

# THE CITY SKIN REPAIR KIT

Pollution isn't just damaging the planet: new studies show that urban life is speeding up the ageing process too. Here's how to stay protected...

WORDS: ALICE MANNING

IT'S TIME TO START TAKING  
THE AGEING EFFECTS OF  
AIR POLLUTION SERIOUSLY

IN ASSOCIATION WITH HOUSE OF FRASER

Something major happened in London on 5 January 2017. And no, for once it wasn't Brexit related. Pollution readings taken from Brixton Road showed that nitrogen dioxide levels had breached the EU annual limit for an entire year – in just five days.

Since then, experts have been queuing up to outline the catastrophic health and environmental consequences. MPs have called air pollution in the UK 'a public health emergency', while, according to a report by The Royal College of Physicians and the Royal College of Paediatrics and Child Health, around 40,000 deaths each year in the UK can be attributed to exposure of outdoor air pollution. Studies have linked it to everything from asthma to cancer. And for most of us living in built-up areas, it's unavoidable. The diameter of the most pollutant particle is on average 30 times smaller than that of human hair, meaning you often can't see or smell it.

Something that is becoming harder to miss, though, is the effect it's also having on our skin. "Studies comparing the skin of women living in urban areas to rural areas found the former, who are exposed to higher levels of pollution, had more visible signs of ageing," says Dr Julia Fussell, senior research fellow at King's College London. And traffic-related air pollution has also been linked to facial dark spots and hyperpigmentation in a report published in

**"WE KNOW POLLUTION  
HAS A SIGNIFICANT  
IMPACT ON SKIN,  
AND NOT ONLY ON  
THE SURFACE"**

the Journal of Investigative Dermatology, suggesting environmentally induced lung damage and skin ageing are closely related. The findings saw a 25% increase in age spots, predominantly on the cheek area, as a direct result of increased nitrogen dioxide concentrations.

So what are we talking about when we refer to 'air pollution'? "In the UK, urban air pollution is mostly composed of a mix of tiny particles (of matter), gases (nitrogen dioxide) and ozone," explains Dr Fussell. "These are primarily from transport vehicles, power stations and factories and the exposure is higher for the 80% of people in the UK who live in urban areas compared to those who live in the countryside."

While there are no current studies that prove these particles physically penetrate our skin, Elisa Simonpietri, Vichy scientific director, explains: "We know pollution has a significant impact on skin, and not only on the surface. This is due to an increase in oxidative stress and inflammatory disorders, a decrease in vitamin E, which is essential to maintain the skin's natural defences, and an imbalance in the pH level," she says. Dr Fussell agrees. "We know from laboratory studies that air pollutants can deplete antioxidant defences and



→ degrade proteins and lipids in the skin. This has the potential to affect the integrity of the skin and contribute towards ageing." Pollution damage – also known as free radical damage – attacks the collagen and elastin in the skin, making it look slack, dull and lifeless: three words most of us would prefer not to hear when talking about our complexion.

But while politicians debate new policies to clean up our air, there are some simple, everyday ways we can protect ourselves – on the surface at least. Beauty brands have been busy developing new-generation ingredients and formulas to arm skin with the weapons to bat off pollutants as soon as they hit. After years of focusing on protecting us from the sun's damaging rays, the emphasis is now shifting. Just look at the pioneering skincare industry in Asia, where over one in three new beauty products that launched in 2016 carried an anti-pollution claim\*.

Thanks to this increased focus on the impact of poor air quality, we now have a new and comprehensive selection of pollution-busting solutions when it comes to skincare. But where do you start? We've done the hard work for you, quizzing doctors, scientists and professors to find the ultimate solution to pollution-proofing your skin in three simple steps...

### 1. Clean up your act

Cosmetic doctor Jane Leonard regularly sees clients in her urban practice with visible damage caused by air pollution, including premature ageing, hyperpigmentation, changes in texture and inflammation. "The key principle to pollution-proofing your skin is cleansing, to remove the invisible layer of pollutants from the surface which have developed throughout the day," she explains. So as soon as you get in from work, resist the urge to flop down on the sofa, and get into the bathroom to give your skin a really thorough clean. If you're normally a face-wipe-and-go woman, it might be time to invest in a proper, wash-off cleanser. It's the difference between sweeping the floor



EXPERTS HAVE SEEN AN INCREASE IN POLLUTION-RELATED SKIN AGEING

with a tired old broom and getting everything spotless with a souped-up Dyson. Follow the facialist's lead and use a muslin cloth too, to ensure no trace of possible pollutants is left behind. Try Extra-Comfort Anti-Pollution Cleansing Cream, £25, Clarins, which turns into a foamy lather when combined with water to really lift and remove stubborn dirt, grime and make-up, or Le Bi-Phase Visage Anti-Pollution Face Make-Up Remover, £30, Chanel, which contains blue-micro algae, a targeted anti-pollutant ingredient which defends the skin from free radical damage. The 'clean' scent mentally helps you feel cleansed of the day's dirt and grime too.

Timing is everything with this. "The damage happens fast, particularly through the formation

of free radicals," warns Dr Marko Lens, who suggests you follow cleansing with an antioxidant-rich serum or moisturiser – both night and day. "This will help restore and reinforce the skin's barrier function, and of course it is paramount to use a sunscreen during the day," he says. Answering all of our anti-pollution prayers is UV Plus Anti-Pollution SPF30 Day Cream, £32, Clarins, which acts as a trusty friend to keep the good stuff in and the bad stuff out. The best bit? It doesn't feel like a typical 'sunscreen' – it's light and sinks in quickly – and so doesn't leave skin feeling claggy or your complexion with a tired, grey tinge before applying make-up.

### 2. Strengthen your skin's barrier

When it comes to warding off pollution, it's vital that you pay attention to the barrier of your skin, especially if you are a city dweller. Why? "The outermost layer of the epidermis is built like a wall with 'bricks' that are cells and 'mortar' which is composed of lipids," explain Dr Lens, and it's this part of the skin that keeps moisture in and aggressors like pollution out. So the solution is to start with a moisturiser or serum rich in ingredients to replace and repair lost

lipids and reinforce the barrier to make it more resistant. Hydra Floral Anti-Pollution Gel Cream, £40, Decl or, does just that thanks to a potent mix of moringa oil to reduce pollution-caused inflammation and hyaluronic acid to boost and strengthen. Simply apply it to just-cleansed skin as a daily booster before following with your usual skincare and SPF.

According to Dr Fussell, a study has shown an association between compromised skin hydration and those living in areas of poor air quality. Clinique's vice president of skin physiology and pharmacology, Dr Tom Mammone, agrees. "These assaults lead to a lack of moisture which will leave skin looking and feeling less supple and rougher in texture," he says. To prevent moisture loss and boost hydration levels, the pros recommend using a face mask once a week for an intense burst of hydration. The Cilantro and Orange Pollutant Purifying Mask, £29, Kiehl's, strengthens the skin's moisture barrier so it can stand up for itself against all these external beatings. It's the equivalent of a super-charged vitamin drink for your skin, with antioxidant-rich vitamins E and C. Leave it on for five minutes before removing with warm water.

### 3. Protect, protect, protect

"There are several different types of pollution, but they all attack the skin in similar fashion: they all generate free radicals and inflammation, which leads to skin damage," says Dr Mammone. Make sure you protect your face with a combination of SPF and antioxidants to fend them off. And don't forget that in the summer months, when the weather is warmer and you spend more time outside, you are usually more exposed to pollutants.



Prevage City Smart Peel-Off Mask, £60, Elizabeth Arden

A Perfect World Antioxidant Moisturiser, £35, Origins

"When skin is under attack from these elements, cell turnover is reduced, resulting in dense, clogged pores and blemishes," says Dr Mammone. Speedy cell turnover is key to helping your skin heal and renew itself – it's really not something you want to be lethargic. It's also vital in maintaining that elusive post-facial-type glow.

A Perfect World Antioxidant Moisturiser, £35, Origins, is an antioxidant-rich moisturiser that will help bubble-wrap your face. With white tea, white birch and SPF 40, it fights free radicals and its texture is so light you can wear it under your base without the risk of it slipping off by lunchtime. For an even easier way to get protected, BareMinerals' SPF30 Natural Sunscreen, £25, is seriously innovative. Apply the ultra-fine powder with the in-built brush every morning as the final step in your skincare routine. Sheer and weightless, it doesn't clog pores during the summer months and provides sturdy yet unnoticeable protection for vulnerable skin. You can even re-apply it throughout the day without ruining your make-up.

But as a pollution particulate can be up to 20 times smaller than the average human pore, focusing your attention on the surface isn't

enough: you need to invest in a product that can extract all of the dirt from deep within the pores too. Elizabeth Arden's Prevage City Smart Peel-Off Mask, £60, is formulated with strong polymers that on application travel deep into the pores before setting like a sheet of gel that you can simply peel off, lifting all the smog with it. Very satisfying. Consider your skin well and truly cleansed.

#### 3 WAYS TO STAY ALERT

- ◆ Follow @DefraUKAir and @CleanAirLondon on Twitter for air pollution updates.
- ◆ AirText is a London borough-led service that provides air quality alerts: simply text AIRTEXT to 78070 or visit [airtext.info](http://airtext.info) for more information.
- ◆ Mayor of London Sadiq Khan has also introduced text alerts on road signs and at bus and tube stations for when air pollution reaches high or very high levels, so it's now easier than ever to stay well informed.

## THREE MUST-HAVE MASKS

Don't let urban life take its toll – discover the at-home masks that strengthen, treat and repair polluted skin



INSTANT MAGIC FACIAL DRY SHEET MASK, £18, CHARLOTTE TILBURY

The antithesis of those soggy, over soaked masks, this 100% dry version can even be worn over make-up. The vitamins, peptides, butters and oils sit within the fabric and are drip-fed onto the skin for gleaming results.



ADVANCED NIGHT REPAIR RECOVERY POWERFOIL MASK, £16.50, EST E LAUDER

The equivalent of Gucci's crystal body suit, this futuristic mask creates a protective barrier, allowing the potent hyaluronic acid and double dose of Advanced Night Repair serum to penetrate skin in seconds.



PREVAGE CITY SMART DOUBLE ACTION DETOX PEEL OFF MASK, £60, ELIZABETH ARDEN

There's no greater satisfaction than peeling off a face mask and having to do a double take at how smooth and bright your skin looks. This pore-cleansing, complexion-refining mask does just that, in 20 minutes.



Cilantro and Orange Pollutant Purifying Mask, £29, Kiehl's

Extra-Comfort Anti-Pollution Cleansing Cream, £25, Clarins

\*Mintel Statistics. All products available at House of Fraser. Opening spread photography: Scope Beauty/Soulla Petrou. Photography: Mintel Statistics.