

JUICE CLEANSE YAY OR NAY?

This latest detox diet promises sweet benefits like glowing skin, heightened alertness and weight loss. We embark on a three-day juice cleanse and evaluate the results with experts.

Today's much-raved-about juice cleanse is no longer about downing copious amounts of lemonade. Instead, the latest hype revolves around new combinations of cold-pressed fruit and veggie juices, and has an ardent following of Hollywood hot bods, including Gwyneth Paltrow as well as Miranda Kerr. The results of such juice cleanses, if recent social media buzz is anything to go by, seem promising, but do they really work and are they safe?

During a cleanse, one essentially skips solid foods and subsists on liquids in order to give the digestive system a break and allow the body to flush out toxins.

The idea is not new and is often credited to Stanley Burroughs, who introduced the infamous detox lemonade – a concoction of lemon juice, maple syrup, cayenne pepper and water – in his 1976 book *The Master Cleanser*. His successor, Peter Glickman, took this further in his 2004 book *Lose Weight, Have More Energy and Be Happier in 10 Days*.

The new juice cleanse proponents have changed the formulas – presumably because of the criticism

levelled against older detox regimens like the Master Cleanse – to incorporate new combinations of fresh produce, with added vitamins and minerals in some cases. And, in case you're wondering, laxatives in varying amounts are often still advised as part of the plan – and in the name of colon cleansing.

That said, not just any juice would do. It has to be fresh, unpasteurised and cold-pressed. Echoing raw food enthusiasts, many juice cleanse champions assert that this method of juice extraction is best because other tools like blenders and centrifugal juicers generate heat that can destroy the healthful nutrients, minerals and

enzymes in fresh produce. And, as one might expect, cold-pressed juices come at a premium: A 500ml bottle can cost upwards of \$10 and a three-day cleanse can amount to at least \$200 for 18 bottles – excluding supplements and delivery fees.

Still, some may consider this a low price to pay for a better complexion, more energy and a slimmer silhouette. In Singapore alone, there are currently more than eight juice cleanse retailers – both brick-and-mortar and online – and probably more will emerge.

Is it worth a shot? We find out.



Shape writer Estelle went on a three-day Skinny Genes organic juice cleanse sponsored by Beauty Cleanse. Every day, she drank six 500ml bottles of juice – each with a different combination of fruits and veggies – at two-hour intervals.

The package, priced at \$330, came with supplements (flaxseed oil, acai berry and "liver support" capsules, a green superfoods powder as well as spirulina powder), laxatives (colosan powder) and pu-erh tea. She was also instructed to have a glass of warm water with lemon juice first thing in the morning to prepare the body for cleansing and to drink as much water as possible over the course of the day to aid detoxification.

CLAIM #1: Juice cleanses detoxify the body.

PROPOSERS The juices are packed with vitamins, minerals and enzymes that help your body flush out harmful chemicals that have built up over time from an excessive intake of caffeine, alcohol, fat and sugar. During the cleanse, you will go to the toilet more often as your body expels toxins.

ESTELLE "As part of my prescribed morning routine, I mixed in a tablespoon of colosan powder with my first bottle of juice. Throughout the day, my tummy felt like a chemistry lab. It churned constantly and gurgled – especially immediately after I drank the juice. I was also flatulent and passed out watery stools every few hours. I was thankful that I didn't have meetings to attend over those three days. I also hoped that those multiple loo trips purged my body of toxins!"

EXPERTS "Frequently passing out watery stools in large volumes may

cause you to flush out important electrolytes that help your heart, nerves and muscles function properly," says Dr Gwee Kok Ann, consultant gastroenterologist at Stomach Liver & Bowel Clinic.

"Mild cases of electrolyte imbalance usually go undetected. In a severe case, one may experience dehydration, muscle weakness and irregular heart rhythm, which can lead to death. People taking diuretic medication (drugs that increase urine production) and those with eating disorders, liver, kidney or heart disease are at higher risk."

Repeated toilet visits could also be due to bowel disturbance. Some fruits, like apples, pears and plums contain sorbitol. This indigestible sugar can cause digestive problems when taken in a concentrated juice form," adds Dr Jeannie Ong, consultant gastroenterologist at Changi General Hospital.

CLAIM #2: It increases your energy level.

PROPOSERS You may feel sluggish in the initial phase when the body starts purging toxins but you will subsequently feel more alert. As the juices exclude fibre from fruits and veggies, the body does not need to work so hard to digest and absorb nutrients.

ESTELLE "On the first day, I felt dizzy and light-headed. I couldn't stop yawning – even while playing tennis. These symptoms lessened the next day and I made it through a challenging yoga session after work.

I also felt well rested and more alert upon waking up on the second and third days despite the fact ▶

that I'm not a morning person. Perhaps it was because I hit the sack much earlier than usual to forget about my hunger pangs."

EXPERTS The fluctuations in energy levels are part of your body's reaction to the new diet, says Mah Wai Yee, a freelance dietitian. "When you reduce food intake and lack crucial nutrients like protein and fat, your body will start to conserve energy, leaving you feeling lethargic. Over the next few days, your body will adjust to a lower metabolic rate, so you may feel like you can function better."

Other factors could also account for the improved energy levels. "During a detox, people tend to take things more slowly," says Ketki Vinayachandra, a naturopath at Natural Medicine Clinic. "When the mind is relaxed, it's easier to get a good sleep." The feelings of rejuvenation could also have a psychological basis.

CLAIM #3: It boosts your immunity.

PROPOSERS Juices from fresh produce like apples, carrots, beetroot, kale and cabbage fuel the body with antioxidants that bolster its ability to heal and fend off germs. A glowing complexion is one of the first signs of improved health.

ESTELLE "By the third day, my skin looked noticeably clearer, with the pimples on my forehead having subsided. This made me wonder if this was due to cutting out fried and processed food or the benefit of getting more antioxidants and fluids than usual."

EXPERTS There is currently little scientific evidence to support the claim that juices can boost immunity. On the flip side, excessive consumption can pose certain health risks.

"Raw fruits and vegetables may increase one's exposure to bacteria, which can lead to an overgrowth of them in the intestines and gastroenteritis (an infection of the gut), especially for those who have diabetes or are on acid-suppressing medication," says Dr Gwee. "What's more, high levels of fructose may also up one's chances of diabetes, hypertension and a fatty liver."

CLAIM #4: It helps you drop kilos.

PROPOSERS By eliminating fat intake and facilitating your body's expulsion of waste, a juice cleanse will slim you down.

ESTELLE "I emerged from the cleanse two kilos lighter and feeling slimmer around the middle. This gave me confidence to wear a

bodycon dress, but I also noticed that my arm muscles seemed to have shrunk."

EXPERTS Firstly, reduced water retention could account for some of the weight loss. But this method of weight loss is not sustainable. "After being deprived of sufficient protein and carbohydrates for several days, your body will naturally crave them. This may lead to overeating and weight gain, resulting in a vicious circle of dieting. At worst, it may trigger eating disorders like anorexia nervosa," warns Jaclyn Reutens, clinical dietitian at Aptima Nutrition and Sports Consultants.

Another likely repercussion: "Going on a reduced-calorie diet over a long period can lower your metabolism (your body's efficiency in burning calories) permanently," says Dr Ong.

What's more, such a diet is lacking in protein, which is essential for building muscles, says Wai Yee. "The effects of protein deficiency may not be noticeable over three days, but if the diet is followed for a few weeks, one might find it difficult to carry out daily activities like lifting heavy objects, climbing stairs and other physically demanding activities."

Note: Exactly when muscle weakness sets in depends on an individual's protein stores. Also, it will take a longer time for a muscular person to feel the effects compared to someone with a smaller muscle mass.

CLAIM #5 It helps you to kick-start a healthier lifestyle.

PROPOSERS Drinking litres of health-giving juices for several days in a row will make you more mindful of what you eat. You're also likely to have fewer cravings for sugar and junk food.

ESTELLE "Three days of restricting my diet made me reflect on the mantra 'you are what you eat'. Although I yearned for laksa and Hokkien mee on the first two days, all I wanted on the last day of cleansing was a bowl of wholesome fish soup. I've also developed the habit of sipping water throughout each day."

EXPERTS There could be some truth to this. "After following through a diet without saturated fat, refined carbohydrates, caffeine and alcohol, one may feel a sense of accomplishment and find it easier to break unhealthy eating habits," says Dr Ong.

CHUG THIS DOWN

The juice schedule of the three-day Skinny Genes diet by Beauty Cleanse.

9am Sweet Carrots – carrot, cucumber and pineapple

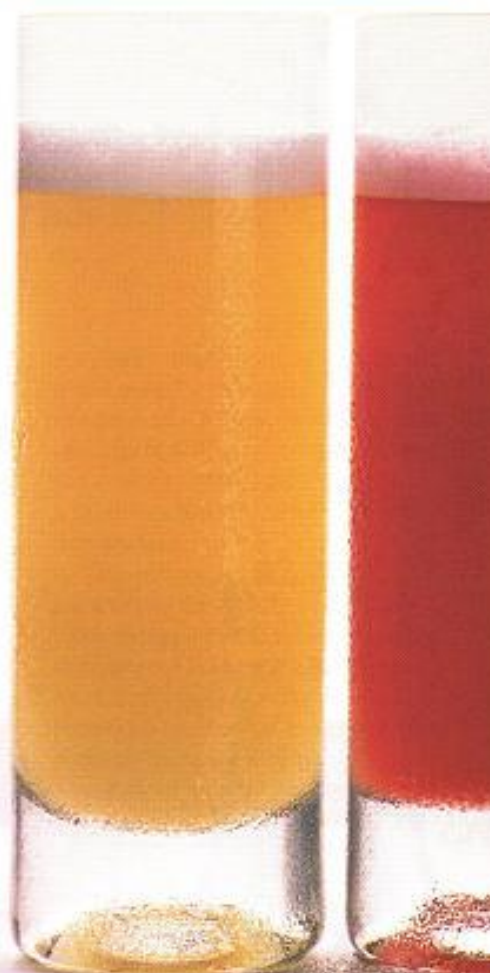
11am Mean Green – kale, green apples, ginger, celery and cucumber

1pm Purple Power – green apple, red cabbage, ginger, celery and beetroot

3pm Field of Green – romaine lettuce, kale, mint, celery and cucumber

5pm Spicy Lemonade – lemon, cayenne pepper and agave nectar

7pm Nutmylk – cashew nut, cinnamon and agave nectar



THE FINAL WORD

Four dietitians, three doctors and two alternative medicine practitioners give their final verdict on juice cleanses.

SKIP IT ENTIRELY

"There's no need for a detox programme if you eat balanced, low-fat and low-salt meals with fruits and vegetables."

MAGDALIN CHEONG, ASSISTANT DIRECTOR OF DIETETIC & FOOD SERVICES AT CHANGI GENERAL HOSPITAL

"Don't bother. The best way to rid your body of toxins is to drink lots of water every day."

JACLYN REUTENS, CLINICAL DIETITIAN AT APTIMA NUTRITION AND SPORTS CONSULTANTS

"Besides a healthy diet and regular exercise routine, a daily herbal tea of blood-cleansing herbs like nettle will suffice. Of course, be happy too. Worry and insecurity constrict circulation, which impairs detoxification."

SEBASTIAN LIEW, A MEDICAL HERBALIST AND AUTHOR OF *FROM LEAF TO LIFE*

"I do not recommend juice cleanses as our body is capable of detoxifying itself. A three-day cleanse might not do any harm to healthy individuals, but it can be dangerous for those

with diabetes or kidney disease because of the high intake of sugar and potassium respectively."

MAH WAI YEE, FREELANCE DIETITIAN

"The concepts of 'cleanse' and 'detox' are not clearly defined, and there is very little scientific research to show that this diet can improve one's health. Those who are concerned about their health are better off paying more attention to their sleep routine or incorporating relaxation exercises like meditation in their daily life."

DR GWEE KOK ANN, CONSULTANT GASTROENTEROLOGIST AT STOMACH LIVER & BOWEL CLINIC

APPROACH WITH CAUTION

"A healthy body does an excellent job of eliminating waste and toxins by filtering them through the liver, kidneys and intestines, and then expelling them through urine, bowel movement, breath and sweat. Some people go on a juice cleanse to give their bodies a time out from the negative effects of an unhealthy diet. Keep the duration short if you must try one."

DR JEANNIE ONG, CONSULTANT GASTROENTEROLOGIST AT CHANGI GENERAL HOSPITAL

"I suggest taking a multivitamin during the cleanse since it eliminates many essential nutrients. And, at most, you should only follow a cleanse for a few days."

VANESSA MCNAMARA, DIETITIAN AND FOUNDER OF THE TRAVELLING DIETITIAN

"Three days on a juice diet should be tolerable for most healthy individuals. However, people with pre-existing medical conditions should discuss it with their doctors beforehand. Those with kidney, liver or heart problems, for instance, may not tolerate a high volume of liquid intake."

DR DESMOND WAI, GASTROENTEROLOGIST AT MOUNT ELIZABETH NOVENA HOSPITAL

"Such detox diets should be done under the supervision of a qualified professional. Ideally, other food groups should be included. A juice cleanse often lacks protein, which is important to help the liver regenerate and prevent muscle loss, especially when followed for more than three days."

KETKI VINAYACHANDRA, NATUROPATH AT NATURAL MEDICINE CLINIC

