THE POPULARITY OF PANDESAL

by Martina Mollenhauer and Sheryl Gabriel

Bread is part of the typical Filipino breakfast as a substitute for rice

Pandesal is the most popular local bread in the Philippines. It is the Spanish term for "salt bread," since the name originated during the 16th century Spanish colonial era. Most bakeries all over the country, from small backyard establishments to industrial bakeries, produce and sell this bread.

This staple food has become part of the typical Filipino breakfast as a substitute for rice. Four pieces of pandesal are equivalent to one cup of rice. Consumers like pandesal to be served hot and freshly baked from the oven. They expect it to have a soft crumb texture and a slightly crunchy crust that is light brown in color. The Filipinos' unique way of eating pandesal is by dipping it into hot coffee. It can also be served with a variety of spreads or fillings such as butter, cheese or jam. Nowadays, some bakeries sell pandesal not only for breakfast but also as a snack at any time of the day.

FORMULATION AND METHOD

Pandesal accounts for about 50% of total bakery production. The formulation consists mainly of flour, water, sugar, fat, salt and yeast. The bread is shaped into long logs (bastons), rolled in fine breadcrumbs, allowed to rest, and then cut into individual portions using a dough cutter. Finally, it is proofed and baked.

The most common bread-making method for pandesal is No Time Dough. Some bakeries also prepare an overnight proofing in which the percentage of yeast used is very low (about 0.05% to 0.25%).

Traditionally, the bakers work the dough by hand, using the dough break system which is still common practice. However, modern bakeries now rely on mixers to develop the dough. The mass production of pandesal remains manual from shaping the dough into logs (bastons) to cutting it into individual portions.

CLASSIC TO REINVENTED PANDESAL VARIANTS

The trend toward innovation plays a vital role in enabling bakeries to offer more value-added pandesal varieties and compete in the market. Because of this, the classic pandesal is being reinvented by the bakers so that they can offer healthier and better tasting options. There are new pandesal variants such as malunggay (horseradish) pandesal, squash pandesal, cheese pandesal, to mention a few.

QUALITY OF THE FLOUR

The flour used for making pandesal is typically medium to high protein (about 12% to 13%) and has good tolerance to

mixing and fermentation. Flour protein correlates with dough stability and bread volume. If the flour protein is too low, the dough will have poor handling properties and the volume of the bread will be small. The rheological properties of the flour correlate with the handling of the dough. A good balance between resistance and extensibility is essential for shaping the pandesal into logs (bastons).

According to the flour mill's technical team, the typical quality concerns of pandesal bakers are dough development, dough handling and proofing. The dough development stage is very subjective for small neighborhood bakeries that work with the dough break method. A baker may use time as a guide and rely on his feeling for the dough. Handling is also critical in respect of the ease or difficulty of shaping the logs. Judgement of proofing may also be subjective on the part of the baker.

Flour improvers, particularly the oxidizing agents and enzymes, are essential for achieving consistent quality in flour. Enzymes such as α-amylase, hemicellulase and oxidases improve the dough handling properties and make for better symmetry and volume.

MINIMIZING FAULTS IN PRODUCTION

The following is an overview of the most common problems in production, and how to avoid them:

Problem: Stiff dough
Possible causes:
- flour too strong
- insufficient water
- undermixed dough

Solution:
- increase the hemicellulase dosage in the flour (e.g. Alphamalt HCTE)
- add more water
- extend mixing time or proper sheeting to achieve optimum dough development

Problem: Soft and sticky dough
Possible causes:
- flour low in gluten
- too much water
- overmixed

Solution:
- use stronger flour and increase oxidation (vitamin C (ELCO P-100K) and glucose oxidase (e.g. Alphamalt Gloxy 12082)
- reduce the amount of water in the formulation
- shorten mixing time

Problem: Poor proofing stability
Possible causes:
- proofer humidity too high
- too much water
- dough is weak

Solution:

- reduce proofer humidity
- reduce water
- increase oxidation in flour (vitamin C (ELCO P-100K) and glucose oxidase (e.g. Alphamalt Gloxy 12082)) and the addition of lipase (Alphamalt EFX) and emulsifier (SSL, CSL, DATEM (Mulgaprime SSL or CSL, Mulgaprime 16))

Problem: Low volume
Possible causes:

- undermixed
- fermentation time too short
- too little yeast
- short fermentation
- weak flour

Solution:

- extend mixing time or proper sheeting to achieve optimum dough development
- ferment longer
- check yeast quantity
- use stronger flour; increase or adjust flour treatment

Problem: Tough crumb
Possible causes:

- too little water in formulation
- undermixed

Solution:

- increase the amount of water in the formulation
- extend mixing time or proper sheeting to achieve optimum dough development
- add maltogenic enzyme (Alphamalt Fresh 23) or DMG (Mulgaprime 90 F) to improve softness WG

TYPICAL PANDESAL NO TIME DOUGH FORMULATION	
	Baker's Percentage
Wheat Flour	100
Water	48-55
Yeast	1.0
Sugar	16
Salt	1.5
Shortening	4.0

If you have any questions, contact Martina Mollenhauer, product manager at Mühlenchemie. She can be contacted at mmollenhauer@muehlenchemie.de.