



feature

# the science of wellness

Early detection, prevention and treatment of age-related dysfunction and disease can enhance our quality of life and add years to our lifespan. **Jessica Rule** reports.



With a rapidly ageing population and over-extended hospital system, anti-ageing medicine could be the gold standard in healthcare of the future. It advocates a proactive approach through forming and maintaining a healthy body and mind by evaluation and prescription of a treatment protocol that includes supplements, medication, exercise, diet and nutrition. It offers a more holistic approach to preventative medicine.

'Anti-ageing is much more than skin deep,' says Dr Bob Goldman, Chairman of the World Anti-Aging Academy of Medicine. 'You can't achieve anti-ageing through a skin cream, a piece of fitness equipment, or even a vitamin pill (not yet, at least),' he says. 'Anti-ageing medical care involves a regimen incorporating multiple elements of scientifically based age-reversal medical interventions administered under the guidance of a trained anti-ageing doctor or health professional.'

These include modalities that cover cosmetic medicine (aesthetic preservation and enhancement) as well as internal age management.

Anti-ageing medicine is borne out of the principles of sports medicine, transforming patient treatment and care from an illness (reactive) model to a wellness (proactive) model of medicine. 'It's all about prevention and early detection in age-related medicine,' explains Dr Goldman. 'It makes sense to prevent the event before it occurs – for example, using sunscreen to prevent cancer rather than operating on the melanoma once it occurs.'

While it may seem complex, Dr Goldman says taking simple measures in everyday life can divert some of the effects of ageing. 'For example, using sun protection and limiting sun exposure, not using baby oils and reflectors, as well as moisturising the skin to replenish hydration.'

Dr Goldman says the aim is to educate consumers and medical professionals on elements such as diet, lifestyle,

stress management, medicine and supplements to form a lifelong healthy regime. 'The earlier you start, the better – if I knew in my 20s what I knew now I can only imagine the extra benefits I'd be reaping now,' he says.

## Five pillars

Under the banner of internal age management and aesthetic age management there are five pillars of anti-ageing medicine.

### 1. Exercise

There are considerable health benefits for those who do regular physical activity of an aerobic nature. Such exercise can include 30 to 60 minutes of brisk walking five or more days a week or strength/resistance training to improve overall health and fitness and increase muscular strength, endurance and bone density.

'Protecting your body when you exercise is also an issue,' says Dr Goldman. 'High-impact activities have a negative effect on the joints and ligaments, such as running or aerobics on hardwood floors. For biomechanical reasons, the human body wasn't made to endure this. Low impact sports such as walking and swimming are much better.'

### 2. Diet and nutrition

Scientists have found that what we eat influences how long and how well we live, though how much we consume plays a role, too. Low-calorie intake, plenty of fruits and vegetables and a high-fibre diet will help improve health.

'What you put in your mouth is reflected on the outside – a diet that is high in fat, grease and sugars produces oily skin, acne and excess body fat,' says Dr Goldman. 'This leaves people open to treatments such as liposuction, when a regime of diet and exercise may have prevented this outcome first.'

Dr Goldman advocates fresh produce and organic foods where possible to limit the chemicals we put into our bodies. 'Steer clear of genetically modified or fortified foods,' he says. 'Steamed and boiled foods are much healthier, along with eating multiple small meals per day and not eating too close to sleep.'

### 3. Relaxation

Given our pressured way of life, stress is inevitable and can affect how good we feel and how quickly we age. Implementing regular interludes for personal relaxation into your weekly routine will help to combat this. Activities such as yoga, meditation, breathing exercises and connecting to those you love can promote a more relaxed lifestyle. Life balance is key.

### 4. Supplements

Even those who believe they have a balanced diet may be surprised to find it lacking because of current farming methods or the origin of the food. It is increasingly difficult to ensure we achieve the correct balance of minerals, vitamins and nutrients.

It is therefore essential to balance our diet with daily nutritional supplements in the fight against ageing. This gives us the nutritional building blocks required by the body for optimal functioning and combating free radical attacks caused by poor dietary habits, lifestyle and environmental pollution. 'In the toxic environment in which we live, vitamin supplements are important,' says Dr Goldman.

'People are now a lot more educated on the benefits of integrating vitamins and supplements into their diets. In fact, 66 percent of all Americans above the age of 65 now take nutritional supplements, which indicates the population is becoming a lot more educated on feeding their bodies,' he explains.

'I advocate a diet with plenty of fluids – over-hydrating with purified water is so important in a climate like Australia's – Vitamin C for collagen and healing and Omega 3s to address micro and macro inflammation,' he says. 'A lot of foods these days have enriched formulas so it could be as simple as opting for brands that offer added benefits.'

### 5. Medication

'Anti-ageing medicine is a lifestyle and there are no 'magic bullet' medicines,' says Dr Goldman. 'A balanced approach to vitamin, mineral and hormone supplementation through careful assessment and restoration to normal levels supports the process of effective anti-ageing medicine.'

Advanced techniques in cosmetic medicine have also taken a holistic approach to facial rejuvenation, focusing on the overall look and symmetry of the face rather than specific wrinkles. Non-surgical techniques support a variety of surgical approaches, such as muscle relaxants, phototherapy, collagen, fillers and plasma technology.

'New lasers have also evolved in leaps and bounds,' says Dr Goldman. 'They involve little downtime these days

## Prevention is the cure

As we age, our coordination, muscle and bone mass diminish so as they say, use it or lose it. Weight training can reverse the effects, paired with a 30-minute walk five times a week to combine motion with resistance.

Inflammation is blamed for chronic diseases such as Alzheimer's, cancer and heart disease. Eating bad foods, not getting enough sleep, and exposure to the sun create inflammation at a cellular level. Eat a whole foods diet, exercise and take supplements with anti-inflammatory properties such as rosehip.

Levels of key hormones drop as we start to age. Consult a specialist to help optimise these essential biochemicals. Certain food combinations and quantities can also be used to help restore hormonal balance.

Prevention of free radical damage, caused by ageing, stress, sun and pollution can stall the ageing process. Antioxidants and Vitamins A, C and E protect the body's cells and help to prevent free radical damage. Multivitamin or topical application of antioxidant vitamins, as well as zinc, iron and other essential minerals play a key role in supporting overall wellness.

Stress increases the production of the hormone cortisol, and this can not only directly affect how we age but it can also make us gain body fat, and lose muscle mass and memory. Managing stress and cutting sugary and fried foods, alcohol and smoking (which people often turn to when stressed) controls cortisol and insulin levels.

When the body loses its ability to detoxify itself, it leads to fatigue, trouble with cognitive function and eventually significant diseases such as cancers. Toxins affect the skin when foods high in fat, sugar, and other chemicals in the diet cause a hormonal, nutritional and cellular change. They manifest in acne, dry patches, sallowing of colour, dark circles, wrinkles and more.

A healthy diet, free from sugar, and ample purified water is essential to clear out toxins.

and are increasingly accessible for those wishing to treat pigmentation, and for rebuilding collagen and tightening. They are enhancing what dermatologists and plastic and cosmetic surgeons can offer people, plus making results accessible to a larger patient market.'

Developments to support early disease detection are also continually improving and evolving. 'I think there are particularly interesting advances in regards to early diagnosis technology,' says Dr Goldman. 'This may be the Rapid CT Scan for cardiovascular problems or the MRI scan for detecting cancer early.' **acsm**