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RHEOLOGY OF SOME SPECIFIC PUPROSE DOUGHS

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requirements for the award of

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IN
FOOD TECHNOLOGY**

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ABSTRACT

Rheological behaviour of a specific purpose dough (batter type), used for Greek dumpling preparation, was evaluated using a rotational type viscometer. Flow behaviour of differently formulated doughs can be described by the power law model. The flow behaviour index of the typical basic formulation was 0.34. Both the flow behaviour and the consistency indices were affected by the flour:water ratio of dough and whole fresh egg or egg constituents addition. Fresh whole egg addition at 25% increased apparent viscosity of dough. A similar effect was exerted by egg yolk, while egg white resulted in an apparent viscosity decrease. Storage of dough under refrigeration (3-4°C) for more than 3 days resulted in high viscosity decrease and dumpling preparation was not possible. Instrumental and sensory evaluation of dumplings showed that egg addition affected the texture, flavour and colour of dumplings. Dumplings containing no or minor amounts of egg were preferred by the panellists.

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