

Texturized dairy proteins meet traditional Chinese food

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Introduction

Chinese cuisine is characterized by strong influences of different regions and their particular preferences. Overall, Chinese food captivates through its variety of different textures in combination with flavor and seasoning characteristics. Texturized dairy proteins (TDPs) are produced by extrusion technology and offer a wide variety of different textures. Whereas cheese products are avoided in traditional Chinese cuisine, TDPs seem to be perfectly suitable for an application in typical Chinese dishes thus integrating valuable dairy proteins into the Chinese diet under full consideration of the specific Chinese taste requirements.

Aim

TDPs were included in different typical Chinese food products and dishes to increase the intake of dairy proteins in the Chinese diet.

Methods

Experiments for producing TDPs by high moisture extrusion were performed at a pilot/production plant. Mixtures of dairy and plant proteins were used for extrusion. Afterwards, the semi-finished products were used in common Chinese dishes for further recipe development.

Results

High moisture extrusion resulted in different fibrous textures depending on recipe and process parameters. TDPs endured being frozen and thawed again without any loss of textural quality. Manufactured semi-finished products could resemble doufu, fish as well as meat-like textures (beef, pork, chicken). Due to this texture variety, a wide array of different Chinese ready-to-eat applications was possible: The use of TDPs in the Chinese cuisine can be applied into different savory traditional dishes like Jiaozi, Baozi, Huntun soup, Mapo Doufu, Gongbao Jiding, Bang Bang Ji, Chinese spring rolls or Yuxiang rousi.

Conclusion

Because of their different possible texture characteristics, TDPs can be easily integrated in various traditional Chinese dishes. Thus, the intake of dairy proteins can be achieved by TDPs ensuring a sufficient supply with valuable amino acids. Due to their nutrient profile TDPs can contribute to a high protein and low carb nutrition