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 the absolute risk is 1 in 10...

- ...risk increases to 2 to 10

If the absolute risk is 4 in 10...

- ...risk increases to 8 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 50 g/day of processed meat

Relative risk increases by 18%

Absolute risk is 5.6% + 1% absolute risk = Absolute risk is 6.6%