List of tables

Tables	Captions	Page No.
Table 3.1.	Cooking treatments and cooking time for vegetables	55
Table 3.2.	Total phenolic and flavonoid content of the selected fresh untreated	57
	fruits (fresh weight)	
Table 3.3.	Ferric reducing antioxidant property (FRAP), DPPH radical scavenging	58
	activity and metal chelating capacity (MCC) of the selected fresh	
	untreated fruits (fresh weight)	
Table 3.4.	Pearson's correlation coefficient values for relation between TPC, TFC	59
	and antioxidant activity	
Table 3.5.	Ascorbic acid and phenolic acids in the selected fruit samples	61
	determined by RP-HPLC expressed in mg/100g (fresh weight)	
Table 3.6.	Total phenolics content (mg GAE/100g DW) in acetone extracts of raw	67
	and cooked vegetables	
Table 3.7.	Total flavonoid content (mgQE/100g DW) of acetone extracts of raw	68
	and cooked vegetables	
Table 3.8.	Ferric reducing antioxidant potential (µM Fe (II)/100-1g) of acetone	69
	extracts of raw and cooked vegetables	
Table 3.9.	DPPH activity (%) of acetone extracts of raw and cooked vegetables	69
Table 3.10.	MCC (%) values of acetone extracts of raw and cooked vegetables	71
Table 3.11.	Phenolic acids in raw and processed vegetables identified by RP-HPLC	74
	expressed as mg/100g	
Table 4.1.	Classification of powder flowability based on Carr index (CI) and	89
	powder cohesiveness based on Hausner ratio (HR)	
Table 4.2.	Bulk density, tapped density, Hausner's ratio, Carr index and span value	96
	of the spray dried fruit juice powders	
Table 4.3.	Physicochemical parameters of the spray dried fruit juice powder	97
	samples	
Table 4.4.	Colour parameters of the spray dried fruit juice powders	98
Table 4.5.	Phytochemical content and antioxidant activity of fresh juice and spray	100
	dried fruit juice powder (dry basis)	
Table 5.1	Effect of processing on the microhial load of the juice samples	111

Table 5.2	Comparison of L a b values and overall colour changes ($\triangle E$) after	112
	processing	
Table 5.3.	Phenolic acid content in the fresh and processed fruit juice samples	121
Table 6.1.	CCRD variables (temperature & ethanol concentration) and responses	141
Table 6.2.	Regression coefficients of the fitted second order polynomial for the	142
	three responses and their significance	
Table 6.3.	ANOVA values for the fitted models and lack of fit	142
Table 6.4.	Optimized solution obtained using the response optimizer	144
Table 6.5.	RP-HPLC results of the crude polyphenol extract from carambola	146
	pomace and carambola juice	
Table 6.6.	Physical properties of the encapsulated samples	147
Table 6.7.	Surface phenolic content (SPC), total phenolic content (TPC),	149
	encapsulating efficiency and in vitro gastrointestinal release of TPC in	
	simulated gastric fluid (SGF) and simulated intestinal fluid (SIF)	
Table 7.1.	Moisture content and proximate composition of the obtained fibre	166
	samples	
Table 7.2.	Yield and dietary fibre of the obtained fibre samples	166
Table 7.3.	Colour values (L, a, b) of the fibre samples	167
Table 7.4.	Physicochemical properties of the fibre samples	168
Table 7.5.	Phytochemical content and antioxidant activities of the fibre samples	169
Table 7.6.	Phenolic acids (mg/100g) compositions of the selected fibres	170
	determined by RP-HPLC	
Table 7.7.	Glucose diffusion rate and GDRI of the selected fibres	173
Table 8.1.	Classification of powder flowability based on Carr index (CI) and	186
	powder cohesiveness based on Hausner ratio (HR)	
Table 8.2.	Independent variables and the response variables	189
Table 8.3.	ANOVA values for the fitted models and lack of fit	190
Table 8.4.	Responses, predicted and actual values of the optimized model	192
Table 8.5.	Proximate composition of the beverage powder (%, db)	193
Table 8.6.	Bulk density, tapped density and flow property of the beverage powder	193
Table 8.7.	Color, L a b values and overall colour ($\triangle E$) difference of the	194
	reconstituted beverage and fresh feed sample	
Table 8.8.	Sensory analysis of beverage using 9 point Hedonic scale	195
Table 9.1.	Constituents of the diet fed to the rat with addition of the test beverage	202

	powder	
Table 9.2.	Conversion of animal dosage to human equivalent dose (HED) based on	203
	body surface area (BSA)	
Table 9.3.	Serum biochemistry of Group I and Group II experimental rats	207
Table 9.4.	Changes in body weight during experimental period	208
Table 9.5.	Short chain fatty acids identified by GCMS in caecal matter of Group I	209
	and II rats	