

## Healthy Aloo Tikkis and French Fries

### *Salient features*

- Developed method that reduce acrylamide (toxic compound) by more than 90%
- After implementation of reduction method, acrylamide levels in the potato snacks is less than the benchmark level set by the European Commission
- 5-20 times less acrylamide than market products
- Reduced risk of cancer
- Enhanced quality and safety

### *Advantages*

- ✓ Less acrylamide dietary exposure to consumers
- ✓ Improved sensory attributes of the potato-based snacks
- ✓ This lab scale developed acrylamide reduction method may be implemented at industrial scale after pilot plant trails for producing snacks with less acrylamide
- ✓ Safe to consume
- ✓ Reduced risk to consumers health

**Without Acrylamide Reduction**



**With Acrylamide Reduction**



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<p><i>More information</i></p>	<p><b>Status of commercialization / Patent / Publications</b></p> <ol style="list-style-type: none"> <li>1. Kumari, A., Bhattacharya, B., Agarwal, T., Paul, V., Maurya, V. K., Chakkaravarthi, S., &amp; Simal-Gandara, J. (2023). Method development and validation for acrylamide in potato cutlet by UHPLC-MS/MS. <i>Food Control</i>, 151, 109817.</li> <li>2. Kumari, A., Bhattacharya, B., Agarwal, T., Paul, V., &amp; Chakkaravarthi, S. (2022a). Integrated approach towards acrylamide reduction in potato-based snacks: A critical review. <i>Food Research International</i>, 156, 111172.</li> <li>3. Kumari, A., Bhattacharya, B., Agarwal, T., Paul, V., &amp; Chakkaravarthi, S. (2022b). Value-added potato-based snacks: Acrylamide formation and safety concerns. In D. Singh, V. Devappa, S. Jahagirdar, H. R. Gautam, &amp; R. Agarwal (Eds.), <i>Management of postharvest diseases and value addition of horticultural crops</i> (pp. 363–368). Today and Tomorrow's.</li> </ol> <p><b>Technology transfer</b></p> <p>NA</p>