

## **Do you lose weight when you fart?**

Fart proudly, proclaimed Benjamin Franklin in 1781, and who am I to argue? It is a natural bodily function and all you need are intestines and an anus - so, yes, even the fairer sex break wind. The main carbohydrate responsible for flatulence is raffinose, a sugar which is commonly found in vegetables such as cabbage and broccoli and which our guts find hard to digest.

When I started thinking about farts, I soon realised there was so much I didn't know about the subject. After all, if the principal constituents of a fart are nitrogen, hydrogen, carbon dioxide, oxygen and methane – the smelly component is the 1% of hydrogen sulphide – gasses all, and gasses have mass, what is the volume of an average fart and has anybody bothered to find out? Well, after some diligent research in the nether regions of the internet I struck gold and I think the results are worth repeating.

I found reference to an article in the ever popular journal, Gut, which described the experiments of gastroenterologists from the Human Gastrointestinal Physiology and Nutrition department of Sheffield's Royal Hallamshire hospital in 1991. They took ten volunteers and fed them with 200 grams of baked beans in addition to their normal diet. The volunteers' flatulence was collected via rectal catheters and to ensure that there was an air-tight seal between the catheter they were required to sit in a bath of water whilst passing wind.

Methodology having been established we pass on to results. Our researchers found that the amount of gas produced over a 24 hour period varied widely, between 476 to 1491 millilitres, with a median result of 705. There was no variation between the sexes in the amount passed and farting tended to be more robust after eating. A single fart, regardless of sex, body size or time of day, has a volume of between 33 and 125 millilitres, with a median of 90. Incidentally, although not part of this

experiment, a fart has been recorded as reaching a speed of ten feet per second. The study found that those on a low-fibre diet reduced most of the fermentation gases which would have been expelled and their average flatulence volume was a paltry 200 millilitres.

For the enquiring mind, this raises a further question which the Sheffield researchers did not address – do you lose weight after a fart? I regret to say, I have failed to find a definitive answer to that question. There was a post on Facebook, a most unreliable source of information in my experience, suggesting that you burn 67 calories per fart. For those who think I may have uncovered the perfect form of weight loss, the website Fat Loss School is ready to pour a bucket of cold water over the idea. They claim that when you fart, the muscles relax and the pressure in your bowels does all the work in expelling the gas. The only way you would achieve a measurable figure in the calories burned whilst farting would be by straining yourself to the limit.

So now we know!

### **Why is the penis on an Ancient Greek statue so small?**

In the days before the internet and when pornography was a top shelf affair, one way that was open to appreciate the human form in all its glory was to pore over dusty volumes of Greek and Roman statuary. The fact you were mugging up on classical civilization gave your prurient interest a patina of respectability. But to an adolescent with an enquiring mind the exercise could raise more questions than it answered, particularly why are the penises that have survived the ravages of time so small and why do the statues exhibit remarkable scrotal asymmetry? Fortunately, help was at hand.

Starting with the penis, the Ancient Greeks weren't as obsessed with size as we seem to be these days. Where statues exist with large penises, they are usually of grotesque characters such as

satyrs or the god Priapus who was cursed by Hera with a permanent erection, impotence and ugliness and ejected from Olympus. Large penises were associated with qualities such as foolishness, lust and ugliness, not the sort of attributes you want to endow your gods and heroes with. A small penis, on the other hand, was a sign of rationality and that your appendage was in proportion with the rest of your body. It was the epitome of the perfect male form.

The comedian, Aristophanes, as often was the case, was the man to go for confirmation of this view. He wrote in the Clouds, *“if you do these things, I tell you, and bend your efforts to them, you will always have a shining breast, a bright skin, big shoulders, a minute tongue, a big rump and a small prick”*. It was not the size, it seemed, it was what you did with it that counted. In a survey of penis size conducted in 2012 of the representatives of 116 countries the Koreans (North and South) had the smallest penises (at 3.8 inches) whereas the largest were those from the Republic of Congo (at 7.06). The British member came in at number 79 at 5.5 inches.

I remember when I went to be measured for my first bespoke suit being flummoxed by the Mr Humphries of the town enquiring how I dressed and realising that “underpants, shirt then trousers” was not the answer he was looking for. In 1960 K S F Chang revealed that in right-handed men the right testis tended to be higher than the left whereas in left-handed men it was the left that was the higher of the two.

Like any man with an enquiring mind, he wondered whether this was anything to do with weight, in other words in right-handed men was the left testis the heavier? An empirical approach was adopted and the testes of cadavers were measured for weight and volume. The results were surprising. In right-handed men, the right testis which was the higher testicle was the heavier and of greater weight than the left. So even though it hung higher it was the heavier of the two. For those who were wondering, the respective weights are 9.95 grams and 9.36 and volumes 9.69cc and 9.10.

As far back as 1764 the aptly named J J Winckelmann noted testicular asymmetry in Greek and Roman statues, reporting “*the left testicle is always the larger, as it is in nature*”. In a well-balanced survey reported in Nature in 1976 Chris McManus observed the scrotal asymmetry of 107 sculptures of antique origin or Renaissance copies and found that in the largest group the right testicle was placed higher but the left is larger and in the second largest group the left is the higher, but the right the larger. The artists had made the same error as Winckelmann, assuming, probably, that the lower hanging testis must be the heavier.

So now we know!

