from them. And they have a huge impact. From the 18th century until today, a clear common thread can be discerned in terms of how smells affect us, and this relates to a sense of well-being. Smells determine whether we perceive a situation as being pleasant or unpleasant, whether we are happy to stay or would rather make a quick getaway, whether we open up or clam up, and whether we are in a good or bad mood. That is why smells wield such power over our everyday lives. And it is also why we should utilise what we know about their impact, especially in contexts where we work together with other people. Smells can create quality of life; lift our mood; or have a positive effect on personal conversations or negotiations. When you work in the care sector, you get a sense of just how important it is to wash clothing, towels and bedding on

a regular basis and to think carefully about what kind of fragrance is emanating from these everyday items. Of course, helping someone with their everyday hygiene involves a great deal of respect. And just like all of us, those in need of care have the right not to smell bad. And are grateful for any positive effects that come from having stimulating fragrances within their environment. An essential part of each individual's job is to take a careful look at themselves and their surroundings and to ask: Am I doing my bit to create a pleasant atmosphere in the course of the daily interactions that people have with me?

It is also important to make room for olfactory experiences in our personal lives, for example, by breathing in and relishing the rich smell of a delicious meal, the flowers in the garden or the beloved smell of our partner. All these impressions are true treasures. And with that in mind, each day has to be regarded as an opportunity to sniff out something new. //

PRACTICAL TIPS



A FRAGRANCE CONCEPT FOR NURSING HOMES

THE **SMELL** OF FRESH LAUNDRY **AT MIDDAY**

A sense of well-being, a zest for life, beautiful memories – our sense of smell is hot-wired to our brains. And this is the ideal starting point for a fragrance concept in nursing homes.

The thought of nursing homes inevitably conjures up a certain image – and brings to mind a rather disconcerting smell! This should come as no surprise because whenever people live together, eating and sleeping in close proximity to one another and receiving care and medical treatment, smells are bound to occur. That is why a German retirement home in Rhineland-Palatinate called DSK Seniorenzentrum Eisenberg is now using a special fragrance concept. What makes it different from other concepts is that the smells are not simply masked. Instead, they are captured and broken down by an organically produced active ingredient.

Fragrances that change throughout the day

The first step consists of neutralising unwanted smells using a process that is harmless to people and the environment. The second step involves releasing aromas via air fresheners that change according to the time of day: the smell of baked rolls in the morning, the scent of freshly washed laundry at midday and the aroma of a relaxing bath just before bedtime. The fragrances reinforce the daily routine and schedule, providing a pleasant atmosphere that can be enjoyed by the employees and residents of the establish-

ment alike. The concept was developed by a company called Senkonzept near Stuttgart. The secret behind the technology is the active ingredient Sinodeen.

Positive effects for elderly residents

Sinodeen is 100 % organic and capable of capturing the majority of undesirable smells. It also accelerates the natural oxidation process. This means that Sinodeen results in odours being broken down 300 to 400 times faster without allowing harmful substances to enter the air. In addition to creating a nice smelling environment at the establishment, the most important effect can be seen on the elderly residents themselves. It has a visibly relaxing effect on the minds and bodies of the residents at DSK Seniorenzentrum Eisenberg, with some becoming more animated and noticeably more active, and others having their appetites stimulated by the smells. It even encourages creativity and concentration. The manufacturer is currently working on memory fragrances for people living with dementia. This is definitely an innovation worth pursuing; a few little bursts of fragrance have the potential to boost quality of life massively for those in their twilight years. //

TRAINING FOR THE NOSE

It is only when we have a cold and our sense of smell becomes impaired that we realise just how important it is. Alongside illness and allergies, there is another factor that interferes with it: the biological ageing process. However, unlike other human nerve cells, our olfactory cells are capable of regeneration. Here is our guide to keeping your nose in good shape!



Your poster to tear out!

Also available to download from:
www.miele.de/proconcept

Other things that are good for your **sense of smell**

Drinking at least 1.5 litres of water a day is good for your nose. It keeps your mucous membranes moist and enables you to smell better. Nasal douches or sea salt nasal sprays also have a positive effect. Unlike decongestant nose drops, they are not addictive.



DO NOT SMOKE



KEEP YOUR NOSE MOIST



EXERCISE



GET ALLERGIES TREATED



AVOID ALCOHOL



“The elderley don’t have to lose their sense of smell”

The word “fragrance” immediately conjures up the smell of vanilla, jasmine or herbs in our minds. Perfumier Marc vom Ende is well aware that smells have the power to transport us in time and space. And that they contribute to our well-being. That is why the ability to smell remains so important into old age.

MASTER OF FRAGRANCES
Marc vom Ende has been working in the perfume industry for more than 30 years. He has enjoyed sojourns in Paris, New York and Hamburg. Nowadays, he works as a senior perfumier for Symrise, a global leader in the production of flavours and fragrances.



WHERE IMAGINATION MEETS TECHNOLOGY
Marc vom Ende’s office is where he does all the hard work by putting together new fragrances in his head or on the computer. He then sends the formula to a robot (pictured left), which mixes the fragrance for him. In this way, the compositions can be continually improved.

Marc, can you tell us what it is that smells are capable of triggering in us?

Smells have the power to transport us in time and space. That might sound a bit abstract to begin with. But what you need to understand is that smells act on the part of the brain that is responsible for storing memories. As soon as we recognise a smell from an earlier situation that we experienced very deeply, we start to relive that moment at an emotional level. In an instant, we are plunged into a particular frame of mind. The smell of biscuit dough might remind us of grandma, who always used to bake goodies at Christmas time. Similarly, the smell of a sea breeze will typically put us in a holiday mood. Everyone will be able to come up with their own example.

Does everyone experience smells in the same way?

Yes and no. On the one hand, we are not genetically programmed to like certain smells and dislike others. Each person’s preferences develop based on their personal experience of situations involving smells. Over time, we store these impressions and form associations. On the other hand, people living in the same region are statistically likely to share many of the same olfactory experiences in terms of smells that are perceived as positive or negative in that area.

In that case, can the power of fragrances be harnessed to make life better for people in retirement and care homes?

At establishments of this kind, you are bound to encounter many smells that are not very pleasant. Therefore, it is definitely worth

considering using positive smells to convey an atmosphere of well-being. Simple items such as laundry suddenly acquire new meaning because they smell fresh and clean. In short, they have a pleasant effect. Even little things such as fresh flowers can have an impact. Alternatively, you can try to find out individually what triggers positive memories and emotions for a particular person or group of people. The sad fact is that one out of every three 70-year-olds has lost their sense of smell. Once this happens, their appetite goes as well. Without smell, a person can only distinguish between flavours that are salty, sour, sweet or bitter, and nothing more. It is then that you often hear them say “It all tastes exactly the same to me”.

Can anything be done about that?

Yes, through training: in other words, by trying to identify what you are currently smelling. You can practise this with herbs or spices, for example. Simply cover your eyes and try to work out what it is. You will be surprised how easy it is to confuse oregano with marjoram. Weekly training can help (see the instructions on page 10). It increases the size of your olfactory bulb and prevents you from losing your sense of smell in old age. Aside from the training aspect, it could also

THE ART OF PERFUMERY

The created product

Smell is a very personal thing. And that is why people, as consumers, can be so critical of products. Consequently, whenever a new fragrance is created for the market, it usually relies on a familiar scent to which the customer is already accustomed. The perfumier only allows hints of a new and innovative fragrance to come through in the more subtle notes of the perfume.

The market

Each country has its own way of doing things. This also applies in relation to consumer behaviour. Fragrances carry different meanings across the world. One example is cinnamon flavoured toothpaste. That might be appropriate in the USA, but it is less common in the UK and would be completely unthinkable in Germany. This explains why even the smell of a toilet rim block has to be adapted for each market.

“Around 1 in 3 lose their sense of smell by age 70.”

serve as a varied and meaningful activity for care home residents.

Let us return to your day-to-day work for a moment. What counts as a “clean smell” for you? What smells clean in the context of one product is completely different in the context of another. A clean dishwasher smell is not the same as a clean laundry smell. Clean smells come in an infinite variety of forms. So I'm afraid I cannot give you a concrete answer.

If fragrances really are that individual, how do you make sure that newly developed fragrances get accepted by consumers? The work of the perfumier is a bit like playing a chord in music, i.e. the fragrance consists of a combination of notes, one that is already familiar and accepted. If I tinker with these nuances and facets in order to introduce something new, the product will ultimately find acceptance.

How many raw materials do you have to choose from when developing and composing a new fragrance?

At Symrise, we have a palette of 1500 raw materials and that allows me to cover a huge range of possibilities. However, there are lots of other raw materials in addition to these. In fact, there are well over 10,000 different scent options that we could use to create a perfume. But I do not need them all. It is exactly the same principle as with a painter. Painters do not need to have every colour in the world at

their disposal. Instead, they mix the colour they want from their palettes. The important thing is to know which raw materials you need to produce a particular fragrance.

And how long does it take to create a new fragrance?

Actually, I sometimes spend several weeks working on one fragrance. And if we stick with the painting analogy: as I've already said, it is important to know how the raw materials work. Nevertheless, you can never predict exactly how the individual fragrances are going to interact. You have to try things out, take samples and keep adjusting the proportion of each raw material within the formula to the tiniest degree until you have achieved a good balance. You then continue refining this formula until you get the result you want. It is a bit like cooking in that a single component can send the balance of the entire creation out of kilter.

What do you think about room scenting?

The bottom line is that we are always surrounded by smells anyway. Objects such as clothing and towels also give off a pleasant smell. Those kinds of smells are all that I need personally. However, everyone is free to experiment with fragrances if they want to. The important thing is the effect you wish to achieve. In a foyer, for example, I like to be greeted by a fresh and inviting fragrance as a sign of welcome. If the room scenter is placed in a break room, the smell should convey a sense of comfort and cosiness. It is a question of creating an atmosphere of well-being, warmth and snugness. Vanilla is very good for that, for example. However, I would always recommend getting your employees and colleagues involved so that you can work out together what people find pleasant. Smell is such a personal thing. No one can or should attempt to make such decisions on their own. //

ENDLESS POSSIBILITIES

More than 1000 scents are stored at the laboratory. A fragrance is created by mixing them together. This calls for precision because every millilitre of a raw material can alter the effect of a fragrance formula.

Harnessing the power of cleanliness and hygiene to banish unpleasant odours

If bad smells are coming from your dishwasher, something has gone awry.

Professional dishwasher technology from Miele puts a stop to this right from the outset.

GOOD HOUSEKEEPING TIPS

- Remove and clean the drain filter once a week.
- Clean the cutlery basket once a month and allow the dishwasher to run without a load.
- If you switch back and forth between short and ECO programmes when using your dishwasher, you should occasionally run a dishwashing cycle at 60 °C or higher. This cleans the appliance and breaks down grease, which has a tendency to build up if low-temperature programmes are used all the time. In addition, it prevents germs from forming inside the appliance.
- To ensure the hygienic cleanliness of your dishwasher, clean it once a year with IntenseClean from Miele.

Industrial dishwashers have a difficult job to do: cups containing dried-on coffee remains, dirty plates and pots, and delicate glasses all end up in their baskets. And then they are supposed to make everything clean while meeting the highest standards of hygiene. Simple dishwashers reach their limits very quickly. And sometimes unpleasant odours can start leaking out of the appliance. To avoid this problem, you should clean your dishwasher regularly (see box on left).

Miele Professional dishwashers are specifically geared towards industrial use. For instance, fresh water dishwashers replace the water after each wash phase for perfect results and a very high standard of hygiene. Appliances featuring the Vario TD hygiene programme allow

you to disinfect the load items thermally by relying on the final rinse temperature. This makes them absolutely ideal for use in hospital ward and care home kitchens. And if you want to play it really safe and exploit their full potential, you can always use ProCare Shine detergent and rinse aid. We also recommend using IntenseClean one to three times a year – an effective cleaning product for removing grease and bacteria. That way, there is no chance of odours building up inside your dishwasher in the first place. //



Tipps for a fragrant working environment

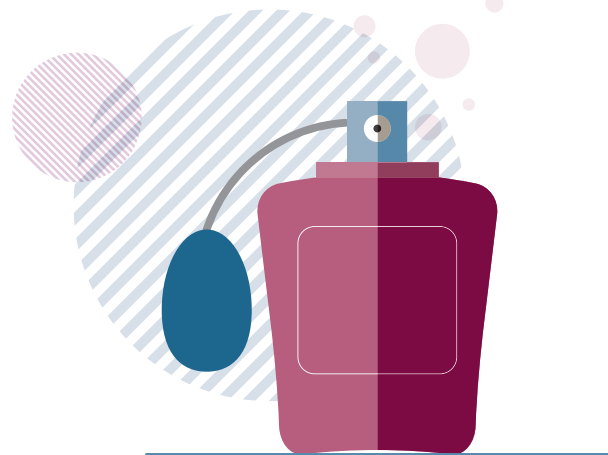
How much eau de toilette or perfume should you wear in the workplace? Here are some recommendations from the etiquette experts for getting it right in your everyday working life.

Not only do we base our impressions of people on how they behave, speak and look, but also on how they smell. Therefore, it is very important to be considerate and take stock of our own “fragrance habits” whenever there are lots of people working together or whenever we have contact with customers, patients or colleagues. It should come as no surprise, then, that the business etiquette guide called “Business-Knigge: Die 100 wichtigsten Benimmregeln” – a best seller in the German-speaking world – should devote an entire chapter to fragrances. It is very difficult to judge how well a particular perfume or eau de toilette will be received in the workplace. But one thing is for sure: if you follow these tips for dealing with fragrances and essences, you will definitely be doing both yourself and everyone else a favour. //

1

THE LIGHTER THE BETTER

While strong and heavy fragrances might be perfect for an elegant dinner or an evening party, they can quickly become overbearing during the day or in the workplace. A fresh and light fragrance is a more sensible choice for everyday situations.



YOU'RE BETTER OFF WITH JUST EAU DE TOILETTE

Perfume has a much higher concentration of essential oil than eau de toilette. That is why the latter produces a more subtle effect, making it the better choice for the office.



4

JUST ONE OR NONE AT ALL

It is not a good idea to combine several different fragrances at once. In the course of the day, this mixture can easily turn into an unpleasant cocktail of smells. Once you have found a fragrance that suits you, it is better to go easy on the perfumed shampoos, creams and deodorants, or to avoid them altogether.

5

APPLY STRATEGICALLY

Rather than completely smothering yourself in perfume or eau de toilette, you should apply it strategically to create focal points. Your neck and wrists are particularly good locations because your body heat will result in a longer-lasting scent in these spots.



STAY IN TUNE WITH THE SEASON

Stylish perfume bottles that are designed to match a particular season are now a reality, but it is not just a marketing ploy. Fresh, floral and “sunny” fragrances will seem out of place in the winter. At this time of year, it is more appropriate to go for warm and woody scents, for example.

6

3

RESPECT PERSONAL SPACE

Whenever people talk to each other, they automatically stand a certain distance apart. As a general rule, the better acquainted you are, the closer you will allow each other to get. In work-related contexts, it is appropriate to observe a professional distance. The same principle applies to the intensity of your perfume. So as not to violate the personal space of the person you are talking to, make sure your fragrance can only be smelt within an arm's length of your body.



7

SWITCH FRAGRANCES

Our colleagues can immediately smell when we've gone a bit overboard. But can we recognise it on ourselves? To find out, it is worth switching fragrances from time to time, as this allows us to better assess the intensity.



QUALITY TEST FOR ODOUR REMOVAL

THE TRAINED NOSES AT MIELE

With a view to optimising Miele washing machines, some innovative new technologies for reducing laundry odours have now been developed as part of a preliminary development project. However, results from sensors are not enough on their own to enable a proper assessment. And that is why the members of the project team decided to rely on their own noses as well. They were provided with training so that they would be able to detect subtle differences between odours. Consequently, all new odour treatment technologies can now be assessed by these same “trained Miele noses”. This has made the results much easier to compare and much more relevant for customers. Given that the sense of smell differs from one person to another, the odour threshold was determined for the Miele team in accordance with DIN EN 13725. On the basis of this standard, samples are assessed as having either a pleasant or an unpleasant odour. Not only is the team engaged in evaluating textile odour removal technologies for the benefit of customers; it is also paving the way for intelligent sensors in the future by providing valuable data.



TIP

Scented greeting cards for that extra personal touch

Whatever the occasion – whether it be Christmas, a birthday or some other celebration – a hand-written card always adds a personal touch when offering our congratulations or best wishes. Now we can even go one step further by impressing our friends, acquaintances or business partners with lovely fragrances. How about the smell of cinnamon or chocolates, for example? The next time you send a card, why not include a fragrance along with your message for that extra personal touch. Scented cards are available from various suppliers on the Internet, as well as elsewhere.



THE LATEST FRAGRANCE TRENDS

Sea fennel and oleander are two plants that are currently taking the world of fragrances by storm. Whereas the bitter, salty smell of sea fennel can be used on its own, the luxuriant fragrance of oleander works better in combination.

MORE THAN
1 TRILLION
SCENTS –
that's how many different smells our noses can detect. This means that our sense of smell is sharper than our sense of sight or hearing.



BEES – THE SNIFFER DOGS OF TOMORROW?

These insects cannot fail to impress with their tiny noses

The sound of bees buzzing all around us on a hot summer's day in the countryside would be unlikely to make us think that we had perhaps wandered into a drug trafficking spot. Rather, we would take it as a sign of being surrounded by lots of nectar plants. But that could all change in the future if Sonja Kessler, a 22-year-old police officer, has her way. The amateur beekeeper thinks that bees have the potential to sniff out drugs, a theory that she investigated as part of her bachelor's dissertation. The results of her work are indeed impressive: when the bees were exposed to the scent of a particular substance while drinking a sugar solution, they became conditioned to this scent after just a few cycles. According to Kessler, bees could be used to scan an area of up to 50 square kilometres for certain substances. The insects could be located using the laser beam from a drone. In order for the bees to reflect the beam, they would first have to be dusted with a fluorescent powder. One advantage of using sniffer bees instead of sniffer dogs is that it only takes a few minutes to train them. On the other hand, there is a problem in that they only live for a few weeks. And by the time the winter comes – or even earlier – they stop being a viable alternative to their four-legged friends. Kessler's dissertation won a special award at the European Police Congress in the form of the “Zukunftspreis Polizeiarbeit” (prize for the future of police work). Nevertheless, there are still doubts among experts as to whether bees will ever actually be used as part of police or customs operations.



OUTLOOK
In the next edition of PROconcept: Find out more about “habitat”.



FRAGRANCE OIL

WITH VANILLA
AND ROSEMARY

How to make your own personalised room scenter for your home, office or work room. This idea also makes a great creative outlet for the patients in your care.

You will need:

1 or 2 vanilla pods, depending on how strong you want your fragrance to be; 1 sprig of rosemary; 50 ml of jojoba oil, almond oil or another type of odourless vegetable oil; 1 clean screw top jar

Instructions:

Using a knife, scrape the seeds out of the vanilla pod(s). Place the seeds in a clean screw top jar. Cut the outer shells of the vanilla pods into small pieces and place these in the jar as well. Grind the rosemary with a mortar and pestle and add it to the jar. Now, gently heat the vegetable oil (briefly in the microwave on the lowest setting) to a temperature of approximately 30° C (until hand-hot). Pour the warm oil into the glass and over the vanilla and then screw on the lid. Give the entire mixture a good shake and leave the jar in a cool, dry location for at least 10 days, but preferably for a fortnight. Once the fragrance oil has been thoroughly infused, you must pass it through a fine filter. Finally, pour your home-made vanilla and rosemary fragrance oil into a decorative bottle.