processes

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Supplementary Materials

Effects of Osmotic Dehydration on the Hot Air Drying of Apricot Halves: Drying Kinetics, Mass Transfer and Shrinkage

Ivan Pavkov [1], Milivoj Radojčin [1,*], Zoran Stamenković [1], Krstan Kešelj [1], Urszula Tylewicz [2], Péter Sipos [3], Ondrej Ponjičan [1] and Aleksandar Sedlar [1]

[1] Faculty of Agriculture, University of Novi Sad, Trg Dositeja Obradovića 8, 21000 Novi Sad, Serbia; ivan.pavkov@polj.uns.ac.rs (I.P.); zoran.stamenkovic@polj.uns.ac.rs (Z.S.); krstan.keselj@polj.uns.ac.rs (K.K.); ondrej.ponjican@polj.uns.ac.rs (O.P.); aleksandar.sedlar@polj.uns.ac.rs (A.S.)

[2] Department of Agricultural and Food Sciences, Alma Master Studiorum—Università di Bologna, Piazza Goidanich 60, 47521 Cesena, Italy; urszula.tylewicz@unibo.it

[3] Institute of Nutrition, Faculty of Agricultural and Food Sciences and Environmental Management, University of Debrecen, H-4032 Debrecen, Hungary; siposp@agr.unideb.hu

* Correspondence: milivoj.radojcin@polj.uns.ac.rs; Tel.: +381-21-485-3431

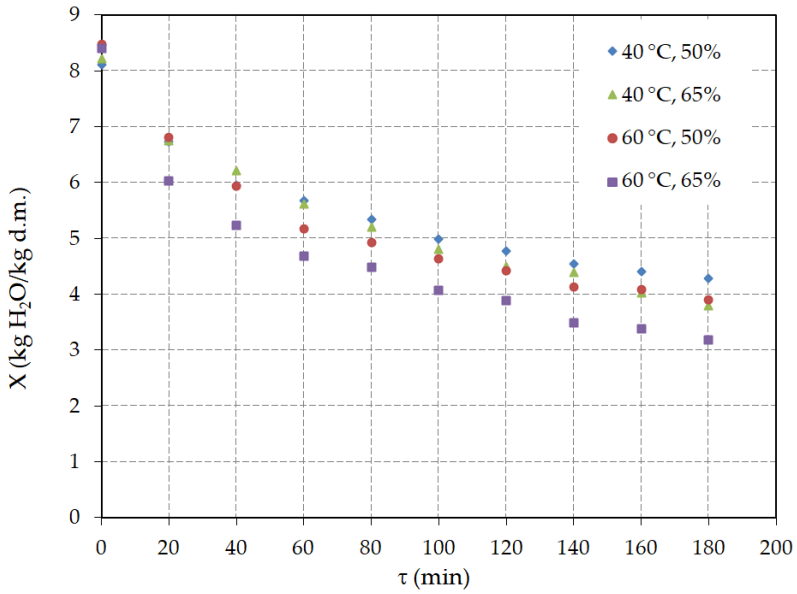

Figure S1. Drying curves of the apricot halves during the osmotic dehydration process.

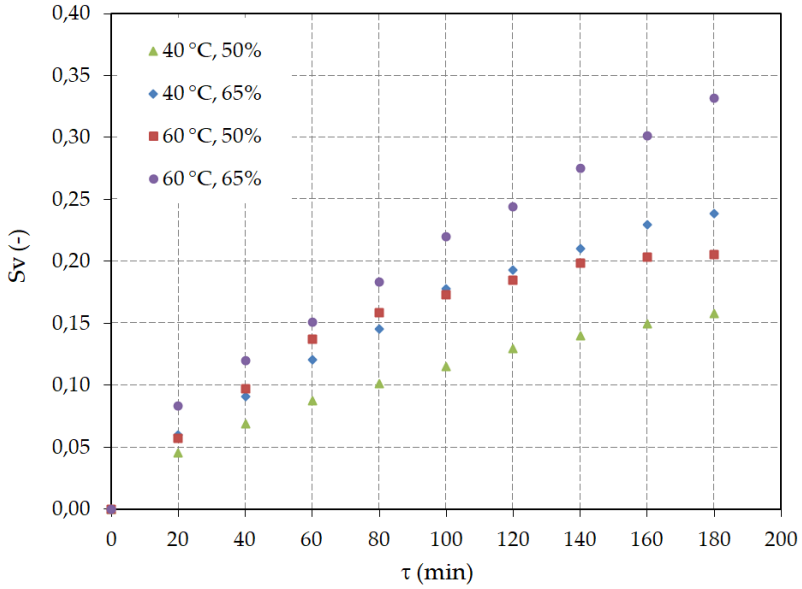

Figure S2. Shrinkage of apricot halves (Sv) during the osmotic dehydration process.

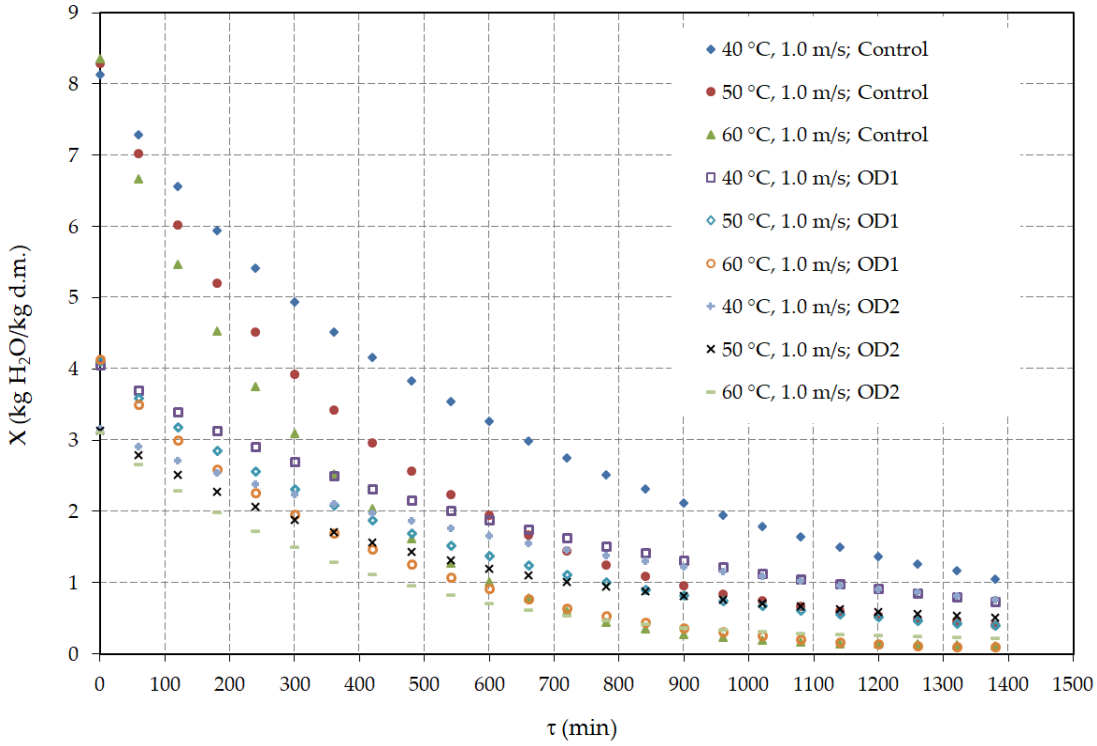

Figure S3. Drying curves of hot air drying apricot halves for air velocity 1.0 m/s.

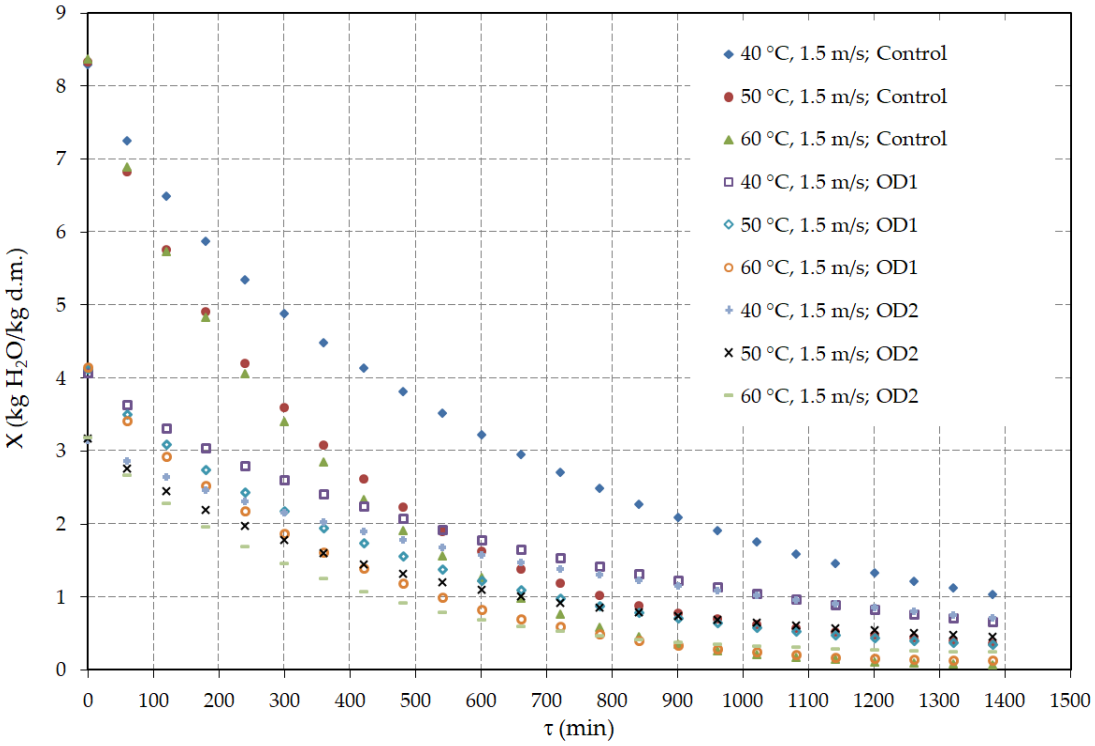

Figure S4. Drying curves of hot air drying apricot halves for air velocity 1.5 m/s.

Table S1. Mean values of shrinkage for osmotic dehydrated samples after 180 minutes of process.

t (°C)	C (%)	S_V (-)	S_{L1} (-)	S_{L2} (-)	S_{L3} (-)
40	50	0.157 ± 0.013^{d}	**0.0**61 ± 0.0217$^{c.}$	0.076 ± 0.0062^{b}	0.095 ± 0.0378^{b}
40	65	0.205 ± 0.022^{c}	0.083 ± 0.0144^{cb}	0.089 ± 0.0073^{b}	0.112 ± 0.044^{b}
60	50	0.238 ± 0.014^{b}	0.107 ± 0.0192^{ba}	0.119 ± 0.028^{ba}	0.192 ± 0.018^{a}
60	65	0.331 ± 0.021^{a}	0.134 ± 0.0058^{a}	0.141 ± 0.033^{a}	0.226 ± 0.021^{a}

[1] t—temperature of osmotic solution; C—concentration of the osmotic agent. Data are mean ± standard deviation. The values designated by different small letters (a. b. c) are significantly different (p = 0.05). S_V—Volume shrinkage; S_{L1}—Length shrinkage; S_{L2}—Width shrinkage; S_{L3}—Thickness shrinkage.

Table S2. Mean values of shrinkage for hot air dried samples after 1380 minutes of process.

	Air velocity (m/s)	Air temp. (°C)	S_v (-)	S_{L1} (-)	S_{L2} (-)	S_{L3} (-)
Control	1.0	40	0.804 ± 0.020^{b}	0.231 ± 0.0058^{ed}	0.400 ± 0.0100^{ed}	0.536 ± 0.0134^{cba}
		50	0.879 ± 0.004^{a}	0.266 ± 0.0011^{cba}	0.472 ± 0.0019^{cba}	0.529 ± 0.0033^{cb}
		60	0.903 ± 0.015^{a}	0.285 ± 0.0050^{ed}	0.517 ± 0.0091^{a}	0.491 ± 0.0086^{dc}
	1.5	40	0.818 ± 0.013^{b}	0.234 ± 0.0047^{cb}	0.443 ± 0.0089^{dcb}	0.546 ± 0.0109^{ba}
		50	0.891 ± 0.012^{a}	0.267 ± 0.0037^{cb}	0.486 ± 0.0068^{ba}	0.582 ± 0.0082^{a}
		60	0.897 ± 0.012^{a}	0.280 ± 0.0035^{dc}	0.492 ± 0.0061^{ba}	0.573 ± 0.0072^{ba}
OD1[1]	1.0	40	0.659 ± 0.044^{ed}	0.259 ± 0.0353^{cb}	0.387 ± 0.0505^{fe}	0.431 ± 0.0339^{hgfe}
		50	0.697 ± 0.027^{d}	0.281 ± 0.0192^{cb}	0.428 ± 0.0425^{edc}	0.433 ± 0.0423^{gfe}
		60	0.762 ± 0.012^{c}	0.314 ± 0.0248^{a}	0.486 ± 0.0440^{ba}	0.452 ± 0.0737^{ed}
	1.5	40	0.628 ± 0.020^{e}	0.125 ± 0.0049^{kj}	0.313 ± 0.0202^{hg}	0.336 ± 0.0166^{h}
		50	0.697 ± 0.009^{d}	0.208 ± 0.0064^{fe}	0.387 ± 0.0172^{fe}	0.382 ± 0.0284^{jhg}
		60	0.765 ± 0.004^{c}	0.295 ± 0.0120^{ab}	0.469 ± 0.0550^{cba}	0.436 ± 0.0468^{fe}
OD2	1.0	40	0.628 ± 0.020e	0.125 ± 0.0049^{kjh}	0.313 ± 0.0202^{hg}	0.336 ± 0.0166^{h}
		50	0.650 ± 0.044^{d}	0.155 ± 0.0055^{kj}	0.347 ± 0.0069^{gf}	0.378 ± 0.0051^{jh}
		60	0.762 ± 0.012^{c}	0.194 ± 0.0156^{gf}	0.403 ± 0.0114^{ed}	0.444 ± 0.0193^{fed}
	1.5	40	0.659 ± 0.044^{ed}	0.155 ± 0.0462^{kjh}	0.292 ± 0.0485^{h}	0.401 ± 0.0361^{hgfe}
		50	0.687 ± 0.022^{d}	0.164 ± 0.0220^{hg}	0.329 ± 0.0139^{hg}	0.397 ± 0.0158^{hgf}
		60	0.765 ± 0.005^{c}	0.185 ± 0.0105^{hgf}	0.390 ± 0.0234^{fe}	0.421 ± 0.0063^{hgfe}

[1] OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%. The values designated by different small letters (a. b. c. k. j. h. g) are significantly different ($p = 0.05$). S_V—volume shrinkage; S_{L1}—length shrinkage; S_{L2}—width shrinkage; S_{L3}—thickness shrinkage.

Table S3. Statistical analysis of models used to describe the kinetics of hot air drying of fresh (control) and osmotically pretreated apricot halves.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	R^2	RMSE	χ^2	CRV (%)
Newton	Control	1.0	40	0.9975	0.0124	0.00016	3.0684
			50	0.9995	0.0062	0.00004	2.1921
			60	0.9971	0.0151	0.00024	6.7161
		1.5	40	0.9941	0.0190	0.00038	4.8306
			50	0.9984	0.0108	0.00012	4.1729
			60	0.9978	0.0130	0.00018	6.3041
	OD1[1]	1.0	40	0.9985	0.0093	0.00009	2.0786
			50	0.9990	0.0084	0.00007	2.4120
			60	0.9959	0.0182	0.00035	7.0401
		1.5	40	0.9967	0.0140	0.00020	3.2567
			50	0.9978	0.0123	0.00016	3.8048
			60	0.9975	0.0140	0.00020	5.6318
	OD2	1.0	40	0.9985	0.0089	0.00008	1.7838
			50	0.9944	0.0187	0.00036	4.7533
			60	0.9994	0.0068	0.00005	2.4581
		1.5	40	0.9958	0.0149	0.00023	3.1079
			50	0.9898	0.0250	0.00065	6.8590
			60	0.9983	0.0112	0.00013	4.1659
Page	Control	1.0	40	0.9997	0.0045	0.00002	1.1494
			50	0.9999	0.0033	0.00001	1.1783
			60	0.9983	0.0118	0.00015	5.3519
		1.5	40	0.9992	0.0070	0.00005	1.8308
			50	0.9997	0.0046	0.00002	1.8297
			60	0.9983	0.0113	0.00014	5.5946
	OD1	1.0	40	0.9997	0.0039	0.00002	0.8770
			50	0.9998	0.0038	0.00002	1.1173
			60	0.9971	0.0154	0.00026	6.0593
		1.5	40	0.9993	0.0066	0.00005	1.5851
			50	0.9996	0.0051	0.00003	1.6089
			60	0.9977	0.0133	0.00019	5.4756
	OD2	1.0	40	0.9998	0.0033	0.00001	0.6808
			50	0.9995	0.0055	0.00003	1.4418
			60	0.9994	0.0067	0.00005	2.4864
		1.5	40	0.9997	0.0042	0.00002	0.8892
			50	0.9993	0.0068	0.00005	1.8946
			60	0.9990	0.0086	0.00008	3.2531

[1] OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%; R^2—Determination coefficient; RMSE—Root mean square error; χ^2—Reduced chi-squared; CRV—Coefficient residual variation.

Table S3. Cont.

	Pretreatment	Air velocity (m/s)	Air temperature (°C)	R^2	RMSE	χ^2	CRV (%)
Modified Page	Control	1.0	40	0.9975	0.0124	0.00017	3.1373
			50	0.9995	0.0062	0.00004	2.2414
			60	0.9983	0.0118	0.00015	5.3519
		1.5	40	0.9941	0.0190	0.00039	4.9391
			50	0.9984	0.0108	0.00013	4.2666
			60	0.9978	0.0130	0.00018	6.4458
	OD1	1.0	40	0.9985	0.0093	0.00010	2.1253
			50	0.9990	0.0084	0.00008	2.4662
			60	0.9959	0.0182	0.00036	7.1984
		1.5	40	0.9967	0.0140	0.00021	3.3299
			50	0.9978	0.0123	0.00016	3.8903
			60	0.9975	0.0140	0.00021	5.7583
	OD2	1.0	40	0.9985	0.0089	0.00009	1.8239
			50	0.9944	0.0187	0.00038	4.8601
			60	0.9994	0.0068	0.00005	2.5133
		1.5	40	0.9958	0.0149	0.00024	3.1777
			50	0.9898	0.0250	0.00068	7.0132
			60	0.9983	0.0112	0.00014	4.2595
Henderson and Pabis	Control	1.0	40	0.9989	0.0085	0.00008	2.1407
			50	0.9997	0.0046	0.00002	1.6788
			60	0.9972	0.0148	0.00024	6.7303
		1.5	40	0.9990	0.0084	0.00008	3.3133
			50	0.9978	0.0129	0.00018	6.4204
			60	0.9978	0.0129	0.00018	6.4204
	OD1	1.0	40	0.9994	0.0058	0.00004	1.3120
			50	0.9996	0.0055	0.00003	1.6146
			60	0.9960	0.0181	0.00036	7.1240
		1.5	40	0.9988	0.0085	0.00008	2.0243
			50	0.9991	0.0081	0.00007	2.5490
			60	0.9975	0.0140	0.00021	5.7463
	OD2	1.0	40	0.9995	0.0051	0.00003	1.0399
			50	0.9966	0.0145	0.00023	3.7771
			60	0.9994	0.0068	0.00005	2.5107
		1.5	40	0.9986	0.0085	0.00008	1.8247
			50	0.9939	0.0195	0.00041	5.4527
			60	0.9985	0.0105	0.00012	3.9837

Table S3. Cont.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	R^2	RMSE	χ^2	CRV (%)
Modified Henderson and Pabis	Control	1.0	40	0.9990	0.0080	0.00008	2.2221
			50	0.9997	0.0046	0.00003	1.8560
			60	0.9972	0.0148	0.00029	7.4406
		1.5	40	0.9976	0.0121	0.00019	3.4710
			50	0.9996	0.0054	0.00004	2.3735
			60	0.9978	0.0129	0.00022	7.0980
	OD1	1.0	40	0.9994	0.0058	0.00004	1.4504
			50	0.9996	0.0055	0.00004	1.7850
			60	0.9960	0.0181	0.00043	7.8758
		1.5	40	0.9988	0.0084	0.00009	2.2217
			50	0.9991	0.0081	0.00009	2.8181
			60	0.9975	0.0140	0.00026	6.3527
	OD2	1.0	40	0.9995	0.0051	0.00003	1.1497
			50	0.9966	0.0145	0.00028	4.1757
			60	0.9994	0.0068	0.00006	2.7757
		1.5	40	0.9986	0.0085	0.00010	2.0173
			50	0.9999	0.0029	0.00001	0.8858
			60	0.9985	0.0105	0.00015	4.4041
Verma	Control	1.0	40	0.9995	0.0054	0.00003	1.4083
			50	0.9999	0.0027	0.00001	1.0015
			60	0.9974	0.0145	0.00024	6.7289
		1.5	40	0.9995	0.0057	0.00004	1.5306
			50	0.9997	0.0050	0.00003	2.0157
			60	0.9978	0.0128	0.00019	6.5376
	OD1	1.0	40	0.9985	0.0093	0.00010	2.1753
			50	0.9999	0.0023	0.00001	0.6879
			60	0.9961	0.0179	0.00037	7.2227
		1.5	40	0.9987	0.0088	0.00009	2.1437
			50	0.9999	0.0023	0.00001	0.7588
			60	0.9975	0.0139	0.00022	5.8696
	OD2	1.0	40	0.9999	0.0022	0.00001	0.4528
			50	0.9978	0.0116	0.00016	3.1063
			60	0.9994	0.0068	0.00005	2.5674
		1.5	40	0.9998	0.0034	0.00001	0.7507
			50	0.9963	0.0152	0.00026	4.3535
			60	0.9987	0.0098	0.00011	3.7919

Table S3. Cont.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	R^2	RMSE	χ^2	CRV (%)
Two Term	Control	1.0	40	0.9989	0.0085	0.00009	2.2451
			50	0.9997	0.0046	0.00003	1.7607
			60	0.9972	0.0148	0.00026	7.0588
		1.5	40	0.9976	0.0121	0.00017	3.2928
			50	0.9990	0.0084	0.00008	3.4750
			60	0.9978	0.0129	0.00020	6.7337
	OD1	1.0	40	0.9994	0.0058	0.00004	1.3760
			50	0.9996	0.0055	0.00004	1.6934
			60	0.9960	0.0181	0.00039	7.4717
		1.5	40	0.9988	0.0085	0.00009	2.1231
			50	0.9991	0.0081	0.00008	2.6734
			60	0.9975	0.0140	0.00023	6.0267
	OD2	1.0	40	0.9995	0.0051	0.00003	1.0907
			50	0.9999	0.0025	0.00001	0.6908
			60	0.9994	0.0068	0.00005	2.6332
		1.5	40	0.9986	0.0085	0.00009	1.9138
			50	0.9939	0.0195	0.00045	5.7189
			60	0.9985	0.0105	0.00013	4.1781
Two Term Exponantial	Control	1.0	40	0.9995	0.0055	0.00003	1.3911
			50	0.9999	0.0029	0.00001	1.0317
			60	0.9968	0.0159	0.00028	7.2209
		1.5	40	0.9998	0.0033	0.00001	0.8564
			50	0.9997	0.0049	0.00003	1.9581
			60	0.9975	0.0138	0.00021	6.8782
	OD1	1.0	40	0.9999	0.0027	0.00001	0.6213
			50	0.9999	0.0023	0.00001	0.6845
			60	0.9955	0.0190	0.00040	7.5134
		1.5	40	0.9995	0.0052	0.00003	1.2361
			50	0.9999	0.0029	0.00001	0.9233
			60	0.9973	0.0144	0.00023	5.9377
	OD2	1.0	40	0.9999	0.0028	0.00001	0.5692
			50	0.9981	0.0107	0.00012	2.7858
			60	0.9991	0.0083	0.00008	3.0928
		1.5	40	0.9999	0.0027	0.00001	0.5727
			50	0.9996	0.0048	0.00003	1.3440
			60	0.9986	0.0099	0.00011	3.7715

Table S3. Cont.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	R^2	RMSE	χ^2	CRV (%)
Diffusion Approach	Fresh	1.0	40	0.9997	0.0042	0.00002	1.0966
			50	0.9999	0.0026	0.00001	0.9547
			60	0.9974	0.0144	0.00024	6.6774
		1.5	40	0.9998	0.0039	0.00002	1.0398
			50	0.9997	0.0048	0.00003	1.9449
			60	0.9979	0.0128	0.00019	6.5133
	OD1	1.0	40	0.9999	0.0022	0.00001	0.5012
			50	1.0000	0.0018	0.00000	0.5239
			60	0.9961	0.0178	0.00036	7.1888
		1.5	40	0.9999	0.0030	0.00001	0.7263
			50	0.9999	0.0019	0.00000	0.6244
			60	0.9975	0.0140	0.00022	5.8814
	OD2	1.0	40	0.9999	0.0018	0.00000	0.3715
			50	0.9982	0.0107	0.00013	2.8411
			60	0.9994	0.0067	0.00005	2.5644
		1.5	40	1.0000	0.0012	0.00000	0.2614
			50	0.9965	0.0148	0.00025	4.2377
			60	0.9987	0.0097	0.00011	3.7727

Table S4. The coefficients of Newton model used to describe the kinetics of hot air drying of fresh (control) and osmotically pretreated apricot halves.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	k[1] (min^{-1})
Newton	Control	1.0	40	0.0016
			50	0.0025
			60	0.0032
		1.5	40	0.0016
			50	0.0028
			60	0.0036
	OD1	1.0	40	0.0013
			50	0.0019
			60	0.0027
		1.5	40	0.0014
			50	0.0021
			60	0.0029
	OD2	1.0	40	0.0011
			50	0.0016
			60	0.0026
		1.5	40	0.0012
			50	0.0018
			60	0.0027

[1] k—Drying constant (min^{-1}); OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%.

Table S5. The coefficients of Page model used to describe the kinetics of hot air drying of fresh (control) and osmotically pretreated apricot halves.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	k[1] (min^{-1})	n (-)
Page	Control	1.0	40	0.0025	0.9305
			50	0.0031	0.9665
			60	0.0021	1.0679
		1.5	40	0.0032	0.8953
			50	0.0042	0.9369
			60	0.0027	1.0478
	OD1	1.0	40	0.0019	0.9470
			50	0.0026	0.9547
			60	0.0018	1.0661
		1.5	40	0.0024	0.9251
			50	0.0033	0.9322
			60	0.0024	1.0294
	OD2	1.0	40	0.0016	0.9462
			50	0.0033	0.8948
			60	0.0025	1.0067
		1.5	40	0.0022	0.9094
			50	0.0045	0.8604
			60	0.0036	0.9529

[1] k—Drying constant; n – Exponent; OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%.

Table S6. The coefficients of Modified Page model used to describe the kinetics of hot air drying of fresh (control) and osmotically pretreated apricot halves.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	k[1] (min^{-1})	n (-)
Modified Page	Control	1.0	40	0.0397	0.0397
			50	0.0502	0.0502
			60	0.0566	0.0566
		1.5	40	0.0404	0.0404
			50	0.0533	0.0533
			60	0.0597	0.0597
	OD1	1.0	40	0.0366	0.0366
			50	0.0439	0.0439
			60	0.0522	0.0522
		1.5	40	0.0379	0.0379
			50	0.0462	0.0462
			60	0.0536	0.0536
	OD2	1.0	40	0.0336	0.0336
			50	0.0406	0.0406
			60	0.0511	0.0511
		1.5	40	0.0348	0.0348
			50	0.0428	0.0428
			60	0.0521	0.0521

[1] k—Drying constant; n—Exponent; OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%.

Table S7. The coefficients of Henderson and Pabis model used to describe the kinetics of hot air drying of fresh (control) and osmotically pretreated apricot halves.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	a[1] (-)	k (min^{-1})
Henderson and Pabis	Control	1.0	40	0.9741	0.0015
			50	0.9863	0.0025
			60	1.0107	0.0032
		1.5	40	0.9578	0.0016
			50	0.9765	0.0028
			60	1.0042	0.0036
	OD1	1.0	40	0.9799	0.0013
			50	0.9806	0.0019
			60	1.0088	0.0027
		1.5	40	0.9692	0.0014
			50	0.9708	0.0021
			60	0.9969	0.0029
	OD2	1.0	40	0.9809	0.0011
			50	0.9658	0.0016
			60	1.0010	0.0026
		1.5	40	0.9677	0.0012
			50	0.9526	0.0017
			60	0.9864	0.0027

[1] a—Coefficient of the equation; k – Drying constant; OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%.

Table S8. The coefficients of Modified Henderson and Pabis model used to describe the kinetics of hot air drying of fresh (control) and osmotically pretreated apricot halves.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	a[1] (-)	b (-)	c (-)	k_1 (min^{-1})	k_2 (min^{-1})	k_3 (min^{-1})
Modified Henderson and Pabis	Control	1.0	40	0.3275	0.3275	0.3207	0.0017	0.0017	0.0012
			50	0.3288	0.3288	0.3288	0.0025	0.0025	0.0025
			60	0.3369	0.3369	0.3369	0.0032	0.0032	0.0032
		1.5	40	0.3193	0.3193	0.3193	0.0016	0.0016	0.0016
			50	0.3414	0.3414	0.3059	0.0035	0.0034	0.0019
			60	0.3347	0.3347	0.3347	0.0036	0.0036	0.0036
	OD1	1.0	40	0.3266	0.3266	0.3266	0.0013	0.0013	0.0013
			50	0.3269	0.3269	0.3269	0.0019	0.0019	0.0019
			60	0.3363	0.3363	0.3363	0.0027	0.0027	0.0027
		1.5	40	0.3228	0.3228	0.3228	0.0015	0.0013	0.0013
			50	0.3236	0.3236	0.3236	0.0021	0.0021	0.0021
			60	0.3323	0.3323	0.3323	0.0029	0.0029	0.0029
	OD2	1.0	40	0.3270	0.3270	0.3270	0.0011	0.0011	0.0011
			50	0.3219	0.3219	0.3219	0.0016	0.0016	0.0016
			60	0.3337	0.3337	0.3337	0.0026	0.0026	0.0026
		1.5	40	0.3226	0.3226	0.3226	0.0012	0.0012	0.0012
			50	0.3530	0.4016	0.2371	0.0021	0.0030	0.0007
			60	0.3288	0.3288	0.3288	0.0027	0.0027	0.0027

[1] a. b. c—Coefficients of the equation; k_1. k_2. k_3—Drying constant; OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%.

Table S9. The coefficients of Verma model used to describe the kinetics of hot air drying of fresh (control) and osmotically pretreated apricot halves.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	a[1] (-)	k_1 (min^{-1})	k_2 (min^{-1})
Verma	Control	1.0	40	0.0390	0.1748	0.0015
			50	0.0251	0.1748	0.0025
			60	−0.0227	0.1748	0.0033
		1.5	40	0.0637	0.1748	0.0015
			50	0.0460	0.1748	0.0027
			60	−0.0097	0.1748	0.0036
	OD1	1.0	40	−0.1244	0.0013	0.0013
			50	0.0312	0.1748	0.0019
			60	−0.0167	0.1748	0.0028
		1.5	40	0.1547	0.0034	0.0013
			50	0.0488	0.1748	0.0020
			60	0.0061	0.1748	0.0029
	OD2	1.0	40	0.0266	0.1501	0.0011
			50	0.0522	0.1748	0.0015
			60	−0.0020	0.1748	0.0026
		1.5	40	0.0453	0.1501	0.0011
			50	0.0748	0.1748	0.0017
			60	0.0262	0.1748	0.0026

[1] a—Coefficients of the equation; k_1. k_2—Drying constant; OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%.

Table S10. The coefficients of Two Term model used to describe the kinetics of hot air drying of fresh (control) and osmotically pretreated apricot halves.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	a[1] (-)	b (-)	k_1 (min^{-1})	k_2 (min^{-1})
Two Term	Control	1.0	40	0.4870	0.4870	0.0015	0.0015
			50	0.4932	0.4932	0.0025	0.0025
			60	0.5053	0.5053	0.0032	0.0032
		1.5	40	0.4789	0.4789	0.0016	0.0016
			50	0.4883	0.4883	0.0028	0.0028
			60	0.5021	0.5021	0.0036	0.0036
	OD1	1.0	40	0.4900	0.4900	0.0013	0.0013
			50	0.4903	0.4903	0.0019	0.0019
			60	0.5044	0.5044	0.0027	0.0027
		1.5	40	0.4846	0.4846	0.0014	0.0014
			50	0.4854	0.4854	0.0021	0.0021
			60	0.4984	0.4984	0.0029	0.0029
	OD2	1.0	40	0.4905	0.4905	0.0011	0.0011
			50	0.4272	0.5690	0.0010	0.0026
			60	0.5005	0.5005	0.0026	0.0026
		1.5	40	0.4839	0.4839	0.0012	0.0012
			50	0.4763	0.4763	0.0017	0.0017
			60	0.4932	0.4932	0.0027	0.0027

[1] a. b.—Coefficients of the equation; k_1. k_2.—Drying constant; OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%.

Table S11. The coefficients of Two Term Exponantial model used to describe the kinetics of hot air drying of fresh (control) and osmotically pretreated apricot halves.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	a[1] (-)	k (min^{-1})
Two Term Exponantial	Control	1.0	40	0.0334	0.0454
			50	0.0293	0.0833
			60	0.0113	0.2803
		1.5	40	0.0791	0.0188
			50	0.0445	0.0609
			60	0.0188	0.1865
	OD1	1.0	40	0.0303	0.0426
			50	0.0292	0.0637
			60	0.0134	0.1999
		1.5	40	0.0335	0.0413
			50	0.0427	0.0476
			60	0.0236	0.1188
	OD2	1.0	40	0.0212	0.0515
			50	0.0596	0.0257
			60	0.0202	0.1261
		1.5	40	0.0447	0.0253
			50	0.3057	0.0044
			60	0.0352	0.0742

[1] a—Coefficient of the equation; k—Drying constant; OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%.

Table S12. The coefficients of Diffusion Approach model used to describe the kinetics of hot air drying of fresh (control) and osmotically pretreated apricot halves.

Model	Pretreatment	Air velocity (m/s)	Air temperature (°C)	a[1] (-)	b (-)	k (min^{-1})
Diffusion Approach	Control	1.0	40	0.0467	0.0593	0.0251
			50	0.0267	0.0619	0.0396
			60	−0.0261	0.0793	0.0413
		1.5	40	0.0738	0.0608	0.0246
			50	0.0494	0.0661	0.0408
			60	−0.0120	0.0826	0.0436
	OD1	1.0	40	0.0335	0.0568	0.0226
			50	0.0350	0.0635	0.0292
			60	−0.0199	0.0711	0.0390
		1.5	40	0.0505	0.0568	0.0238
			50	0.0536	0.0646	0.0312
			60	0.0046	0.0689	0.0416
	OD2	1.0	40	0.0279	0.0286	0.0379
			50	0.0616	0.0604	0.0253
			60	−0.0025	0.0638	0.0410
		1.5	40	0.0529	0.0556	0.0202
			50	0.0796	0.0373	0.0445
			60	0.0284	0.0657	0.0401

[1] a. b—Coefficients of the equation; k—Drying constant; OD1—Osmotic dehydration at temperature 40 °C and concentration 50%; OD2—Osmotic dehydration at temperature 60 °C and concentration 65%.