

Chicken Liver Hydrolysates and Value Added Products

<p><i>Salient features</i></p>	<ul style="list-style-type: none"> ➤ Chicken liver hydrolysates from chicken liver and chicken feet by fermentation and enzymatic hydrolysis. ➤ Optimized process for the preparation of gelatin from chicken feet. ➤ Optimized process for the preparation of functional iron-rich jellies from chicken feet gelatin. ➤ Optimized process for the preparation of wheat flour fortified with chicken liver hydrolysates. ➤ Potential technology for the pilot scale production chicken fee gelatin based iron-rich jellies and chicken liver hydrolysates fortified wheat flour.
<p><i>Advantages</i></p>	<ul style="list-style-type: none"> ✓ Chicken liver hydrolysates as a carrier for delivering iron-rich product. ✓ Value addition of chicken liver and chicken feet. ✓ Opportunities for the poultry processing industry to produce the value-added foods from the under-utilised by-products. ✓ Improvement in the bioavailability of other ingredients in chicken liver hydrolysates.
<p><i>Process technology / product developed by</i></p>	<p>Dr. N. Bhaskar, Meat & Marine Sciences CSIR- Central Food Technological Research Institute (CFTRI), Mysore, Karnataka State bhaskar@cftri.res.in, bhasg3@yahoo.co.in Dr. V.K. Modi, Mr. P.Z. Sakhare, CSIR- CFTRI, Mysore</p>
<p><i>Year</i></p>	<p>2012-13</p>
<p><i>Source of funding</i></p>	<p>MoFPI</p>
<p><i>More information</i></p>	<p>Status of commercialization / Patent / Publications</p> <p>Publications</p> <p>Chakka, A.K., Elias, M., Jini, R., Sakhare. P.Z. and Bhaskar N. 2015. In-vitro Antioxidant and antibacterial properties of fermented and enzymatically prepared chicken liver protein hydrolysates. Journal of Food Science and Technology, 52: 8059–8067.</p> <p>Chakka, A.K. Ali, M., Sakhare , P.Z and Bhaskar N. 2017. Poultry processing waste as an alternative source for mammalian gelatin: Extraction and characterization of gelatin</p>

from chicken feet using food grade acids. *Waste and Biomass Valorization*, 8: 2583–2593.

Sakhare, P.Z., Kumar, A.C., Ali, M. and Bhaskar, N. 2013. Utilization of Poultry processing by-products : Evaluation of chicken feet as a source of collagen and gelatin. Presented at IFCON Mysore, pp:, 18-21.

Chakka, A. K., Elias, M., Haware, D.J., Sakhare, P.Z. and Bhaskar, N. 2013. In vitro antioxidant and antimicrobial properties of fermented chicken liver hydrolysate. Presented at IFCON, Mysore. 18-21 Dec.

Chakka, A.K., Sakhare, P.Z. and Bhaskar, N. 2014. Rheological and functional properties of chicken feet gelatin. Presented at Emerging Food Safety Risks: Challenges for developing countries, NIFTEM, 9-11 Jan.

Chakka, A.C. Sakhare, P.Z. and Bhaskar, N. 2014. Extraction and characterization of gelatin from chicken feet. Presented at Bioprocessing India 2014 – An International Conference, Institute of Chemical Technology, Mumbai, 17-21 Dec.

Kalyani, K., Chakka, A.C., Sakhare, P.Z. and Bhaskar, N. 2014. Functional properties and amino acid composition of enzymatic and fermentative hydrolysates from chicken liver. Presented at Bioprocessing India 2014 – An International Conference, 17-21 Dec., Institute of Chemical Technology, Mumbai, India.