- Ageing

Does age slow your metabolism?

The Star Malaysia · 7 Nov 2025 · 8 · By CAMILLA FORSTER

MANY of us attribute gradual weight gain in middle age and beyond to a slow metabolism, but to what extent is this assumption true?



In a world flooded with health advice and ever-changing diet trends, we consulted British consultant bariatric surgeon Dr Matyas Fehervari, who works extensively with metabolic issues, to cut through all the noise.

He has helped demystify exactly what metabolism is, how it can change with age, and also identified some key ways we can maintain a healthy metabolism as we get older.

What is metabolism and a metabolic rate?

“Metabolism refers to the chemical processes that keep our bodies functioning, from converting food into energy to repairing cells and supporting organ function,” says Dr Fehervari.

“The metabolic rate is the amount of energy your body uses to maintain these vital processes.

“Even when you’re resting, your body is still working to keep your heart beating, lungs breathing and brain active – this is known as your basal metabolic rate (BMR).”

What are some misconceptions about metabolism?

“One of the biggest myths is that people with a ‘fast’ metabolism can eat whatever they like without gaining weight,” he says.

“In reality, differences between individuals are usually modest.”

Another common misconception is that metabolism alone determines someone’s body weight.

“Weight regulation is shaped by a complex network of factors extending far beyond calorie

many people believe that the kilos tend to pile on with age due to a slower metabolism, but this isn’t necessarily true.

burning,” explains Dr Fehervari.

“These include diet quality, muscle mass, sleep and physical activity, but also deeper physiological mechanisms such as changes in bile flow, adjustments in stomach function and size, nerve (vagal) signalling, and the modulation of gut hormones.

“The gut microbiome also plays a vital role, influencing how efficiently we extract energy from food, how bile acids are processed and how our metabolism functions overall.”

Furthermore, some people assume that metabolism steadily declines after early adulthood, however, he says “large, highquality studies show it remains remarkably stable for decades before gradually slowing later in life”.

How does our metabolism change with age?

“Metabolism isn’t a straight downward curve,” says Dr Fehervari.

“A major study published in Science in 2021, involving over 6,000 people, showed that energy expenditure peaks in infancy – when it can be over 50% higher than in adults – then gradually declines until around age 20.

“From the 20s through to around 60, metabolic rate remains remarkably stable when adjusted for body size and composition.

“After 60, there tends to be a slow, but measurable, decline.”

What are the reasons for the decline at 60 onwards?

“After 60, metabolic rate typically decreases by about 0.7% per year,” he says.

“The main reasons are loss of muscle mass (sarcopenia), reduced physical activity and subtle hormonal shifts such as lower levels of growth hormone and sex hormones.

“Mitochondrial efficiency – the body’s energy-producing machinery – may also decline slightly with age.

“It’s not that your body ‘forgets’ how to burn energy, rather it becomes a little less efficient at doing so.”

What lifestyle factors impact your metabolism?

Several lifestyle habits can either support or slow metabolic function.

>

“Muscle tissue burns more energy than fat, even at rest,” explains Dr Fehervari.

>

“Severe calorie restriction can temporarily suppress metabolic rate,” he says.

>

“Poor sleep can alter hunger and energy-regulating hormones such as leptin and ghrelin,” notes

Low muscle mass or inactivity Crash dieting Poor sleep

Dr Fehervari.

>

“Elevated cortisol can promote fat storage and affect energy use,” he says.

>

Chronic stress Smoking and excessive alcohol

“Smoking and excessive alcohol consumption can both impair cellular metabolism and hormone balance,” Dr Fehervari says.

Is it actually possible to “boost” your metabolism?

“There’s no magic pill or quick fix,” says Dr Fehervari.

“Temporary increases in energy expenditure can occur after exercise or with caffeine, but these are modest.
“The most effective, evidencebased way to maintain a healthy metabolism is to preserve muscle mass and stay active throughout life.”
How can we look after our metabolism as we get older?
Methods include:
>
“Combine aerobic activity like brisk walking or cycling with resistance training to maintain muscle,” recommends Dr Fehervari.
> Prioritising protein
Staying active
“Eat enough protein, especially in later life, to support muscle repair and prevent sarcopenia,” he advises.
> Avoiding extreme diets
“Sustained, balanced nutrition keeps metabolic processes steady,” says Dr Fehervari.
>
“Aim for seven to nine hours to support hormonal and energy balance,” he advises.
> Managing stress
“Mindful activities and social connections reduce cortisol’s long-term effects,” says Dr Fehervari.
> Undergoing regular check-ups
“Thyroid, vitamin D and hormonal imbalances can all influence energy metabolism, so I would recommend regular checkups,” he says.
In conclusion, Dr Fehervari says: “Your metabolism does not inevitably ‘crash’ with age, it remains stable for decades and only begins to slow slightly after around 60.
“Much of that change is due to muscle loss and lifestyle, not age alone.
“By staying active, eating well and maintaining strength, most people can keep their metabolism healthy well into later life.” – PA Media/dpa
Sleeping well