

# Sweet scent of roses fades most for older noses

## Seniors find it hardest to detect 'rose' smell and easiest to sniff out 'onion' scent: Study

**Samantha Boh**

Take some time to “stop and smell the roses” when you are young, for you may not get the full glory of its fragrance when you are old.

That’s one fresh take on the old adage about appreciating the beauty of life – coming from a study by National University of Singapore (NUS) researchers.

The team tested the sensitivity of the noses of about 300 Chinese Singaporeans and permanent residents who are ethnic Chinese to 10 odours, and found that the ability to detect a chemical with a rose-like smell suffers the most drastic decline with age.

To detect the scent, those in their 70s required 179 times the concentration of the chemical needed by those in their 20s.

In contrast, sensitivity to a chemical with an onion-like smell changed the least with age, with participants in their 70s needing only three times the concentration required by those in their 20s, to detect it. The ability to detect the odour also declined only in participants aged 51 and older.

The findings from the one-year study were published in scientific journal *Chemical Senses* in March last year.

Now, the team is in discussions to conduct similar studies on Malay and Indian participants, to find out if the results are replicable in these ethnic groups.

Associate Professor Huang Dejian from NUS’ Food Science and Technology Programme, who supervised the study, said it has long been known that a person’s sense of smell deteriorates with age, but

less is understood about the specific odours affected. Hence the study’s purpose was to find the missing information, which will guide the team in creating food for elderly citizens who could be at risk of malnutrition, he said.

Along with a deterioration in their sense of smell, seniors often experience a decline in appetite, simply because they enjoy food less. “The hope is that we can create food that can stimulate the appetite of old folk,” said Prof Huang.

The study also tested the participants’ ability to smell the odours of orange, banana, mint, cinnamon, mushroom, popcorn, smoke and cheese. The chemicals needed to be 12 to 34 times more concentrated for those in their 70s to detect them, compared with those in their 20s. It is still unclear why the drop in sensitivity affects certain odours and not others.

Prof Huang said pungent odours are often an indication that something has gone bad or is toxic, which is a signal for a person to stay away from it.

“We hypothesise that we don’t lose sensitivity to pungent smells (like onions), otherwise we would lose that defence mechanism.”

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**The ability to detect a chemical with a rose-like smell suffers the most drastic decline with age, says the study.**

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