

Food drying technology short course

Werribee 7 & 8 March 2017

Program¹

Day 1

8.30 am	Welcome and introduction	
	Dried products and their quality	Gordon Young, FoodStream Pty Ltd and Henry Sabarez, CSIRO
	Basic drying theory	Gordon Young, FoodStream Pty Ltd
	Morning Break	
	Drying systems used in the food industry	Dennis Forte, FoodStream Pty Ltd
	Water activity: Basic concepts & sorption/desorption isotherms, methods of measurement	Gordon Young, FoodStream Pty Ltd
12.00 pm	Lunch	
	Lab demonstration; water activity/moisture content / DVS	
	Water activity: relevance to food stability and the drying process	Gordon Young, FoodStream Pty Ltd
	Principles of mass and energy balances as applied to drying processes (Exercise: Using mass and energy balance techniques to analyse simple drying system)	Gordon Young, FoodStream Pty Ltd
	Afternoon break	Gordon Young, FoodStream Pty Ltd
	Principles of psychrometrics, tracing a drying process on a psychrometric chart	
	Mass & energy balance applied to a more complex drying system – A case study	Gordon Young, FoodStream Pty Ltd
4.30 pm	End of day 1	

1. The following program may be subject to minor change

Day 2

8.30 am	Start of day 2	
	Modelling the drying curve (practical measurement/modelling of product drying curve and how it can be used)	Dennis Forte, FoodStream Pty Ltd
	The use of dimensional analysis to optimise a drying process (an industry case study)	Dennis Forte, FoodStream Pty Ltd
	Morning break	
	Specialised drying systems	Darren Gardiner, CSIRO
	<i>Pilot Plant visit</i>	
12.15 pm	Lunch	
	Option 1: Design and specification of drying systems Gordon Young, FoodStream Pty Ltd Case studies of a range of drying technologies	Option 2: Spray drying technology Darren Gardiner, CSIRO
	Afternoon break	
	Improving efficiency of established drying processes – a case study	Gordon Young, FoodStream and Henry Sabarez, CSIRO
4:15 pm	Course close	