**Absolute Risk**

is the likelihood of an event occurring under specific conditions

For instance, the chance of a person developing heart disease is **based on factors** such as:

- Age
- Physical activity
- Sex
- Genetics
- Diet

Commonly expressed as:

- A 1 in 10 chance of developing heart disease
- A 10% chance of developing heart disease

**Relative Risk**

is the likelihood of an event occurring in a group of people compared to another group with different behaviours, physical conditions or environments

For instance, meat consumption expressed as:

- Meat eater vs. vegetarian
- Sedentary vs. physically active people
- Overweight vs. normal body weight
- Low income vs. high income

An 18% increase in risk of bowel cancer

**Relative Risks** alone do not tell the full story...

If absolute risk is 1 in 10...

- Risk increases to 2 to 10

If absolute risk is 4 in 10...

- Risk increases to 6 to 10

**Absolute Risk** numbers are needed to understand relative risks!

Example: processed meat and bowel cancer

What does a 18% increased risk of bowel cancer really mean?

Estimated lifetime risk of developing bowel cancer if you eat 50g/day of processed meat

1% absolute risk

Absolute risk is 5.6%

Absolute risk is 6.6%