# Natural Precision Fermentation: Looking for Specific Glycolytic Activities from Bacteria

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**ABSTRACT:**
Precision fermentation is deriving from classical biotechnology processes of production of pharmaceutical/chemical building blocks and food ingredients. Although a diversity of processes can be related to this concept, a dominant use of this term comes from technologists believing that Nature can be completely modified to serve humans. In this idea, precision fermentation's application can be to produce meat, milk or food oils from reactors using unrelated substrates and highly genetically-modified organisms (GMO). However, precision fermentation can also be employed in a more Nature-friendly way that can be used also when catalysts are consumed by humans. In this concept, biotechnological processes and biocatalysts are used to simplify transformation steps, making them more sustainable. In this part of biotechnology, especially for food, screening of natural biodiversity is preferred to GMO construction although, through a "precision screening", very specific starters are expected. This presentation will give some applications of "natural-precision fermentation" showing the numerous demands around glycoside hydrolysis to clean products from their antinutritional factors and off flavors or to increase the amount of some flavoring compounds. It will insist on the strategies of screening of these specific starters as this screening step is often the limiting step of this technology, especially when the biochemical and genetic characterizations of enzymes and glycosides are not very developed.