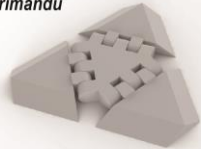# Ori-mandu: Korean Dumpling into Whatever Shape You Want

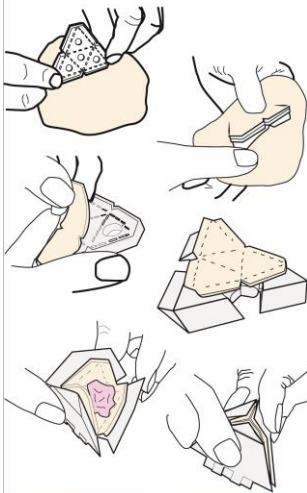**Stamp for orimandu**
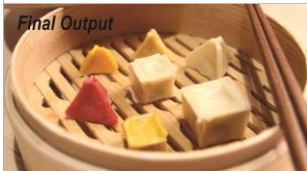
**Jig for orimandu**

**Process of making mandu**

**Final Output**

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## Abstract

3D food printing is getting the spotlight in the market by offering the opportunity of customizing food appearances that are usually troublesome to make by hand. Additive manufacturing techniques, similar to the majority of traditional 3d printers, extrude ingredients into a certain shape (such as *Candy2Gum* for a chewing gum and *Foodini* for chocolate). However, this technique is not applicable for all types of food.

Korean dumpling, Mandu, is an example that has a complicated cooking process. The cook needs to cut the dough into a certain shape, fill the stuffing, and finally fold it into a delicate form. To assist this process, we propose a novel and hybrid process in which we fabricate custom tools that assist the cooking journey. Computer-aided design (CAD) software generates the tools (stamp and jig system) based on the custom parameters, then the user cuts the dough with the *stamp* and assembles it by using the *jig* as a guide. Users can create mandu into various geometric shapes quickly without any special skills. With the Ori-mandu, we extended the current research on digital gastronomy by using digital fabrication to create custom tools for cooking.

## Author Keywords

food fabrication; dumpling; custom food print;