

Microbiological hazards

- FRUIT AND VEGETABLES ARE HEALTHY
- FRUIT AND VEGETABLES CAN BE A SOURCE OF FOODBORNE INFECTIONS
- MICROORGANISMS (FUNGI, BACTERIA, VIRUSES) ARE EVERYWHERE
- MICROORGANISMS ARE ESSENTIAL FOR THE LIFE CYCLE (E.G. DEGRADATION AND DIGESTION OF ORGANIC MATERIAL)
- SOME SPECIES ARE PATHOGENIC AND POSE A PUBLIC HEALTH RISK
- PEOPLE AND ANIMALS ARE NATURAL CARRIERS OF MICROORGANISMS (INCLUDING THE PATHOGENIC ONES)
- IT IS IMPOSSIBLE TO KILL ALL HARMFUL BACTERIA ON FRUIT AND VEGETABLES (WHICH IS OFTEN EATEN RAW)
- CONDUCT RISK ASSESSMENT TO IDENTIFY SOURCE OF CONTAMINATION AND DETERMINE CONTROL MEASURES

SOURCES

CONTROL MEASURES

People

- Can carry and disseminate pathogenic microorganisms
- Identify and analyse risks and hazard
- Handle the product directly

Water

- Could be contaminated and spread the contamination
- In every different application of water
- Identify and analyse risks and hazards

Animals

- Carry and disseminate contamination
- Identify and analyse risks and hazards

Animal manure

- Is contaminated
- May come in contact with edible parts of produce
- Identify and analyse risks and hazards

Equipment, materials and facilities

- Can be contaminated and/or disseminate contamination
- Identify and analyse risks and hazards

No staff with abdominal complaints

Wash hands thoroughly

No dirty clothing

Cover hair with hair net

No jewellery

No smoking

No water use nearby sewer discharge or overflow

Avoid birds in and nearby water source

Avoid livestock in and nearby water source

Frequently test water based on results of risk analysis

No (domestic) animals near produce

Avoid pests near produce

Avoid contact with edible parts of produce

Use treated manure

Keep tools clean and disinfect regularly

Keep facility clean and disinfect regularly

Keep equipment clean and disinfect regularly

Develop and uphold a cleaning schedule

IMPACT OF CONTAMINATION ON THE ENTIRE CHAIN



WASH YOUR HANDS THOROUGHLY AFTER:

- Coughing
- Touching spoiled produce
- Visiting the toilet
- Eating and drinking
- Smoking
- Using your mobile phone

DO NOT FORGET TO WASH: between your fingers, under your nails, the tops of your hands

Colophon

This poster was made on behalf of:



Together, these organisations form the core team of the Risk Management and Crisis Management group for food crop horticulture. For more information, tools and calamity hotline, see www.TuinbouwAlert.nl.

This poster is designed to help you develop your own risk analysis. It is possible that more control measures beyond the general guidelines that are outlined in this poster can emerge from this analysis. Every entrepreneur in the fruit and vegetables sector is responsible for developing their own adequate approach.