

THE SCIENCE BEHIND SUPERHEROES

Ever wanted to know what it takes to be a superhero? How many calories you'd need to consume to reach incredible speeds or how much strength you'd need to build to overpower Superman? All those questions and more are answered – we've revealed the science behind superheroes and now it's up to you to start the construction of your lab.

SUPERMAN

Superman's super strength means that, on earth, he can lift up to **800,000 tonnes**. That's 8 million times more than the average bench presser!

LIFT!

Therefore lifting a 1kg bag of sugar would be the equivalent of **five, two tonne cars** on Earth.

SPIDERMAN'S FEET

Scientists are studying the feet of Geckos to see how they cling to walls. It is unlikely this will ever allow humans to have this ability as when an organism's size is doubled, it's mass is squared so gravity is exerting proportionally more force upon it.

BATMAN

If Batman actually jumped from a **152m high building...**

JUMP!

GLIDE!

...the **4.6 meters** of electrically charged wingspan would allow Batman to glide for **349m at the speed of 109kph** before...

...plummeting to the ground at **80kph**.

CRASH!

STORM'S POWER

When Storm sets off a lightning bolt, the energy released is about 500 million joules, equivalent to 120,000 calories of energy. In order to produce a single bolt, Storm would have to eat 60 times the recommended daily calorie intake. That would mean eating approximately 522 Big Macs a day.

FLASH

Running faster results in an increase in oxygen intake. It would take Flash two million years to use the **entirety of the Earth's oxygen supply**.

SUCK!

If he ran at just **1% of the speed of light** he would need to burn **75 billion calories**. This equates to eating **146,484,375 Mars bars**.

Yummy!

WONDER WOMAN'S LASSO OF TRUTH

William Moulton Marston, the psychologist who created Wonder Woman, was the inventor of one of the first lie detector tests. It monitored blood pressure and observed changes to physiology of the subject telling a lie. It was this invention that later inspired Marston to create the Lasso of Truth, Wonder Woman's weapon that forces those she captures to tell the truth.

ATTRIBUTIONS & SOURCES

Superman, Batman, & Flash superhero characters
Jaycey Celdarin (huatlet.deviantart.com)

Car, hamburger, & spider web icons
Denle Frezzato, from The Noun Project (thenounproject.com)

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