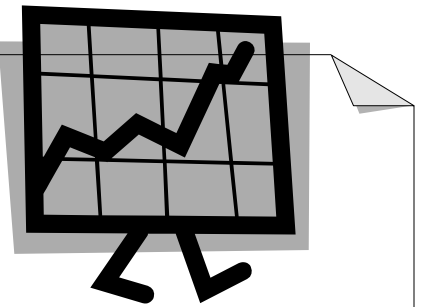




Statistics – What Do They Really Mean? By Jacqueline Roy



Every day we are bombarded with stats – they’re in newspapers, on the radio, in our textbooks...

So many decisions seem to be made based on them! But are all stats based on sound science?

Which ones can we trust? Are some stats being spin-doctored by the media? If so, how can we tell?

Here are some sure-fire ways to distinguish a super stat from a phoney one.

When examining any stat, always ask yourself:

A. Who collected this data and for what purpose?

Is your information coming from a “think tank” or some other unreliable source? To be safe, ask a teacher or parent if they know anything about this organization. Remember: Some statistics companies thrive on hiding their biases under a professional façade!

B. Do you understand the definitions and science behind the data?

Think about each term used in the statistic. If we are talking about “adults,” who are they exactly? Ten of someone’s closest friends? People between the ages of 18 and 25 in Alberta? A large sample of adults of all age groups from all over North America? How might these definitions influence the outcome? Talk to your friends for ideas.

C. Is this data being spin-doctored?

Even if the data is sound, a newspaper or group could be using it to infer something that stretches the truth, or simply is not true at all. Once again, ask around to see what people’s views are. Is a paper known to often push a certain point-of-view?

9 out of 10 doctors recommend using Sensogel for sensitive teeth. If you have problems eating ice cream, you better get yourself a tube!

Let’s say you heard the statement above during a commercial break while watching your favourite TV show, The Simpsons.

Let’s use the three questions above to determine if it is reliable:

A. Sensogel probably collected this data themselves. Their goal is to sell their product; we better keep our eyes open for biases!

B. Who are these “doctors?” Are they ten private doctors that get paid to endorse the product, or are they a large, reliable sample of all the dentists in the world?

C. Even if Sensogel didn’t collect their own data, they might be leaving things out on purpose. What is meant by “recommend?” That Sensogel was recommended over other toothpastes for sensitive teeth, or over regular toothpastes only? For all we know, it could be recommended over brushing with sugar!



Lots of stats are sound and reliable; others are just plain rotten. Be a smart consumer: think before you swallow something whole. Always subject statistics to the questions above, no matter how sound they seem at first.