



FAT CAMP

By Ankit Ajmera, Mumbai Mirror | Aug 14, 2013, 12.00 AM IST



Shekhar Kapur wants actors with only 5 per cent body fat, but your biggest enemy in the weight-loss battle plays a key role in keeping your body good-looking.

For his next film, which explores a water crisis in a futuristic world, filmmaker Shekhar Kapur has made an express demand saying he wants to cast only 'incredibly thin' actors with only 'five per cent body fat'. While Kapur's email may make actors and actresses hit the gym and avoid food with a vengeance, fitness experts Mumbai Mirror spoke to, explain that a drastic skew in fat to body ratio can have serious consequences for the body.

Much like the other organs - bones, muscles, organ tissue - fat is an essential component in the human body and is needed for healthy day-to-day functioning.

Dr Poonam Bajaj, a physiotherapist at Mind Temple in Juhu, says adult women in the 18-38 age group should have a body fat percentage of 21-32, while men in the same age group should keep it in the 8-20 per cent range. A woman's anatomy has a higher bodyweight ratio because of fat stored in the breasts, pelvis, hips and thighs.

Body essentials

While fat has become the biggest enemy in the weight-loss battle, medical experts say that fat — which the body breaks into fatty acids and glycerol - is needed for a healthy and better-looking body.

While fatty acids are responsible for the efficient functioning of all major body tissues, including cardiac muscles, skeletal muscles and the central nervous system, glycerol is converted into glucose by the liver, which stores it as energy.

Dr Bajaj says the fats are responsible for keeping the skin and hair healthy. She explains fatty acids help maintain stable membranes around skin cells, keeping them buoyant. Additionally, fat soluble vitamin A helps produce sebum, an oily substance which keeps hair from drying and breaking off.

Fat also forms a layer under the skin, insulating the body against cold weather. Body fat also protects the internal organs, by cushioning them during physical movement. "Additionally, fat forms a covering of myelin, a fatty substance, that insulates nerves and helps transmit brain impulses through the body," Dr Bajaj adds.

And the list doesn't end there. Dietician Sheela Tanna says that fat is required for the absorption of certain vitamins such as A (for good vision), E (which neutralises free radicals and keeps skin healthy), D (needed for strong bones and calcium absorption) and K (needed for blood clotting). "These are absorbed only in the presence of fat," she says.

Fat is the second biggest source of energy in the body after carbohydrates. Tanna says after about half-an-hour of exercise, the body switches carbohydrates and starts drawing energy from the fat reserves. "One gram of fat provides nine calories of energy, while the same quantity of carbohydrate or protein provides only four, which is why those who are fitness conscious consume fat in appropriate quantities," she adds.

If the fat percentage in the body drops below two per cent in men or 10 per cent in women, the experts say, the damage to the body is immeasurable. "The absorption of the vitamins may become limited, resulting in vision loss, brittle bones, organ damage, dull skin and hair, and impaired cognitive function. It will also lead to hormonal imbalances in both men and women by impacting the production of oestrogen and testosterone, thus affecting their sex drive," says Tanna.

Even an increase in the body fat percentage is no good. High blood pressure, gallstones, type 2 diabetes, osteoarthritis and heart problems are a common fallout.

Incidentally, Kapur isn't new to the five per cent brigade. Celeb trainer Samir Jaura says Farhan Akhtar, who he trained for *Bhaag Milkha Bhaag*, brought down his body fat percentage for the role. "Farhan was training six hours a day. Though we trained for 13 months, Farhan was brought down to five per cent only during for the last four months of his training, as this was the look needed on the camera. He had to give up rice, chapattis and bread. Instead, he relied on fruits and vegetables for carbs. But experts like me monitored Farhan's body. I wouldn't recommend regulars to follow his example," Jaura cautions. He adds that post the film, Akhtar has returned to rice and chapattis and maintains a healthy 10-12 body fat per cent.

WHAT'S YOUR NUMBER?

Mumbai's gyms use two methods to test body fat percentage:

» **Skin fold calliper:** A calliper is used to measure the thickness of body fat under the skin. The reading in millimetres is compared to a height/weight chart to arrive at the body fat percentage.

» **Bioelectric impedance analysis:** A person is weighed, their height, age, gender and other physical characteristics are also taken into account. Electrodes are attached to various parts of the body and a small electric signal is circulated. BIA measures the impedance or resistance to the signal as it travels through the water that is found in muscle and fat. The more muscle a person has, the more water their body can hold. The greater the amount of water in a person's body, the easier it is for the current to pass through it. The more the fat, the more resistance to the current.