MicroTrumps Dump Game

Aim:
Start with 14 cards and dump them in the correct order.

Students will begin to become familiar with the names of major helpful and harmful microbes, they will pick up factors that affect microbial growth and that cause concerns for food safety.
Quiz using cards
MicroTrumps cards

- Microscopic photo
- Name of microbe
- Conditions the microbe can tolerate (temperature, pH)
- Danger Score 1 to 12
- Tattoo images: relate to microbe
- Information
- Shape of microbe
- Where it is found
- Who it affects

Card number 1 - 14
Quiz using MicroTrumps – step 1

Lay the **14 cards** out on the table – any order

Dump two microbes

- That do **not** cause disease – that are helpful
Key point

Some microbes are known as ‘helpful bacteria’
MicroTrumps – step 2  12 cards left

Dump 2 microbes with

• Danger score of 12 but with the same name

• Why are they different ?
Key point

Bacteria can adapt to tolerate differing conditions e.g. cold or medium temperatures
MicroTrumps – step 3  10 cards left

Dump 2 microbes that are

• Viruses
Key Points  Viruses live in cells and can survive on dry surfaces
Dump a microbe that:

- Is dangerous for infants and the elderly
- Is named after a Danish bacteriologist called Carl Olaf ‘Sonne’
- Lives in sewage
**Key points**

Disease also called Dysentery.
Spreads through contaminated water, dirty hands.
MicroTrumps - Step 5

Dump a microbe that

• has a danger score of 12
and
• Is easily transferred from raw meat to cooked meat
Key points

Separate all raw and cooked food.
Use temperature-controlled storage
MicroTrumps - Step 6  6 cards remain

Dump a microbe that can:

• Survive in the refrigerator
• Can affect pregnant women
• Has flu-like symptoms
Key point  Avoid certain foods while pregnant
MicroTrumps - Step 7

Dump microbes that

• Survive in lemon juice or vinegar with a pH acid strength of 3?
Key Points

Pickling is a way preserving foods. Making food acid causes microbial activity to stop.
MicroTrumps - Step 8 still 5 cards remain

Dump:

• Microbes that form spores
Key points

High temperatures are needed to destroy spores
Cool food quickly
MicroTrumps - Step 9  3 cards remain

Dump:

• Microbes that can tolerate water activity below 0.8
Key Points: NO CARDS DUMPED
Microbes other than viruses cannot survive dry conditions.
Dehydration is a method of preservation
MicroTrumps - Step 10  3 cards remain

Dump

• A microbe that is not rod or spiral shaped
• That has a quick onset time
Key point

Quick onset time means you will remember what you ate that made you ill. A round microbe.
MicroTrumps - Step 11  2 cards remain

Dump a microbe that:

• Is a focus of the Food Standards Agency advert

• That could be spread by washing raw chicken
Key points

Do not wash chickens or turkeys before cooking
Cross contamination is a cause of food poisoning
MicroTrumps - Step 12

Dump the final card if it is:

• A microbe that lives in the gut of poultry?
• Might thrive in undercooked meat?
Key points

- Store raw meat below cooked foods.
- Cook chicken thoroughly.
Lay all the cards out again

Revise the key points as you lay the cards out

Name some common food poisoning microbes

Discuss hygiene rules that help prevent cross contamination