



## Undernutrition increases the risk for developing tuberculosis (TB)

### Evidence in numbers



51 studies | 27 million participants | 6 WHO regions.

### Authors' recommendations

- Policies that aim to reduce the burden of undernutrition are needed, not only to relieve human suffering due to undernutrition, but also as an important part of the critical measures to end the TB epidemic by 2030.
- Additional large population-based studies are needed to provide high-certainty estimates of the risk across different settings, including low- and middle-income countries of World Health Organization (WHO) regions.
- Further studies on children and adolescents that uses state-of-the-art methods for diagnosing TB, would provide more up-to-date information relevant to practice and policy.

Franco JVA, Bongaerts B, Metzendorf MI, et al. Undernutrition as a risk factor for tuberculosis disease. Cochrane Database of Systematic Reviews 2024, Issue 6. Art. No.: CD015890. DOI: 10.1002/14651858.CD015890.pub2. Accessed 10 February 2026.



### The Evidence

Studies compared people with, and without, undernutrition over time and investigated how frequently each group developed TB



- Undernutrition probably increases the risk of TB two-fold in the short term (< 10 years) and also in the long term (> 10 years).
- Most studies were in adults, four in children, and three in children and adults combined.



- On average, the studies followed people for 3.5 years.

### Key messages



- Undernutrition **doubles the risk** of getting sick due to TB.
- These results apply to the **general adult population**; the risk for other groups, such as adolescents and children, is uncertain.

### About Cochrane South Africa

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