

The potential of Australian wheat for German egg noodles (spatzle)

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Spatzle are freshly made egg noodles and are very popular in Germany. They are made at home as well as produced commercially. Spatzle accounts for about 5% of the total noodle market in Germany and the prices received for high quality spatzle are 2-3 times greater than those received for ordinary pasta. The spatzle market is a high priced niche market which could be exploited by Australian producers if the grain is of suitable quality.

Spatzle are made from 2/3 hard wheat flour, 1/3 hard wheat semolina, salt and fresh eggs. Wholemeal flour and Dinkel (*Triticum spelta*) mixtures can also be used but durum flour is not used because the noodles do not expand sufficiently with cooking. The noodles are cooked by immersing in boiling water or by steaming for 2-3 minutes. During cooking the noodles expand about 3-fold and become fluffy, the fluffier the better. Commercially-produced noodles are dried in a moisture controlled chamber at 40°C for 18-20 hours to reduce the moisture content from 30% to 10-11%. The suitability of locally produced flour for spatzle was evaluated in small scale cooking tests.

Methods

Flour samples from the Victorian Institute for Dryland Agriculture, Horsham (VIDA) were compared with two commercial wheaten noodle flours, a rye flour and two wheat/rye (1:1) mixes. For the cooking tests, 200g of flour was mixed with 3 eggs (50g), 20mL of water and 2g salt. The quality of the noodle was assessed by the noodle weight (a measure of the water uptake of the flour), the consistency of the dough and the taste of the cooked noodle.

Results and discussion

Noodles made from rye flour were a dark colour, rather than the yellow colour which is desirable. The commercial hard noodle flour produced the best quality spatzle with a good appearance, colour and texture and with a high water absorption (Table I). Noodles made from rye flour expanded very little but had a good taste. Noodles made from rye/wheat flour had excellent appearance and taste. The wheaten flour from VIDA produced good textured noodles. These cooking tests indicate that high protein Australian wheat and rye flour are capable of producing good quality spatzle which could compete with German produce and provide a valuable niche market for Australian grain. However the success of this will depend on the development of effective marketing strategies.

Table 1. Protein concentration and quality evaluation of flour from wheat and rye for spatzle.

Flour type and source	Protein concentration (%)	Dough consistency	Noodle texture/taste	Noodle weight (g)
ED 86 (VIDA)	12.0	weak	elastic	500
ED 89 (VIDA)	12.0	medium/weak	elastic	500
Soft noodle (Bunge)	8.4	medium/weak	chewy	510
Hard noodle (Bunge)	11.2	strong	very elastic	530
Rye (Bunge)	n.a.	medium/weak	chewy/excellent	520
Rye/soft noodle (Bunge)	n.a.	weak	chewy/good	510
Rye/hard noodle (Bunge)	n.a.	strong	med. elastic/v. good	510

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