PLANT-BASED MEAT AND FISH ANALOGUES BY TWIN SCREW EXTRUSION

BRUNEL S. (1)
1 CLEXTRAL, FIRMINY, France

Plant-based products have evolved over the last couple of decades. Consumer expectations and awareness of the environmental impacts of meat and fish production have driven the development of alternatives for regular food. The protein fibration technology produces unique intermediate products, with fibrated internal structure similar to meat muscles. The strength of fibration can be adjusted by manipulating operating conditions: ingredients and formulation, equipment configuration. Texture profile of meat-like product can be further analyzed using instrumental texture analysis used in traditional meat products. The combination of complementary measurements such as tensile or shear strengths to measure firmness, elasticity, and/or chewiness allows describing the entire scope of texture of the fibrated protein by extrusion. This presentation will cover the latest developments in extrusion for meat and fish analogues.