

## Breast Cancer UK statement on Organic Food

There is insufficient evidence to conclude that consumption of organic food, compared to conventionally grown produce, offers protection against breast cancer. However, as some pesticides are oestrogen mimics which may increase breast cancer risk, an association is feasible (1).

Based on the precautionary principle, Breast Cancer UK recommends consumption of organic produce (where possible) as organic food contains less pesticide residues compared to non-organic produce. This is because pesticide use is prohibited (largely) in organic farming (2).

Monitoring of pesticide residues by the UK Department for Environment, Food and Rural Affairs has found pesticide residues are present in many fruits and vegetables available in the UK and EU (3). For example many fruits contain high levels of chlorpyrifos, a pesticide known to be oestrogenic and promote mammary tumours in rodents (4). Certain pesticides are known to be endocrine disrupting chemicals which mimic oestrogen and so may increase breast cancer risk (5). Furthermore, many pesticides have not been studied for their endocrine disrupting effects in humans, or in the presence of other endocrine disrupting chemicals (6, 7).

Currently there is not enough evidence to draw firm conclusions about whether organic food reduces risk. Findings of a 2014 epidemiological study did not support the hypothesis that breast cancer risk is reduced with lower pesticide exposure (8) however two recent epidemiological studies (from 2018 and 2019) do suggest that consumption of organic foods may lower risk (9, 10).

In summary, some studies suggest consuming organic food is linked to reduced breast cancer risk, but most find there is no association (8, 9, 10, 11).

**BCUK Tip** “Always wash your fruit and vegetables under running water, in order to help wash off pesticide residue. This can also be removed mechanically by brushing or rubbing with a cloth”.

### References:

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