

Gouda Guidelines

Suggested Cheese Recipe

Gouda is a ripened cheese which originates from Holland. It accounts for more than two-thirds of the total Dutch cheese production. A large number of similar variations are made throughout the world. Originally it is sold in 5-8 kg wheels with a shiny, golden rind. Inside the cheese is ivory coloured and has a smooth and springy texture with few holes.

Technology

Milk	High quality whole milk is used.	
Heat treatment	Pasteurise at 72°C (162°F) for 15 sec. Cool to 30-32°C (86-90°F).	
Culture	The following cultures and inoculation levels are recommended.	
	Freeze-dried DVS	CHN-11, FLORA-DANICA, CHN-19, DCC-240 or DCC-250 500-1000u/5000 l or
	Frozen DVS	CHN-11, CHN-120, CHN-19, DCC-230, DCC-240 or DCC-250 500-1000 g/5000 l
Pre-ripening	30-45 min.	
Rennet	Liquid	NATUREN Standard Plus 175 20-40 ml per 100 l of milk or CHY-MAX Plus 20-35 ml per 100 l of milk
	Powder	CHY-MAX Powder Extra 1-3 g per 100 l of milk or NATUREN Standard 900 2-6 g per 100 l of milk
	A gel will form in 35-45 minutes.	
Cutting	Cut the coagulum into 5-7 mm cubes.	
Pre-stirring	The curd is slowly stirred for 15-25 min.	
Washing/scalding	Approx 35-45% of the whey is drained off and the curd is gently stirred for 15 min. Approx 25-30% (of start volume) hot water at approx 60°C (140°F) is added. The temperature of the curd should be 35-38°C (95-100°F) depending on the final water content wanted. After reaching the final temperature, the curd is stirred for another 15-30 min.	

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Pre-pressing	Most of the whey is drained off and the curd is lightly pressed at 2-4 kg/cm ² under the remaining whey for 15-30 min. Another possibility is to pump the curd via a buffer tank to an automatic pre-press tower.						
Moulding	The curd is cut into suitably sized blocks which are fitted into moulds.						
Pressing	The moulds are lightly pressed for 20 min. They are then pressed at 4-6 kg/cm ² for 1-2 hrs. The curd blocks can stay in the moulds until the following morning, very often in cold water, or be dumped directly into cold brine at a pH of 5.75-5.85, depending on the moisture content wanted.						
Salting	Time in brine depends on the size of the cheese block. Aim at 4% salt in moisture.						
Storage	The cheese is ripened at 10-15°C (50-59°F) and 90% RH for 4-8 weeks (young) or 8-17 weeks (mature).						
Packaging	Wax or plastic coating is recommended.						
Key figures	<table><tr><td>24 hrs pH</td><td>5.15-5.25</td></tr><tr><td>Fat in dry matter</td><td>48%</td></tr><tr><td>Water content</td><td>45%</td></tr></table>	24 hrs pH	5.15-5.25	Fat in dry matter	48%	Water content	45%
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Chr. Hansen's worldwide facilities and the personnel of our application and technology center are at your disposal with assistance, instructions and guidance for your choice of culture and rennet.

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