3. How to express comparison?

<u>Introduction:</u>

Comparison expression is one of the items of relating ideas and objects to each other. To compare is to take two things face to face and find either differences or similarities. Comparison is frequently expressed using comparative or superlative forms.

1. <u>Terms to indicate superiority :</u>

(+) BIG/impact	(+) HIGH	(+) GOOD
• increase • grow • expand • lengthen • widen • enlarge • extend • spread•	• to raise • lift • heighten •	• improve • boost • enhance • enrich

2. <u>Terms to indicate "inferiority":</u>

(-) BIG / (–) HIGH	(-) GOOD
• decrease • reduce • lessen • shorten • lower •	• worsen • weaken • deteriorate

Examples:

> .[16] For instance, oral *Actinomyces* and *Lactobacillus* spp. can inhibit *Candida albicans* biofilm formation.[16,17] Conversely, *C. albicans* combined with *Streptococcus* spp. can co-increase their virulence in invasive candidiasis, early childhood caries or peri-implantitis.[18-22]

"The authors compare the effects of micro-organisms associations on the behavior of candida albicans (biofilm and virulence): the comparison aspect was:

(actinomyces & lactobacillus + candida) VS (candida alone) → (--) less of biofilm
(Streptococcus + candida) VS (candida alone) → (++) more virulence

> An early report indicated that the mortality rate among term and preterm neonates with omphalitis ranges between 7% and 15% [6]. More recently, it has been shown that the odds of all-cause mortality increased significantly in infants with redness of the stump that extended to the abdominal skin [7]. However, the risk of developing omphalitis has decreased remarkably with the increased rates of births in hospital, rather than home, setting.

"The authors compare the incidences of omphalitis in babies. The comparison aspect was:

(redness of the stump 'extended' (++big) VS (no extension) → (+++) more mortality
(birth at hospitals) VS (birth at home) → less mortality

> Besides that, improving detection specificity has also been one of the major challenges [33]. To achieve this, some studies have incorporated molecularly imprinted polymers (MIP) into the device to improve detection specificity [110]. MIP is generally a type of biomimetic materials that have attracted significant interest in food industry due to their favorable selectivity and sensitivity for target analytes, high physicochemical stability and long shelf life in addition to their cost-effectiveness. A recent study

"The authors compare the detection potential of a technique in terms of using molecular imprinted polymers (MIP), and to make it (+++) more good (quality).
The comparison aspect was:

((adding MPI) VS (no MPI) → (+++) good detection quality: it was more/much selective, sensitive, stable and cost-effective.

3. <u>Terms used as 'superlative':</u>

Superlative is the expression of the superiority of one thing above all other things in the same group. In current English, we usually add –er and –est to one-syllable words to make comparatives and superlatives: Old → Old**er** → Old**est.** if an adjective ends in - e, we add –r or –st : Large → Larg**er** → Large**st**.

Usually, in scientific language, we express the superiority of a scientific pattern with nouns. The choice of noun-usage is related to the needs of authors; between emphasizing the importance of a phenomenon above others issues, or the superiority of kind of results above other data (*see table below)*.

(+++) IMPORTANT	(+++) HIGH
• the chief • main • leading • foremost•	• the top • peak • tip

4. <u>Contrasted Ideas:</u>

The contrast is a clear (obvious) difference between two things put close together.

''Although'', ''***even though''***, ''***in spite of''*** and ''***despite''*** are all used to link two contrasting ideas or show that one fact makes the other fact surprising. After ''<u>in spite of</u>'' and ''<u>despite</u>'', we use a noun, gerund (-ing form of a verb) or a pronoun. After ''<u>although</u>'' and ''<u>even though''</u>, we use a subject and a verb.

In scientific language, contrast is not all ways about differences. The fact is that two ideas, results or patterns could be similar, not similar but compatible witch each other, or works in duals (*see table below*).

Similarity/dissimilarity	Compatibility	Duality
• it is like / unlike • similar to • the same as • equal to • in comparison • by contrast•	• to match • fit • suit • correspond•	• both • either/or • neither/ nor

Examples:

The device enables dried reagent storage, equipment-free amplification and rapid colorimetric detection with simple operation steps, offering a great deal of potential for food safety and quality control. Although all these efforts have successfully improved the simplicity, portability and usability of paper-based devices in food safety monitoring, the challenges of further simplifying user steps and multiplex detection should be addressed for practical applications.

"The authors contrasted two progress needs. They expressed that despite the offering advantages of the device, more achievements must be reached in terms of multiplex detection.
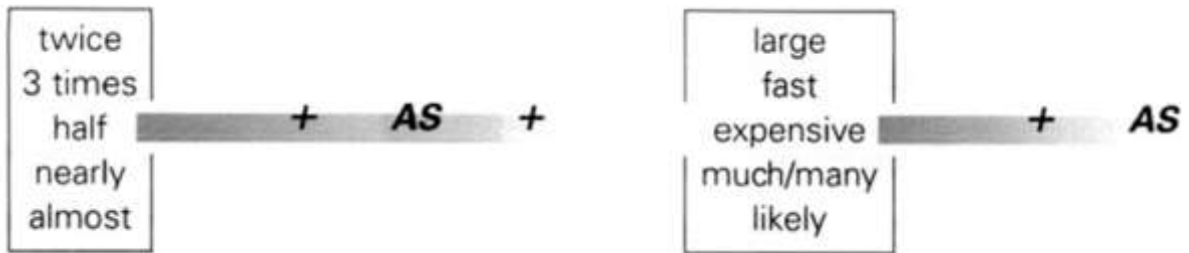
In another study, paper-based SERS device was developed by hydrophobic modification of filter paper with high sensitivity and reproducibility [62]. The filter paper was subjected to the hydrophobic treatment of alkyl ketene dimer to prevent the absorption of AgNP and sample solutions by the paper. Unlike conventional filter papers, the hydrophobic modified filter paper produced more SERS hot-spots consisted of AgNP clusters on the paper surface, resulting in a more sensitive detection of pesticides.

"The authors contrasted the method of using hydrophobic filter against the conventional method.

Biofilms need to grow onto a support, which can either be a solid material or an air-liquid surface (abiotic) or a cell culture (biotic).

They can combine fungal and bacterial reference strains, wild-type strains or mutant strains. The number of species ranges from two[31,69,79,80] to 11 strains.[74] To our knowledge, neither archaea, viruses nor parasites have been used in multispecies bacterial biofilm models.

5. <u>AS + as expression</u>

6. <u>Other patterns :</u>

Noun-shaped	Noun-like Prefixes
• a commensal-like tropism • a graph-shaped bacteria	• **OVER** : *to overload a circuit to* *overestimate the results* *to overheat an engine* • **UNDER** : *the meat is undercooked* *an underdeveloped country* *an understaffed research project*