



CHAPTER 3

Techniques and Methods

Advanced Techniques and Methods
in Bread Making

By Michael Lim

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1. Kneading Techniques

Kneading is about more than just mixing ingredients; it's about aligning the gluten proteins in the dough to create a robust network that can trap gases and provide structure.

Traditional Hand Kneading

- **Procedure:** Using a push-and-fold motion, the dough is repeatedly worked on to develop gluten. The base of the palm pushes the dough forward, and the fingers fold it back.
- **Benefits:** Offers the baker a tactile connection with the dough, feeling changes in consistency and elasticity as gluten develops.
- **Ideal for:** Most bread types, especially beginners or when making doughs with standard hydration levels.

Slap & Fold (French Kneading)

- **Procedure:** The dough is lifted, slapped onto the work surface, and then folded over onto itself. The process is repeated, gradually developing the dough's strength without applying excessive pressure.

- **Benefits:** Efficient for wetter, high hydration doughs which can be sticky and challenging to handle.
- **Ideal for:** Ciabatta, baguettes, or any high hydration bread.

Stretch & Fold

- **Procedure:** Instead of traditional kneading, the dough is gently grabbed from underneath, stretched upwards, and then folded over the top. This action is repeated several times at intervals.
- **Benefits:** Gradually strengthens the dough without degassing it completely. It helps maintain more of the gas and bubbles in high hydration doughs.
- **Ideal for:** Artisan breads, sourdoughs, and other doughs where an open crumb structure is desired.

No-knead Method

- **Procedure:** Minimal mixing to combine ingredients, relying on time to develop gluten.
- **Benefits:** Easier on the baker and relies on long fermentation to develop flavours and structure.
- **Ideal for:** Breads where convenience and flavour are prioritised over specific textures.

2. Fermentation & Proofing

Fermentation is not merely waiting; it's the ballet of yeast and bacteria converting sugars into gases, acids, and alcohol.

Bulk Fermentation

- **Insight:** It's during this phase that the majority of fermentation occurs. Here, the dough can display flavours from slight acidity to deep tanginess.
- **Impact:** The length and temperature of this stage influence bread's flavour, crumb structure, and crust characteristics.

Cold Fermentation

- **Insight:** By slowing down yeast activity, cooler temperatures allow for a longer fermentation. This results in improved dough strength and flavour development.
- **Impact:** Breads fermented cold often have a nuanced flavour profile, with pronounced sour notes in sourdoughs.

Proofing

- **Insight:** This final rise sets the stage for the oven. Overproofing can lead to flat, dense bread, while underproofing can result in overly dense crumb.
- **Impact:** Proper proofing ensures good oven spring and optimal crumb structure.



3. Advanced Techniques

Mastering bread-making often involves understanding some specialised techniques.

Autolyse

- **Insight:** By allowing flour and water to sit before adding other ingredients, enzymes in the flour begin breaking down starches into simpler sugars. This process can improve extensibility and final bread flavour.
- **Impact:** Easier dough handling, improved crust colour, and better flavour.

Bassinage

- **Insight:** By hydrating the dough in stages, the baker can manage high hydration doughs more effectively.
- **Impact:** Achieving wet dough characteristics like an open crumb without the challenge of handling super wet dough from the start.

Tartine Method

- **Insight:** This method, named after the famous San Francisco bakery, is a way to achieve rustic, flavourful, and beautifully textured sourdough bread.
- **Impact:** Characterised by its dark crust, mild tang, and open crumb, this method exemplifies the artisan bread movement.

The beauty of bread-making lies in its blend of science and art. While the techniques offer a roadmap, the artistry comes in understanding when and how to use each one. The result? Bread that's a true reflection of the baker's skill and passion.

