

PASTRY

INFORMATION SHEET



BAKING INDUSTRY
RESEARCH TRUST

DEFINITION

Pastry is a mixture of flour, water and fat combined to make a paste. When combined in different proportions, and by varying mixing methods, these basic ingredients make flexible doughs that can be shaped into a range of shapes to hold a variety of sweet or savoury fillings.

Paste is the uncooked pastry mixture with the fat added. It has less water and more fat than the dough which is used for bread and scones.

HISTORY

Pastry was originally made by the Egyptians, who made a flour and water paste to wrap around meat to soak up the juices as it cooked. Pastry was further developed in the Middle East and it was brought to Europe by the Muslims in the 7th century. By medieval times local areas had their own specialty puddings and pies. In the 17th century both flaky and puff pastries were used, and intricate patterns on the pies were a work of art. Today the chief purpose of pastry is to complement the flavour of the fillings and to provide a casing.

TYPES OF PASTRY

The two major types of pastry in New Zealand are puff and short, but other types will also be defined:

Puff pastry is light, flaky and tender. It is made by mixing flour, salt, a little fat and water to form a dough. Puff pastry has a flour to water ratio of 2:1 and is described as a plastic-elastic dough. The dough is then layered with fat, preferably butter, by folding and rolling to form hundreds of layers of fat and dough. When it is baked, water from the dough turns into steam and puffs up the pastry to produce lots of flaky layers. Flaky pastry is made in the same way but has less rolling and folding and is quicker to make. Puff pastry is used for pies and vol-au-vents and can be filled with meat or fruit and spices. *See information sheets on Pies and Pastries.*

Yeasted Pastry – yeast is added to puff pastry ingredients before making yeasted pastry. Yeasted pastries are light flaky pastries that are crisp on the outside, but soft and tender on the inside. The dough, which has yeast added, is layered with fat, so this pastry is a cross between bread and pastry. Yeasted pastries are used in Danishes and croissants. *See information sheets on Danish Pastries and Croissants.*

Short pastry is a soft, tender pastry that is made from flour, fat, salt and water and becomes crispy when cooked. Short pastry has a flour to water ratio of 3:1 and is considered a plastic paste. It is made by mixing the fat and flour together, adding water and then rolling the paste. As the fat is mixed into the dough or paste, the gluten is prevented from developing fully, keeping the pastry 'short' or tender.

Different types of short pastry are used for different foods. Short pastry is used to make meat and other savoury pies. Short pastry becomes sweet when sugar and sometimes eggs are added and it is used to make fruit pies, Christmas mince pies and other sweet recipes for desserts.

Suet pastry is an old fashioned British pastry used for steamed and boiled sweet and savoury puddings, roly-poly puddings and dumplings. Suet pastry is softer than short pastry, which is crispy when cooked. Suet pastry is made from raw beef or mutton fat, especially the hard fat found around the loins and kidneys (suet). Suet has a melting point of 45–50°C which is higher than butter (32–35°C) traditionally used in pastry. This melting point means that it is solid at room temperature but easily melts at moderate temperatures, such as in steaming. During cooking, water needs to be kept on the boil to avoid a heavy or soggy pastry.

Filo and leaved pastries are found in many parts of the world and popular recipes are traditional strudel from Austria, baklava from the Mediterranean, borek from the Middle East and spring rolls from China. Unlike other pastries, filo (leaved pastry) is made from flour with high gluten content, little fat (butter) and no sugar. Gluten is a protein found in some grains, particularly wheat, and gives bread dough its elastic texture. The flour needs high gluten content to produce an elastic dough that can be stretched into very large, very thin sheets. All leaved pastries (apart from puff pastry) are made from a sheet of dough that is as thin as tissue paper. Traditionally, the dough is made by hand by gently rolling, stretching or pressing it into very thin sheets. Filo pastry's gossamer-thin sheets need careful handling because they're fragile and dry out quickly, so unused sheets are covered with a damp cloth. Before baking, the dough is brushed with butter or oil. It is then used in different ways depending on the recipe. It can be cut into sheets and layered in a tin, cut to make individual rolls or rolled up as one large roll. Strudel pastry, famously used in central Europe for apple strudel, is very similar.

Choux pastry is a French speciality used for cream buns, chocolate éclairs and profiteroles. Ingredients include water (or milk), fat (preferably margarine fat with good flavour), eggs (the more added, the better the quality and end result of choux pastry) and flour (high levels of starch), and sometimes a little salt and baking powder. The butter is boiled with a water/milk mix and then flour is added to it. This mixture is then beaten and eggs are added. The mixture is then put in a forcing bag, and placed as rounds or lengths on a baking tray before being baked in a hot oven. During cooking the pastry should triple in size due to natural lift of air. When cool, the pastry is pierced to let out the steam. The pastry is often cut and filled with cream.

REFERENCES

van Achter J. *Choux mix (pate a choux) – how to avoid pitfalls*. In: *Better baking*.
Wheat Foods Council 2010(revised). *Grains of truth about pastry*.