"Eat 6 small meals a day to stoke your metabolic fire" screamed the cover of one fitness magazine, and "Kickstart your butt with Breakfast" challenged yet another. The first headline claimed that eating more frequently was the sure-shot way to turbo-charge one's metabolic engine while the second went as far as to imply that the very act of eating itself would ignite the fat-burn, right? Wrong.

Scientific evidence backs quite the opposite: Lengthening the time interval between two meals is what really revs up your fat-metabolism. But how does that even make sense?

Metabolism is a subject shrouded in myths and misinformation, not least of all because of difficulty in accurately measuring it. To date there is no conclusive study that establishes a link between grazing all day and increased metabolism, and yet the myth endures. A review of scientific literature that identified 176 studies on this subject, found no link between higher meal frequency and weight-loss and in fact, found that the opposite was true!

**Capacity Issues**

Let's think about this logically: How many refuelling pit-stops does a race car need to make? Technically - none, unless it's fuel-storage capacity is very low. Likewise, for humans too, there is no metabolic mileage gained from stopping and refuelling with food every 2-3 hours except, of course, if fuel-storage capacity is very low. Now is this really the case? Well, anything but.

Humans have been endowed with an incredibly large fuel-storage tank. The first source of energy is found in our glycogen reserve (stored glucose) which helps us last anywhere from 4 hours to 2 days (without refuelling). Once this is depleted, the second, virtually limitless, source of energy is stored in our fat reserves. Fat stores are a virtually limitless though less easily accessible source of energy. Just like we prefer to use the cash in our wallets before withdrawing from our bank ATM, our body too prefers using glycogen reserves first before turning to our fat-ATM. This latter phase is the fat-burning nirvana we all aspire to reach when we think of metabolism!

**Beware Of Insulin - The Party Pooper**

However, there is just one small problem. The 'key' to our fat-loaded ATM only works when insulin is not present. [The 'key' is actually an enzyme called hormone-sensitive lipase (HSL) and insulin inactivates HSL]. What this means is that each time insulin gate-crashes the fat-burnout party, the key to our fat stores gets stuck, instantly blocking our access to the fat-ATM. With no energy inflow now coming from the fat-ATM, our energy outflow (resting metabolism) automatically slows down as a compensatory response.

So, if we wish to re-open the floodgates to fat-metabolism, it is important that insulin be kept locked up inside its pancreatic cage for as long a period as...
possible. But the question is: who decides when this metabolic bully (insulin) may be released again on parole? The answer is food.

Every time we eat, we signal our body to release insulin. In fact, each time we even think of eating, our body releases insulin in sweet anticipation of a tasty bite, even prior to any nutrient absorption. So, your friend who claims she gains weight just by looking at food, may not be kidding. It is this conditioned "Pavlovian response" to sensory stimuli that explains why even sugar-free artificial sweeteners don't work, and in fact cause insulin spikes and weight gain.

**On The "Fast" Track To Weight Loss**

This is where intermittent fasting (that is, holding off eating for longer intervals between meals) comes to the rescue. It tricks insulin to stay locked-up between meals so as not to disrupt the fat-burn. Interestingly, not only does fasting speed up our metabolism, but also protects lean muscle mass and helps reboot the entire immune system.

So remember: Eat only when you feel hungry and when you do, opt for high-fibre meals that help stave off hunger for longer. Revel in the joy of having discovered a deeper meaning of the age-old cliché "do wakt ki roti" (two square meals a day).

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