HIGH FIBRE DIETS Can Lead To Bloating

"IT'S POSSIBLE THAT IN THIS STUDY, the protein-rich version of the diet caused more bloating because it caused more of a healthy shift in the composition of the microbiome,"

Agencies

People who eat high fibre diets are more likely to experience bloating if their high fibre diet is protein-rich as compared to carbohydrate-rich, according to a new study.

For the study, published in the journal Clinical and Translational Gastroenterology, the researchers from Johns Hopkins University analysed data from a clinical trial of high fibre diets.

"It's possible that in this study, the protein-rich version of the diet caused more bloating because it caused more of a healthy shift in the composition of the microbiome," said study co-senior author Noel Mueller from Johns Hopkins University in the US.

"Notably, the protein in these diets was mostly from vegetable sources such as beans, legumes, and nuts," Mueller added.

High-fibre diets are believed to cause bloating by boosting certain populations of healthful fibre-digesting gut bacteria species, which produce gas as a byproduct.

The findings thus also hint at a role for "macronutrients" such as carbs and proteins in modifying the gut bacteria population--the microbiome.

In the study, the researchers examined a dietary clinical trial that was conducted in 2003 and 2005 in Boston.

Known as the Optimal Macronutrient Intake Trial to Prevent Heart Disease (OmniHeart), it included 164 participants who had above-normal blood pressure.

They were assigned to three different diets over consecutive six-week periods separated by two-week "washout" intervals during which participants returned to regular eating habits.

The diets were all considered high-fibre, low-sodium "DASH" diets, and had the same number of calories, but varied in their macronutrient emphases: a carbohydrate-rich version was, by calories, 58 per cent carbohydrate, 15 per cent protein, and 27 per cent fat; a plant-protein-rich version was 48 per cent carbs, 25 per cent protein, 27 per cent fat; and a fat-rich version was 48 per cent carbohydrate, 15 per cent protein, and 37 per cent fat.

The primary results of the OmniHeart trial, published in 2005, suggested that the plant-protein-rich and fat-rich diets were the most effective in reducing blood pressure and improving measures of blood cholesterol.

In their new analysis of this data, they examined how participants' reports of bloating--which were among the secondary data collected in that trial--varied as participants ate the three OmniHeart diets.

A key finding was that the prevalence of bloating went from 18 per cent before the diets to 24, 33, and 30 per cent, respectively, on the carb-, protein-, and fat-rich diets--indicating that these high fibre diets did indeed appear to increase bloating.

The researchers also analysed the relative changes among the diets, and linked the protein-rich diet to a significantly greater chance of bloating--roughly 40 percent greater--in comparison with the carb-rich diet.

The results suggest that substituting high quality carb calories, such as whole grain, for protein calories might reduce bloating for those on high fibre diets, making such diets more tolerable.

Weight Loss Surgery May Improve Breathing Issues

Agencies

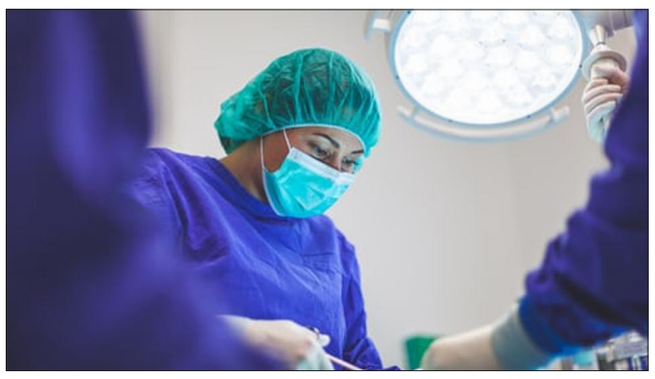
Researchers have revealed that Bariatric surgery and weight loss appear to reverse some of the negative effects of obesity on the respiratory system.

Known effects of obesity on the respiratory system include increased respiratory work, along with compromised airway resistance and respiratory muscle strength, which may all contribute to restrictive pulmonary function impairment.

As an imaging technology that provides detailed pictures of the lungs and airways, CT has great potential to improve understanding of obesity's impact on the respiratory system.

Until now, however, there have been few CT studies evaluating obesity's effects on the lungs and the trachea, often referred to as the windpipe.

"For the first time, this study has demonstrated changes in the CT morphology of large and small airways that improve when individuals lose weight. These features correlate with an improvement in patient symptoms," said study lead author Susan J. Copley from Hammersmith Hospital in London.



For the study, published in the journal Radiology, the research team evaluated changes in the respiratory systems of 51 obese individuals who underwent Bariatric surgery, a treatment for obese patients who haven't responded to other weight loss approaches.

The procedure reduces the size of the stomach. All participants lost weight post-surgery with a mean body mass index decrease of 10.5 kg/m2.

The researchers used CT to measure the size and shape of the trachea and assessed air trapping, a phenomenon in which excess air remains in the lungs after exhaling, resulting in a reduction in lung function.

Air trapping is an indirect sign of obstruction in the small airways of the lung.

When the researchers compared results at baseline and six months after Bariatric surgery, they found that surgery and weight loss were associated with morphological, or structural, changes to the lung and trachea.

Post-surgery CT showed reductions in air trapping and a lower incidence of tracheal collapse.

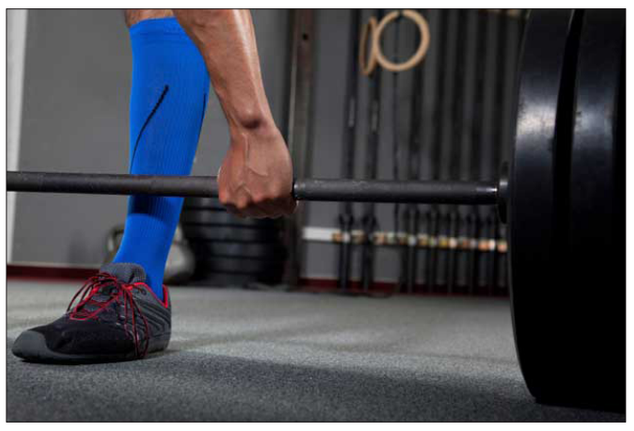
Change in the extent of CT air trapping was the strongest predictor of improvement in dyspnea, or shortness of breath, the study said.

The results suggest that there may be a reversible element of small airway inflammation related to obesity and that reversal of this inflammation correlates with improvement in symptoms. The findings also point to CT as a potential marker of this inflammation.

"CT is a useful morphological marker to demonstrate subtle changes which are not easily assessed by lung function alone," Copley said.

The Importance of Building Lower Body Strength

Except for a few handfuls of the gym, a major portion of the gym-goers dislikes the leg day so much so that the leg days most popularly on Saturdays and is therefore often conveniently skipped. These people could easily be pinpointed in the gym as they are the ones who are invisible from the waist down. Well to be fair all of us face the thought of whether we want to work out our lower body or just find some excuse to skip it. Now while the ramifications of skipping leg day may at the moment seem to you as innocuous as ignoring your well-wishers' advice to get a foot massager on rent for your comfort, however, the consequences may be much more serious. So we will share with you some reasons why you should never skip leg day and always keep your lower body strength on priority:



Increased lower body strength equates more muscle

Those deadlifts painful and as boring as they may seem directly lead to bigger muscles all over your body. The reason for this is that big muscles are directly proportional to your T levels. Testosterone is primarily a steroid hormone that your body naturally produces and is very important for the health of men and is responsible for increments in muscle mass and strength. The exercises like squats and deadlifts involve the larger muscle groups leading to an increase in testosterone levels. Hence the lower body strength directly translates to your ability to build larger muscles in the entire body.

More calories could be burnt

The hind muscles technically referred to as the gluteus maximus is size-wise the biggest muscles of the body. Therefore it is very intuitive to imagine that to work out these muscles you need to burn more energy which translates to your body burning more calories. Hence a good workout session involving compound exercises like squats or deadlifts would burn more energy if compared to a workout session wherein no lower body workouts are involved.

Extremely helpful for big lifts

For any kind of heavy lifting involving any muscle group and for your general body power, you need to have good strength in you. Little is known to all that we derive a major portion of our body strength from our legs and our core. So for instance even when you are doing bench presses or barbell curls, your lower body strength is extremely crucial as the lower body needs to be engaged to facilitate a stable platform for you to pump from.

Hence now that we have established the importance of lower body strength we sure do hope you work towards building it. The process of building lower body strength can start from a simple step as getting yourself a treadmill for rent and then building your strength and stamina bit by bit before moving on to the heavy-duty exercises.

Uk Is Most Popular Study Destination Overseas

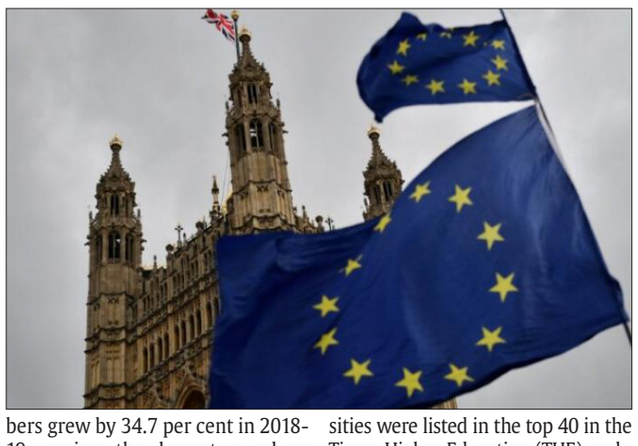
Agencies

Overseas students are increasingly selecting London as their study destination of choice; this is especially true for Indian students, with 2018-19 representing a record year for international students in the UK capital in the past decade.

According to new data from the Higher Education Statistics Agency (HESA), the total number of international students grew 5.8 per cent, representing uplift in overseas students for the sixth consecutive year, reinforcing London's reputation as a top higher education destination on the global stage.

The total number of international students at London's universities in 2018-19 was 125,035, up 5.8 per cent from 2017-18 and rise on last year's growth rate of 5.3 per cent, demonstrating the UK capital's growing appeal for prospective students.

It marks an impressive period of growth for India, which returned to being London's third-largest international student market after falling to the fourth position three years earlier. Indian student numbers grew by 34.7 per cent in 2018-19, seeing the largest numbers since 2011-12.



However, China remains London's largest international student market, with 25,650 students enrolled at universities in the UK capital.

Applications may have been encouraged by the recent reintroduction of the two-year post-study visa for international students by the UK government, allowing overseas graduates a longer period of time to look for employment after their studies.

In September, four London universities were listed in the top 40 in the Times Higher Education (THE) rankings, more than any other city in the world. Universities included were Imperial College (10), University College London (15), London School of Economics and Political Science (27) and King's College London (36).

Best student city

London holds the crown as the world's best city for students, according to the QS Best Student Cities Ranking, by global education consultancy QS Quacquarelli Symonds. London beat international cities Tokyo (second) and Melbourne (third) to first place for the second consecutive year in July 2019.

"I'm delighted to see so many young people from across the world choosing London to pursue their higher education. In doing so, they're becoming part of a global community that has produced some of the world's most exciting and innovative companies. With its world-leading universities, thriving business ecosystem and unrivalled cultural landscape, studying in London offer the opportunity to be part of a city at the forefront of creativity and innovation", said Rajesh Agrawal, Deputy Mayor of London for Business.

"These new figures are a resounding endorsement of our world-leading universities and our great city. Whether it's fashion or financial economics, accountancy or art history, prospective international students know when they choose London; they are choosing a first-class education and a cultural experience like no other.

We look forward to welcoming more international students to the capital this year!" said Lalage Clay, Director of Education and Talent at London & Partners which runs Study London.

Sugary Diet Can Promote Serious Gum Infections

Agencies

Sweet soft drinks and lots of sugar increase the risk of both dental cavities and inflammation of the gums -- known as periodontal diseases, say researchers.

"Sugar hasn't traditionally been associated with the development of periodontal diseases," said study lead author Bente Nyvad from Aarhus University in Denmark.

According to the researchers, back in the 1970s, two American researchers suggested that a diet, which was high in carbohydrates, could be a common risk factor for both dental diseases and inflammatory diseases such as diabetes, obesity and heart disease, but this knowledge was largely forgotten again.

The current study, published in the Journal of Oral Microbiology, suggests that a sugary diet can also promote periodontal diseases.

"Today, there is general agreement that the above-mentioned diseases are associated with a high sugar intake. However, a hypothesis that could link and explain the two major dental diseases, caries and periodontitis, has been lacking," Nyvad said.

In the new research project, the researchers have arrived at a common hypothesis for the development of the two major dental diseases.

The hypothesis is based on the biochemical processes that take place in the bacterial deposits on teeth when you add copious amounts of nutrients to the bacteria, particularly when you eat sugar.