ABSOLUTE RISK

is the likehood of an event occuring under specific conditions

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

age

sex

diet

physical activity

genetics

commonly expressed as:

a 1 in 10 chance
of developing heart disease

a 10% chance
of developing heart disease

Relative risks alone do not tell the full story...

If **absolute** risk is 1 in 10...

50% increase

...risk increases to 2 to 10

If **absolute** risk is 4 in 10...

50% increase

...risk increases to 8 to 10

RELATIVE RISK

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

meat eater **vs** **vegetarian**

sedentary — physically active people

overweight — normal body weight

low income — high income

for instance, meat
consumption expressed as

an 18% increase in risk
of bowel cancer

Absolute risk numbers are needed to understand relative risks!

Example: processed meat and bowel cancer
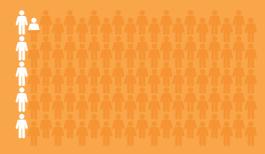What does a 18% increased risk of bowel cancer really mean?

estimated lifetime risk
of developing bowel cancer

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%**