

Ab *flab*

How to tame your lava belly

Tired of that roll of fat on your tummy? Physiotherapist ANNA LOUISE BOUVIER has good news: you can get rid of it

Something happened over the past few months. In my house we have a terrific mirror in the bathroom that's only big enough to reveal a head-and-shoulders version of yourself. Better still, this winter our exhaust fan was on the blink, so most mornings I got a very satisfactory, Doris Day-hazy view of my post-shower self that led me to falsely believe all was well. Until we went on holidays to hot, sunny Queensland.

The bathroom in our apartment not only had an excellent exhaust fan but strong fluorescent lighting over a mirror that revealed my full torso in all its glory. I stepped out of the shower on the first morning of our holidays and caught a glimpse of myself in the crystal clear mirror.

What had happened while I had been ensconced in my layers of winter clothing? A lava-like substance had developed around my stomach and, worse still, it seemed to have a certain cottage cheese quality. I hadn't been eating more, I exercise regularly and yet there'd been a discernable change — and it certainly wasn't for the better!

I know I'm not alone in the observation of this phenomenon. It can strike younger tummies, slim people, men or women. Many of my patients, once they get to a "certain" age, talk in desperate, hushed voices about this

mysterious thing that transforms formerly perfectly acceptable waists and tummies into ever-spreading, impossible-to-contain disaster zones.

From bathroom mirrors to the horror of trying on swimming costumes in department store change rooms, lava-belly is a source of constant angst. So what causes it? Is it about diet, age or exercise — or a combination of all of three?

The tiramisu of tummies

In order to understand the lava-belly phenomenon it is important to first understand the anatomy of the tummy muscles.

Your stomach muscles are like an old-fashioned corset, with three different layers of muscles lacing in different directions, each playing a unique role in holding your trunk upright. When you look at these layers in cross section, they actually look like a piece of tiramisu (an Italian layered sponge cake). The most important aspect is to understand what each layer does to the circumference of your waist.

The creamy layer

On the very top of the muscle layers sits a layer of cream. Well, actually, it's adipose tissue, commonly known as fat. How much cream you

have depends on diet, age and hormone levels. See page 58 for more on this.

The sit-up layer

This is the outer layer. To feel this layer, just lie on your back for a moment with your knees bent and place the fingers of your right hand on your stomach just above your belly button. You will need to push through the creamy layer a bit till you hit the muscle wall. (Don't despair, it is there!) Then place your left hand almost at your pubic bone. Now do a gentle sit-up. What you'll often feel is your stomach doming or lifting as it hardens. This layer is great for power activities such as digging or pushing and really comes in strongly when force is required. If this layer was in a footy team, it would be the brawny guy you bring on for the scrum.

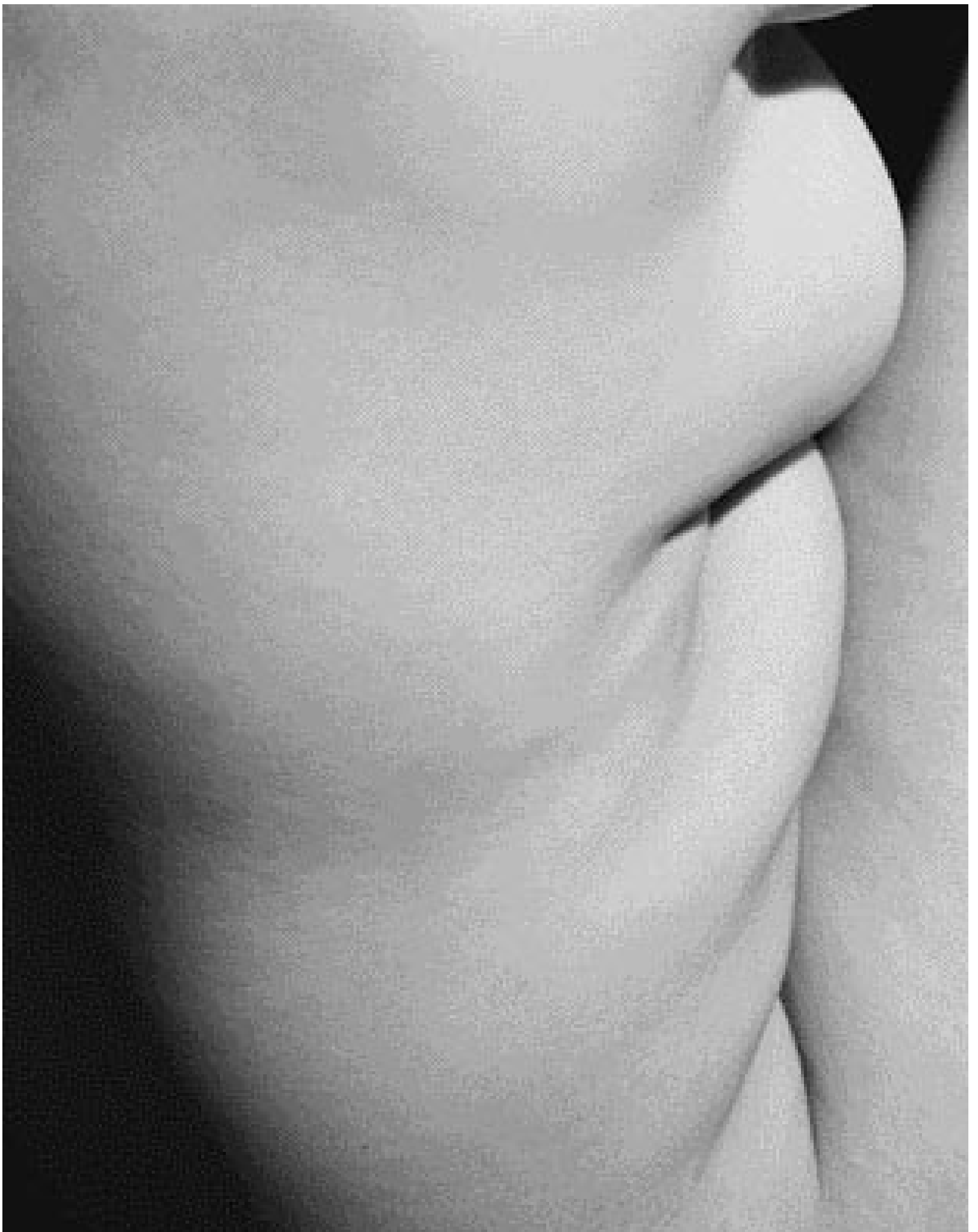
The cough-constipated layer

Now find your hip bones and put your fingers into the side of your stomach (where you would feel ticklish). Now cough. You will feel a bulging into your fingers. This layer — technically, your oblique muscles — is important for twisting and lifting, but as you can feel it doesn't narrow the circumference of the waist when it contracts. These muscles are also used for activities that require a little more force, such as coughing. They come on quickly but they also tire easily.

The deep marathon layer

Groundbreaking research from internationally recognised physiotherapists Dr Paul Hodges and Dr Julie Hides at the University of Queensland into the deepest layer (technically known as the transversus abdominus) is really the clue to understanding why many stomach exercises

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A two-part plan

To control lava belly you need to do two things:

- Keep your creamy layers under control with diet and aerobic exercise to burn the fuel from the food and drink you consume;
- Make sure your deep marathon layer is working.

Why does the deep marathon layer stop working?

There has been extensive research into this over the past few years, both in Queensland and through the work of physiotherapist Dr Peter O'Sullivan in Perth. Some of the reasons for deep layer malfunction are poor posture, acute back pain episodes, poor breathing and poor pelvic floor control.

So, if you've had lots of back pain and your posture looks like Quasimodo and you've had asthma for years and you're perimenopausal and notice occasional leakage, then you've also probably noticed that your lava seems to be on the march. A bit like putting pancake mix in the frying pan, it seems to spread and spread!

If you exercise without it working properly, two things can happen. The first is you risk injuring yourself, particularly if you're doing high load activities such as weights. Second, you may be doing stacks of stomach exercises but at best nothing is happening; at worst you



actually find your stomach is getting harder, but instead of flattening it's starting to bulge.

What can you do?

Straighten yourself up

Finally, the most important thing you can do is be aware of your sitting and standing posture. Your muscle activation system is beautifully designed to boot up when you sit and stand up straight, but it also tends to switch off when you slump.

Learn to breathe

If your breathing is really poor, look up your local Buteyko Method practitioner or yoga school for some breathing retraining.

Try a good class

If you know your circumference is really on the march, try a physiotherapy exercise class or a good Pilates class.

Learn to meditate

Meditation is also a great way to work on your breathing and your posture.

See a physio

If you've had back pain or are experiencing any pelvic floor symptoms, go and see your local physiotherapist, who will be able to assess your deep layer and show you some exercises to kick-start it.

Improve your sitting posture

Sit on the edge of your chair, put one hand on your chest, the other on your tummy, and then slump. You'll feel the lava spread straight into your hands. Now, gently lift your chest up away from your belly button, without overarching your back. Violà! You will feel the lava recede. In fact, it's the deep layer activating in response to your aligning your spine.

really don't work to flatten the stomach. These muscles are the only ones that go all the way around, joining the back muscles, so they're really a circle of muscles. They are meant to be able to activate for long periods of time without getting tired. These are called slow-twitch muscles and they hold the key to controlling lava belly. As team members, these are the intellectuals: they are the controllers and play makers, not the brawny beefy "fast-twitch" guys.

Unlike fast-twitch muscles they are hard

to feel because when they contract it's very subtle. Consequently, many people are never quite sure if they are activating them correctly. To feel them, lie down and leave your hands where they were for the last exercise above. Take a slow breath in and then gently let your stomach deflate like a balloon that's losing all its air. You'll feel your stomach wall moving softly down away from your fingers. Now keep breathing softly but don't allow your stomach to fill with air every time you breathe in. Then,

as you breathe out, visualise the deflating balloon. As many of you will find, this is almost impossible.

These muscles are the only stomach muscles that control the circumference of the stomach. In a perfect world, the three layers synchronise with the deepest layers, turning on milliseconds before the other layers come in, which causes the circumference to draw in as the other layers contract. This results in a firm, flat tummy.

The truth about *tummy fat*

JOANNA McMILLAN PRICE
has some practical advice on
how to battle the bulge

The mid-section is the one area where both men and women struggle and aim for a similar outcome: a flat, taut stomach. Men may also seek the rippling six-pack look, but to be honest you're probably best to shelve that particular goal and settle for flat. The former is a result of not just the right diet and exercise but a particular coding of genes.

However, don't get the wrong idea. Working towards improving your mid-section isn't all just about vanity. The circumference of your waist gives you a good indicator of your risk of type 2 diabetes, heart disease and other so-called diseases of affluence. In fact, your waist circumference is a far stronger indicator of risk than your weight or body mass index (BMI).

Research has shown that, for Caucasian women, disease risk increases if your waist exceeds 80cm and increases dramatically if it's above 88cm. For Caucasian men the cutoffs are 94cm and 102cm. Pacific Islanders can afford to be bigger and they can add 10cm to the risk level cutoffs, while conversely those of Asian origin incur risk at a far smaller size and need to subtract 10cm.

So why should the size of your waist be so important to your health?

It all comes down to fat and, more



specifically, where that fat is. Subcutaneous fat — what physiotherapist Anna-Louise Bouvier terms the “creamy layer” — is fat under the skin.

When I was a kid there used to be an advert for a breakfast cereal that asked if you could “pinch more than an inch”. Have a go and you'll discover how much subcutaneous

fat you have. While this isn't a pleasing exercise, stick with me, as the type of fat you have is what's important.

The other type of fat lies under the muscle and is actually inside the abdominal cavity, lying around the organs. This is called intra-abdominal fat. It's much harder to know how much of this type of fat you have as you can't

COAX IT OUT OF THE CELLAR WITH SOME FRESH FISH.



The Hermit Crab Viognier/Marsanne

Artist: Eric Löffbecke®

The limestone beneath the d'Arenberg vineyards was made by the remains of sea critters ~ such as the reclusive little hermit crab ~ when McLaren Vale was covered by sea millions of years ago. Hardly surprising, then, that we'd make a wine that goes perfectly with seafood. The Hermit Crab merges vibrant Viognier with the nutty, herbaceous Marsanne to make a wine that drinks brilliantly now or will happily hide away in your cellar. We dare say after a few years, it will really come out of its shell.



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health report

The good news is that fat in the mid-section, particularly the intra-abdominal fat, seems to be far easier to shift than fat stored on the hips and thighs, for example.

feel it. Men are particularly prone to this type of fat (and women post-menopause): the apple-shaped man with slim limbs and a big round belly.

I have an uncle like this who declares, "I'm not fat; this is solid muscle" and insists you punch him in his rock-hard abs to prove the point! They are indeed rock hard, but that's because all the fat is under the muscle, hidden from view. This is the worst kind of fat as far as your health goes, and why a simple waist measurement is so powerful in depicting your risk of chronic disease.

The good news is that fat in the mid-section, particularly the intra-abdominal fat, seems to be far easier to shift than fat stored on the hips and thighs, for example. Pear-shaped women, take heart — although hard to shift, this fat distribution is far more heart healthy.

Abdominal fat tends to be drawn on first when you eat fewer kilojoules than you expend. And there lies the key. I'm sorry to disappoint if you were hoping a particular food or magic drink would promise to burn off this fat but, sadly, in the same way we can't spot-reduce fat from one area of the body with exercise, neither can we with diet. The only way forward is to shift the balance of energy in and energy out.

There are of course many things you could change about your diet to achieve this balance shift, and it can be different for everyone. The key is to assess your own diet and consider what will make the biggest difference, taking into account how easily you think you can achieve that change.

For example, if you absolutely love chocolate and would find it extremely hard to give up completely, don't set yourself up to fail. Instead, set a daily limit and look for what else you could change so that you gradually shift your diet in the right direction. Without getting into every aspect of diet, here are some things to look for:

What do you drink? Drinks providing kilojoules are often the easiest to cut down on or even cut out. The same appetite-suppressing pathways aren't stimulated when we're not required to chew and mulch up our food. This makes it easy to take in too many kilojoules in liquid form. Watch for seemingly healthy drinks such as fruit juices and smoothies, which may well provide nutrients but are also energy-dense. Coffee is another major factor here. My dad has finally managed to kick-start his waist reduction plan by conditioning himself to like black coffee without sugar. He estimated that taking two sugars in his coffee was amounting to 0.5kg over the course of the week!

Do you snack between meals? The grazing concept is often promoted as a good way to lose weight as you burn more energy digesting and metabolising several small meals than one big one. However, that only works if we're talking about the same number of kilojoules. In reality, snacking usually leads us to eat more. Stick to a routine of three square meals and one or two small snacks to be consumed if you're hungry and the next meal is still some time away.

Overeating? Finishing the plate and unconscious eating are two common behaviours that lead us to overeat. Young children rarely overeat, yet most of us lose that connection with satiation as we get older. To be successful in long-term control of body fat, we need to re-connect with our body. Avoid eating while reading or watching TV, eating slowly, waiting five minutes before accepting seconds to see if you really are hungry and being aware of your hunger level can all help. Try to eat until you're comfortably full and not stuffed.

Go natural. Finally, when it comes down to what to eat, the answer is really quite simple. Eat more foods in their natural form and fewer processed, man-made foods and products. The former almost always have a lower energy density and a far higher nutrient density. This means more nutrients for less kilojoules — just what most of us need. ■