Identifying Peptides in Complex Protein Digests:

Technical and Risk Considerations for Novel Proteins

24 October

Assessment of small peptides only needed where hazard identified

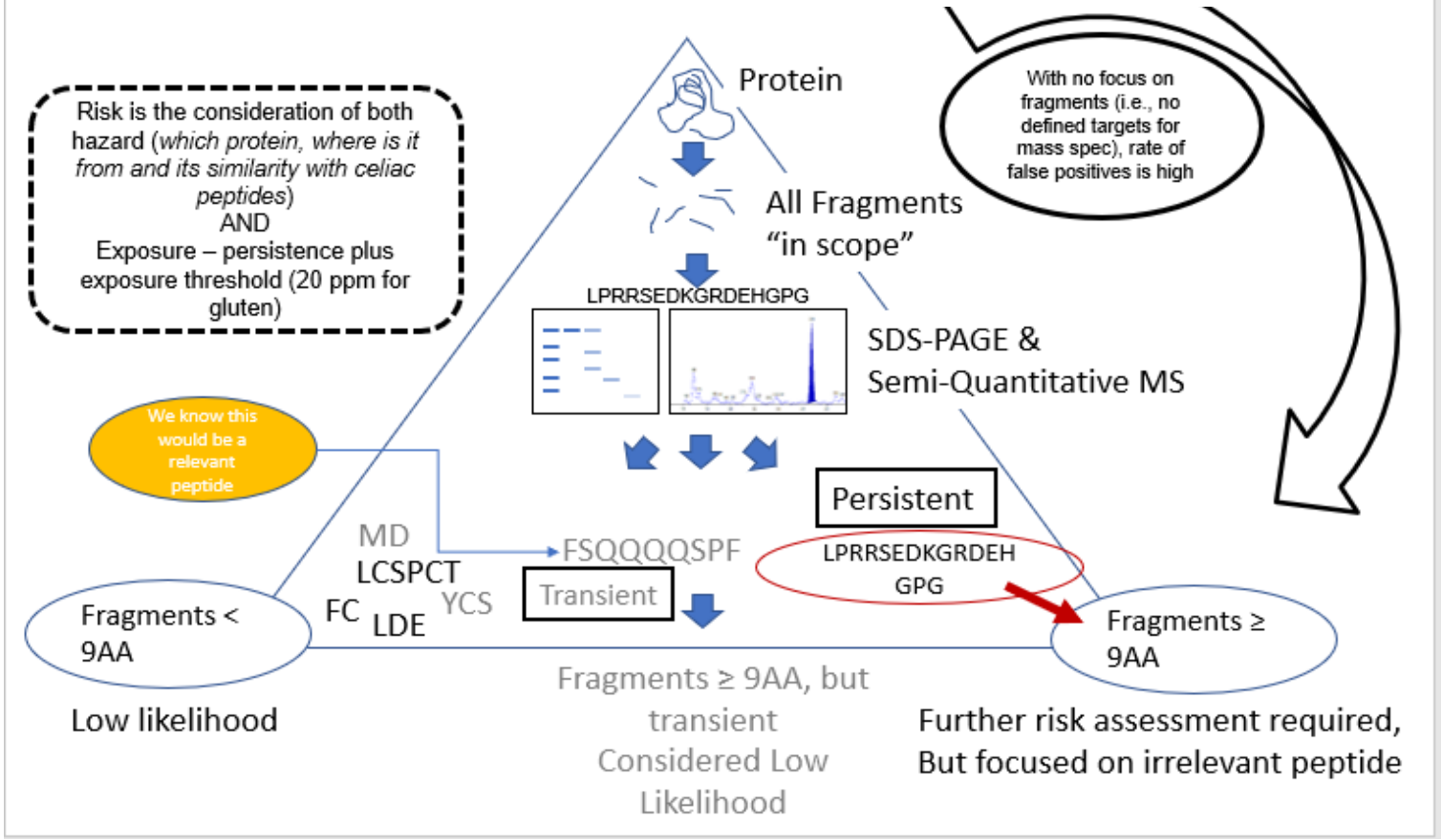
Risk is the consideration of both hazard and exposure. When the hazard is absent, exposure is not relevant

- Then, putative peptide identity by wet chemistry (i.e., Mass Spec) is out of context because digestion is **exposure context** and is not very useful for predicting a risk, without a hazard!

Digestion assay becomes informative and reduce technical challenges when used in conjunction with knowledge of hazards

A top-down approach for identity of peptides, without a focus on peptide target, is not feasible with SGF assay and limits accurate detection of relevant peptides

EDLCSPCTYCSFSQQQQSPFCLPRRSEDKGRDEHGPGLDE



Focused Assessment on relevant fragments of New Protein provides best knowledge and least chance of false positives or inability to detect

EDLCSPCTYCS**FSQQQQSPF**CLPRRSEDKGRDEHGPGLDE