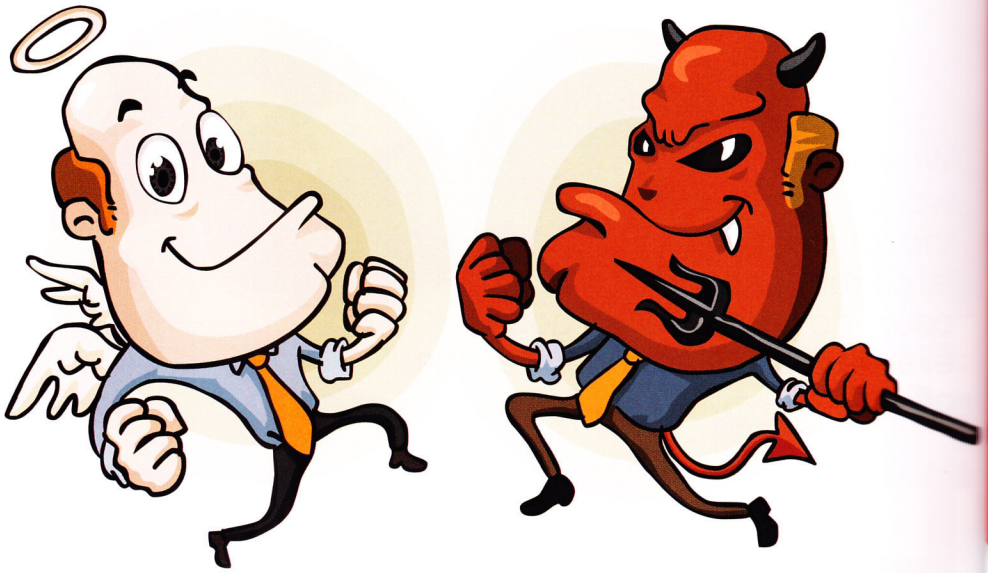
The good, the bad and the ugly

The bacteria on our skin are like characters in a Western movie; there are good and bad guys. They fight it out and, in the end, the good guys win – well, most of the time. Consultant Dermatologist Dr Chang Choong Chor discusses how we can tip the balance for the good guys.

words **Leonard Yap**



In a typical Western, there are always the gun battles, the bar brawls and bad guys appearing to win, but eventually they get driven out of town. It is a similar scenario for bacteria on our skin, though the relationship between bacteria, the many types of skin flora and our skin is much more complex.

Normal skin flora thrives in an environment that has the right humidity and pH, says Dr Chang Choong Chor, a Consultant Dermatologist. It is a system of check and balance, a sort of yin and yang relationship. The balance can be disrupted by a disturbance to the normal flora, a breach of the skin barrier caused by injuries, scratches, wounds, burns, inflammation or a skin disease.

When this happens, some of these normally harmless bacteria may turn 'bad' or opportunistic. This can also happen when the body's immune system becomes defective or weakened by disease or certain medications. Over-use of antibiotics or antiseptics may also disrupt the delicate balance of skin flora, leaving the skin susceptible to pathogens previously kept at bay by existing flora.

So, what can you do to maintain healthy skin and good bacterial balance? Dr Chang has the following suggestions:

- Eat a healthy, balanced diet
- Practice proper skin care by using a gentle soap/ cleanser and moisturiser
- Ensure proper aeration of skin folds
- Avoid unnecessary and prolonged antibiotic use
- Avoid routine use of antiseptic or antibacterial wash or harsh/alkaline soaps

Diet can play an important role in skin health. High-fibre, low-glycaemic index foods like fruits and vegetables, and yoghurt can improve gut flora. Not only do they help your skin, they can also work wonders for your general health. However, eating all these may not always be possible, especially with a busy schedule. Supplementation with probiotics (live bacteria) or prebiotics (non-digestible fibre that stimulate good bacteria) have shown some promise in improving skin-barrier function and reducing skin inflammation. **HT**

Know your skin flora

- **Sebaceous (oily) areas of the face, back of the ear, upper back and chest are populated predominantly by propionibacteria and staphylococcus**
- **Moist areas like the armpits, groin and toe webs are populated by corynebacteria and staphylococcus**
- **Dry areas are populated by a mixture of species, usually dominated by proteobacteria and flavobacteria**
- **In some individuals who are nasal carriers of the potentially pathogenic Staphylococcus aureus, the bacteria can be found on the face and hands.**

Common fungi of the skin: Malassezia fungi constitute 50-80% of all skin fungi

Common skin mites: Demodex family