

YOUR vitamin and mineral PRESCRIPTION

Added protection
for your body every
step of the way.

By CANDICETE HINI

As we grow older, our bones, muscles, brain and skin need different nutrients to keep functioning properly. We all try to follow a healthy, well-balanced diet to give our body all the nutrients it needs, but sometimes our body doesn't absorb the nutrients properly. Moreover, food is not as nutritional as we think it is and stress and poor lifestyle choices begin to take its toll.

Experts generally agree that we need to give our body a variety of vitamins, minerals and nutrients to help it function optimally and to help preserve its youthfulness. But where do we start? To guide us on what we need, and at what age, we consulted with our experts. Here's what they had to say:

20s

In your 20s you are young, fit and everything should be functioning at an optimal level. But you'll benefit from supplementing with the following:

High-quality omega-3 fatty acid is essential for every component of the body, but specifically for the skin. "It assists in inhibiting the inflammation that contributes to the dreadful scarring that's usually associated with acne," says Dr Burt Jooste, a GP with a special interest in integrative, anti-ageing medicine at Skin, Body & Health Renewal. It also has huge benefits

on your brain as it enhances memory and concentration, and aids in the management and prevention of mood disorders such as depression, anxiety and ADHD.

"Calcium is another must-have supplement as most people do not meet adequate intake for calcium. Long-term dietary deficiency is a factor responsible for the development of osteoporosis later on in life," says registered dietician Jade Campbell from Nutritional Solutions. The recommended daily intake for calcium is 1 300 mg of calcium for adolescents, 1 000 mg for adults, and 1 500 mg

for pregnant women. While sources of calcium include milk and milk products, sardines, tofu and kale, it is not always easy to meet calcium needs with diet alone.

Sports nutritionist Julian Naidoo also recommends taking a multi-vitamin to ensure you meet your daily requirements of vitamins and minerals. He suggests choosing one that has vitamin B, C, D, E and K as well as magnesium, calcium, potassium, iron and zinc.

A well-balanced multi-vitamin may be safely taken throughout life.

30s

Now you are at your peak, you need to look at preventing the loss of lean tissue and maintaining healthy bones, as well as protecting your body from degenerative diseases.

Continuing calcium supplementation is of the utmost importance. Dr Jooste also says that, "it is essential to start supporting the detoxifying processes of the liver with supplements like milk thistle and artichoke extract. Your homocysteine levels should be assessed, as high levels can contribute greatly to premature ageing and toxin overload."

He suggests taking antioxidant supplements like vitamins A, C and E and beta carotene as they protect your skin by stopping the enzyme that breaks down collagen and will also assist your body to neutralise free radicals.

Pycnogenol is a strong antioxidant that inhibits the two primary pathways of collagen breakdown as well as protecting collagen and elastic fibres in the skin. It also increases the skin's resistance to the effects of harmful ultraviolet radiation by over 80 percent and reduces hormonal pigmentation by 37 percent.

Now is the time to up your vitamin B intake as it helps produce energy for the body. "In your 30s you are often juggling the demands of a family and a career. During times of high stress you tend to deplete your B vitamins and therefore supplementing with these may help to boost your energy levels," says Campbell.

Iron deficiency or anaemia is one of the most common nutrient deficiencies worldwide. It is especially common in women of a reproductive age as blood volume increases by 50 percent during pregnancy, necessitating an increased iron intake, explains Campbell.



40s

Even though you should be in good health, your metabolism will be slowing down. Your blood pressure may be on the increase. Women will be approaching peri-menopause and some men will be dealing with "midlife crisis", so now's the time to watch your sugar and hormone levels.

"Hormone levels need to be tested in your middle- to late-40s and any deficiencies can be supplemented with bio-identical hormones. This will decrease the risks of developing cancers and premature ageing," says Dr Jooste.

Dr Jooste also explains that one of the supplements that becomes essential in this age group is vitamin D3, which supports your immune system and assists in cancer prevention and calcium absorption. Vitamin K2 is also vital, as it ensures the calcium supplements you are taking are sent to your

bones and don't clog your arteries. Jooste also encourages us to optimise our colon function with probiotics to aid in the elimination of free radicals.

Chromium is a mineral that is associated with glucose metabolism. "During the 40s and 50s, chronic lifestyle diseases such as diabetes can develop. Chromium has been found to help regulate blood glucose levels, so taking a multivitamin supplement that contains chromium may be of some benefit for optimum glucose control," says Campbell, who advises taking it in conjunction with a healthy, balanced diet.

Magnesium plays an important role in the more than 300 enzymes found in your body. Enzymes help to regulate many bodily functions such as the production of energy, body protein and muscle contractions, explains Campbell.



Supplement pointers

Before you start taking supplements take note of the following:

- Extra vitamins and minerals are only as good as the diet accompanying them.
- Supplementation with nutrients will not give you a "quick fix". Take them regularly for at least three months in order to see benefits, which may be subtle.
- Remember that we have different re-

quirements, and we absorb and utilise nutrients differently.

- Vitamin E has several forms, with the most common being alpha-tocopherol. The most potent form is tocotrienol, so look for this in your vitamin E supplement.
- Water-soluble vitamins such as vitamin C and the B group are best taken in a slow-release form. The body has limited storage capacity and excess will be eliminated in the urine if taken in bulk.

60s

Your lifestyle may have calmed down a bit, but you should still be healthy and active. Look at boosting your immunity and helping your body prevent degenerative diseases.

Supplements that support the joints in the regeneration of cartilage, thereby decreasing pain and morning stiffness, are a must. "A good joint support supplement is crucial," says Naidoo, who advises looking for one that contains vitamin C, glucosamine – which helps keep the cartilage in joints healthy, chondroitin – a chemical that is normally found in cartilage around joints

in the body, and MSM – which is a naturally-occurring compound that contains a sulphur, required for optimum health. It helps support tissue pliability and it also helps form healthy bones, joints and ligaments.

Zinc is an important trace mineral for enzymes, immune function and other important physiological functions. "Zinc deficiency in elderly individuals results in impaired cellular immunity, poor wound healing, dermatitis and a decrease in taste acuity," says Campbell.

Dehydroepiandrosterone (DHEA) is used to produce testosterone, oestrogen, progesterone and corticosteroids. At age 25 these hor-

50s

Take more action in controlling life-threatening diseases like cancer, heart disease and stroke. This is also when menopause in women and andropause in men becomes a reality. "A slump in oestrogen weakens the skin's collagen and the body loses volume," explains Dr Jooste, who also recommends approaching the diminishing hormone levels with bio-identical hormones, which are hormones produced from plants, and are biologically identical to the hormones in our bodies.

Up your omega-3 – they are natural anti-inflammatories and therefore play a role in decreasing the pain associated with arthritis and other inflammatory conditions. Campbell explains that the long-chain polyunsaturated fatty acids – eicosapentaenoic acid (EPA) and docosahexanoic acid (DHA) – in omega-3s may also protect against cognitive decline, dementia and Alzheimer's.

Co-enzyme Q10 is an essential enzyme involved in cardiovascular health. It has the potential to improve heart muscle functioning, reduces high blood pressure and assists in the conversion of stored fat into energy, says Dr Jooste. It also works well in helping your body absorb vitamins C and E.

mones start declining, and by age 70 your body is only producing a mere 20 percent. In animal studies, DHEA helped protect the body against obesity, diabetes, cancer and more. The jury is still out on the efficacy of DHEA supplementation in humans.

Although supplementation with melatonin is still controversial, it's worth discussing with your doctor if you struggle to sleep. Melatonin is secreted by the pineal gland but production declines after age 50. It has powerful antioxidant properties and is also a natural sleeping aid, so it helps regulate your sleep and wake cycle.