

Deoxynivalenol and its masked forms: Characteristics, i wheat and wheat based products processing - A review

Trends in Food Science and Technology

71, 13-24

DOI: [10.1016/j.tifs.2017.10.012](https://doi.org/10.1016/j.tifs.2017.10.012)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Fates of deoxynivalenol and deoxynivalenol-3-glucoside from wheat flour to Iranian traditional breads. <i>Food Control</i> , 2018, 91, 339-343.	2.8	16
2	The detoxification of aflatoxin M ₁ by <i>Lactobacillus acidophilus</i> and <i>Bifidobacterium</i> spp.: A review. <i>Journal of Food Processing and Preservation</i> , 2018, 42, e13704.	0.9	49
3	Aflatoxins in cereals: State of the art. <i>Journal of Food Safety</i> , 2018, 38, e12532.	1.1	56
4	Probabilistic risk assessment (Monte Carlo simulation method) of Pb and Cd in the onion bulb (<i>Allium</i>) Tj ETQq1 1 0,784314 rgBT /Over	2.7	49
5	Impact of unit operations during processing of cereal-based products on the levels of deoxynivalenol, total aflatoxin, ochratoxin A, and zearalenone: A systematic review and meta-analysis. <i>Food Chemistry</i> , 2018, 268, 611-624.	4.2	104
6	Prevalence and concentration of ochratoxin A, zearalenone, deoxynivalenol and total aflatoxin in cereal-based products: A systematic review and meta-analysis. <i>Food and Chemical Toxicology</i> , 2018, 118, 830-848.	1.8	110
7	Modified Fusarium Mycotoxins in Cereals and Their Products—Metabolism, Occurrence, and Toxicity: An Updated Review. <i>Molecules</i> , 2018, 23, 963.	1.7	90
8	Mycotoxin levels in the digestive tissues of immature gilts exposed to zearalenone and deoxynivalenol. <i>Toxicon</i> , 2018, 153, 1-11.	0.8	16
9	The prevalence of aflatoxin M ₁ in milk of Middle East region: A systematic review, meta-analysis and probabilistic health risk assessment. <i>Food and Chemical Toxicology</i> , 2018, 118, 653-666.	1.8	95
10	Effect of debranning process on deoxynivalenol content in whole-wheat flours. <i>Cereal Chemistry</i> , 2019, 96, 717-724.	1.1	8
11	Biomonitoring of mycotoxin exposure using urinary biomarker approaches: a review. <i>Toxin Reviews</i> , 2021, 40, 383-403.	1.5	16
12	Interactions among Fungal Community, <i>Fusarium</i> Mycotoxins, and Components of Harvested Wheat under Simulated Storage Conditions. <i>Journal of Agricultural and Food Chemistry</i> , 2019, 67, 8411-8418.	2.4	17
13	The occurrence of mycotoxins in breast milk, fruit products and cereal-based infant formula: A review. <i>Trends in Food Science and Technology</i> , 2019, 92, 81-93.	7.8	70
14	Food Safety & Mycotoxins. , 2019, , .		1
15	Global research trends in food safety in agriculture and industry from 1991 to 2018: A data-driven analysis. <i>Trends in Food Science and Technology</i> , 2019, 85, 262-276.	7.8	42
16	Deoxynivalenol: insights on genetics, analytical methods and occurrence. <i>Current Opinion in Food Science</i> , 2019, 30, 85-92.	4.1	11
17	Mycotoxins in cereal-based products during 24 years (1983–2017): A global systematic review. <i>Trends in Food Science and Technology</i> , 2019, 91, 95-105.	7.8	110
18	The concentration and prevalence of ochratoxin A in coffee and coffee-based products: A global systematic review, meta-analysis and meta-regression. <i>Fungal Biology</i> , 2019, 123, 611-617.	1.1	52

#	ARTICLE	IF	CITATIONS
19	Changes in masked forms of deoxynivalenol and their co-occurrence with culmorin in cereal-based products: A systematic review and meta-analysis. <i>Food Chemistry</i> , 2019, 294, 587-596.	4.2	41
20	Preparation of dummy molecularly imprinted polymers for extraction of Zearalenone in grain samples. <i>Journal of Chromatography A</i> , 2019, 1602, 11-18.	1.8	39
21	Concentration and Prevalence of Aflatoxin M1 in Human Breast Milk in Iran: Systematic Review, Meta-Analysis, and Carcinogenic Risk Assessment: A Review. <i>Journal of Food Protection</i> , 2019, 82, 785-795.	0.8	49
22	The Association between the Preservative Agents in Foods and the Risk of Breast Cancer. <i>Nutrition and Cancer</i> , 2019, 71, 1229-1240.	0.9	17
23	Effect of iron-enrichment on the antioxidant properties of wheat flour and bread. <i>Journal of Cereal Science</i> , 2019, 87, 98-102.	1.8	9
24	Estimating percentages of fusarium-damaged kernels in hard wheat by near-infrared hyperspectral imaging. <i>Journal of Cereal Science</i> , 2019, 87, 18-24.	1.8	49
25	Aflatoxin M1 in human breast milk: A global systematic review, meta-analysis, and risk assessment study (Monte Carlo simulation). <i>Trends in Food Science and Technology</i> , 2019, 88, 333-342.	7.8	80
26	Machine learning algorithms for the automated classification of contaminated maize at regulatory limits via infrared attenuated total reflection spectroscopy. <i>World Mycotoxin Journal</i> , 2019, 12, 113-122.	0.8	10
27	Exposure assessment of adult consumers in Serbia, Greece and Croatia to deoxynivalenol and zearalenone through consumption of major wheat-based products. <i>World Mycotoxin Journal</i> , 2019, 12, 431-442.	0.8	11
28	Microbiological Issues Associated with Fruits, Vegetables, Nuts, and Grains. , 0, , 179-206.		2
29	Changes in aflatoxins content during processing of pekmez as a traditional product of grape. <i>LWT - Food Science and Technology</i> , 2019, 103, 178-185.	2.5	33
30	Cold plasma as a tool for the elimination of food contaminants: Recent advances and future trends. <i>Critical Reviews in Food Science and Nutrition</i> , 2020, 60, 1581-1592.	5.4	93
31	Deacetylation of 3-acetyl-deoxynivalenol in wheat flour is mediated by water-soluble proteins during the making of Chinese steamed bread. <i>Food Chemistry</i> , 2020, 303, 125341.	4.2	5
32	Recent advances on toxicity and determination methods of mycotoxins in foodstuffs. <i>Trends in Food Science and Technology</i> , 2020, 96, 233-252.	7.8	157
33	Assessment of processing impacts and type of clarifier on the concentration of ochratoxin A in pekmez as a conventional grape-based product. <i>LWT - Food Science and Technology</i> , 2020, 119, 108882.	2.5	16
34	Antifungal Activity of Chitosan Oligomersâ€“Amino Acid Conjugate Complexes against <i>Fusarium culmorum</i> in Spelt (<i>Triticum spelta</i> L.). <i>Agronomy</i> , 2020, 10, 1427.	1.3	19
35	Antifungal Activity against <i>Fusarium culmorum</i> of Stevioside, <i>Silybum marianum</i> Seed Extracts, and Their Conjugate Complexes. <i>Antibiotics</i> , 2020, 9, 440.	1.5	8
36	Mycotoxins Analysis in Cereals and Related Foodstuffs by Liquid Chromatography-Tandem Mass Spectrometry Techniques. <i>Journal of Food Quality</i> , 2020, 2020, 1-23.	1.4	13

#	ARTICLE	IF	CITATIONS
37	Effect of different ozone treatments on the degradation of deoxynivalenol and flour quality in Fusarium-contaminated wheat. <i>CYTA - Journal of Food</i> , 2020, 18, 776-784.	0.9	12
38	A New High-Throughput Screening Method to Detect Antimicrobial Volatiles from Metagenomic Clone Libraries. <i>Antibiotics</i> , 2020, 9, 726.	1.5	2
39	Metabolomics-guided analysis reveals a two-step epimerization of deoxynivalenol catalyzed by the bacterial consortium IFSN-C1. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 6045-6056.	1.7	12
40	Preparation of magnetic molecularly imprinted polymers for the identification of zearalenone in grains. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 4725-4737.	1.9	20
41	The potential of pulsed electric fields to reduce pesticides and toxins. , 2020, , 141-152.		3
42	Fate of deoxynivalenol and degradation products degraded by aqueous ozone in contaminated wheat. <i>Food Research International</i> , 2020, 137, 109357.	2.9	9
43	A review on mycotoxins detection techniques in edible oils. <i>International Journal of Environmental Analytical Chemistry</i> , 2022, 102, 2125-2139.	1.8	19
44	Deoxynivalenol degradation in wheat kernels by exposition to ammonia vapours: A tentative strategy for detoxification. <i>Food Control</i> , 2020, 118, 107444.	2.8	21
45	In vitro and in vivo capacity of yeast-based products to bind to aflatoxins B1 and M1 in media and foodstuffs: A systematic review and meta-analysis. <i>Food Research International</i> , 2020, 137, 109505.	2.9	21
46	Electron beam irradiation to reduce the mycotoxin and microbial contaminations of cereal-based products: An overview. <i>Food and Chemical Toxicology</i> , 2020, 143, 111557.	1.8	54
47	Deoxynivalenol: Masked forms, fate during food processing, and potential biological remedies. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2020, 19, 895-926.	5.9	63
48	Maize (<i>Zea mays</i> L.) and mycotoxins: A review on optimization and validation of analytical methods by liquid chromatography coupled to mass spectrometry. <i>Trends in Food Science and Technology</i> , 2020, 99, 542-565.	7.8	20
49	Fate of regulated, masked, emerging mycotoxins and secondary fungal metabolites during different large-scale maize dry-milling processes. <i>Food Research International</i> , 2021, 140, 109861.	2.9	17
50	Study on the interactive effect of deoxynivalenol and <i>Clostridium perfringens</i> on the jejunal health of broiler chickens. <i>Poultry Science</i> , 2021, 100, 100807.	1.5	13
51	Accurate determination of type B trichothecenes and conjugated deoxynivalenol in grains by isotope dilution-liquid chromatography tandem mass spectrometry. <i>Food Control</i> , 2021, 121, 107557.	2.8	26
52	Are Data from Mycotoxins™ Urinary Biomarkers and Food Surveys Linked? A Review Underneath Risk Assessment. <i>Food Reviews International</i> , 2021, 37, 373-398.	4.3	7
53	Effects of Durum Wheat Cultivars with Different Degrees of FHB Susceptibility Grown under Different Meteorological Conditions on the Contamination of Regulated, Modified and Emerging Mycotoxins. <i>Microorganisms</i> , 2021, 9, 408.	1.6	8
54	Transcriptome Analysis of Caco-2 Cells upon the Exposure of Mycotoxin Deoxynivalenol and Its Acetylated Derivatives. <i>Toxins</i> , 2021, 13, 167.	1.5	15

#	ARTICLE	IF	CITATIONS
55	Enrichment of deoxynivalenol and establishment of online early warning treatment system for drinking water. <i>International Journal of Food Science and Technology</i> , 2021, 56, 2612-2620.	1.3	1
56	Application of new technologies in decontamination of mycotoxins in cereal grains: Challenges, and perspectives. <i>Food and Chemical Toxicology</i> , 2021, 148, 111976.	1.8	65
57	The impact of wheat-based food processing on the level of trichothecenes and their modified forms. <i>Trends in Food Science and Technology</i> , 2021, 111, 89-99.	7.8	12
58	Content of minerals and deoxynivalenol in the air-classified fractions of durum wheat. <i>Cereal Chemistry</i> , 2021, 98, 1101-1111.	1.1	4
59	The prevalence of aflatoxins in commercial baby food products: A global systematic review, meta-analysis, and risk assessment study. <i>Trends in Food Science and Technology</i> , 2021, 114, 100-115.	7.8	32
60	A global systematic review and meta-analysis of concentration and prevalence of mycotoxins in birds' egg. <i>Environmental Science and Pollution Research</i> , 2021, 28, 59542-59550.	2.7	5
61	Prevalence, level and health risk assessment of mycotoxins in the fried poultry eggs from Jordan. <i>Environmental Research</i> , 2021, 200, 111701.	3.7	4
62	The concentration of aflatoxin M1 in raw and pasteurized milk: A worldwide systematic review and meta-analysis. <i>Trends in Food Science and Technology</i> , 2021, 115, 22-30.	7.8	24
63	The technological properties of winter wheat grain during long-term storage. <i>Potravinarstvo</i> , 0, 15, 926-938.	0.5	0
64	Development and validation of a reliable LC-MS/MS method for simultaneous determination of deoxynivalenol and T-2 toxin in maize and oats. <i>Microchemical Journal</i> , 2021, 169, 106599.	2.3	20
65	Simultaneous quantitation of 3ADON and 15ADON chemotypes of DON-producing <i>Fusarium</i> species in Chinese wheat based on duplex droplet digital PCR assay. <i>Journal of Microbiological Methods</i> , 2021, 190, 106319.	0.7	4
66	Mycotoxin deoxynivalenol and oxidative stress: Role of silymarin and inulin protection. , 2021, , 457-467.		0
67	Enniatin B and Deoxynivalenol Activity on Bread Wheat and on <i>Fusarium</i> Species Development. <i>Toxins</i> , 2021, 13, 728.	1.5	9
69	Impact of Climate Change on Crop Production in Serbia. , 2020, , 1-18.		0
70	The potential of HPP for minimizing pesticides and toxins in food products. , 2020, , 173-184.		0
71	The fate of deoxynivalenol and its derivatives in spring wheat whole-grain flour during storage. <i>Zemdirbyste</i> , 2020, 107, 123-130.	0.3	1
72	Updated Review of the Toxicity of Selected <i>Fusarium</i> Toxins and Their Modified Forms. <i>Toxins</i> , 2021, 13, 768.	1.5	19
73	Challenges of <i>Lactobacillus</i> fermentation in combination with acoustic screening for deoxynivalenol and deoxynivalenol conjugates reduction in contaminated wheat - based products. <i>Food Control</i> , 2022, 134, 108699.	2.8	8

#	ARTICLE	IF	CITATIONS
74	The donor properties of resources resistance against the exciter of wheat rust wheat. <i>Potravinarstvo</i> , 0, 14, 821-827.	0.5	8
75	Diversity of winter common wheat varieties for resistance to leaf rust created in the V. M. Remeslo myronivka institute of wheat. <i>Potravinarstvo</i> , 0, 14, 1001-1007.	0.5	8
76	Impact of Climate Change on Crop Production in Serbia. , 2021, , 779-796.		0
77	Use of Air-Classification Technology to Manage Mycotoxin and Arsenic Contaminations in Durum Wheat-Derived Products. <i>Foods</i> , 2022, 11, 304.	1.9	2
78	The control of fungi and mycotoxins by food active packaging: a review. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 6393-6411.	5.4	15
79	Tricothecenes in food and feed: Occurrence, impact on human health and their detection and management strategies. <i>Toxicon</i> , 2022, 208, 62-77.	0.8	28
80	Implications of Mycotoxins in Food Safety. , 0, , .		4
81	Predictive growth kinetic parameters and modelled probabilities of deoxynivalenol production by <i>Fusarium graminearum</i> on wheat during simulated storing conditions. <i>Journal of Applied Microbiology</i> , 2022, 133, 349-361.	1.4	9
82	Epimerization of Deoxynivalenol by the Devosia Strain A6-243 Assisted by Pyrroloquinoline Quinone. <i>Toxins</i> , 2022, 14, 16.	1.5	12
83	Tricothecenes and enzyme activities in the mashing step of the brewing process. <i>Food Research International</i> , 2022, 157, 111317.	2.9	1
84	Deoxynivalenol: An Overview on Occurrence, Chemistry, Biosynthesis, Health Effects and Its Detection, Management, and Control Strategies in Food and Feed. <i>Microbiology Research</i> , 2022, 13, 292-314.	0.8	18
86	Highly sensitive and convenient aptasensor based on Au NPs@Ce-TpBpy COF for quantitative determination of zearalenone. <i>RSC Advances</i> , 2022, 12, 17312-17320.	1.7	12
87	Sorting capability and grain recovery of deoxynivalenol contaminated wheat is affected by calibration and vitreous kernel settings from near-infrared transmittance technology. <i>World Mycotoxin Journal</i> , 2022, 16, 49-57.	0.8	1
88	Effects of cold plasma on food poisoning microbes and food contaminants including toxins and allergens: A review. <i>Journal of Food Processing and Preservation</i> , 2022, 46, .	0.9	5
89	Chemical composition of essential oils from leaf and bud of clove and their impact on the antifungal and mycotoxin inhibitory activities of clove oil-in-water nanoemulsions. <i>Industrial Crops and Products</i> , 2022, 187, 115479.	2.5	7
90	Antifungal activity, mycotoxin inhibitory efficacy, and mode of action of hop essential oil nanoemulsion against <i>Fusarium graminearum</i> . <i>Food Chemistry</i> , 2023, 400, 134016.	4.2	19
91	Decontamination of Cereal and Cereal. , 2022, , 145-163.		0
92	Zearalenone and Its Masked Forms in Cereals and Cereal-Derived Products: A Review of the Characteristics, Incidence, and Fate in Food Processing. <i>Journal of Fungi (Basel, Switzerland)</i> , 2022, 8, 976.	1.5	7

#	ARTICLE	IF	CITATIONS
93	Reliable and Accessible Method for Trichothecenes Type B Determination in Oat Products. <i>Food Analytical Methods</i> , 2023, 16, 83-95.	1.3	1
94	Matrix-associated mycotoxins in foods, cereals and feedstuffs: A review on occurrence, detection, transformation and future challenges. <i>Critical Reviews in Food Science and Nutrition</i> , 0, , 1-14.	5.4	2
95	Aflatoxins in Cereals and Cereal-Based Products: Occurrence, Toxicity, Impact on Human Health, and Their Detoxification and Management Strategies. <i>Toxins</i> , 2022, 14, 687.	1.5	12
96	Recent advances on formation, transformation, occurrence, and analytical strategy of modified mycotoxins in cereals and their products. <i>Food Chemistry</i> , 2023, 405, 134752.	4.2	10
97	Mycotoxins in Wheat Flours Marketed in Shanghai, China: Occurrence and Dietary Risk Assessment. <i>Toxins</i> , 2022, 14, 748.	1.5	5
98	The potential and applicability of infrared spectroscopic methods for the rapid screening and routine analysis of mycotoxins in food crops. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2022, 21, 5199-5224.	5.9	9
99	Recent Research on Fusarium Mycotoxins in Maize—A Review. <i>Foods</i> , 2022, 11, 3465.	1.9	14
100	Type B Trichothecenes in Cereal Grains and Their Products: Recent Advances on Occurrence, Toxicology, Analysis and Post-Harvest Decontamination Strategies. <i>Toxins</i> , 2023, 15, 85.	1.5	10
101	Photocatalytic Degradation and Pathway from Mycotoxins in Food: A Review. <i>Food Reviews International</i> , 2024, 40, 276-292.	4.3	0
102	Type B trichothecenes in cakes and their interaction with matrix components. <i>Food Control</i> , 2023, 149, 109692.	2.8	1
103	Effect of Plasma-Activated Water Bubbles on Fusarium graminearum, Deoxynivalenol, and Germination of Naturally Infected Barley during Steeping. <i>Toxins</i> , 2023, 15, 124.	1.5	5
104	Different diagnostic approaches for the characterization of the fungal community and <i>Fusarium</i> species complex composition of Italian durum wheat grain and correlation with secondary metabolite accumulation. <i>Journal of the Science of Food and Agriculture</i> , 2023, 103, 4503-4521.	1.7	4
105	Prevalence and Concentration of Mycotoxins in Animal Feed in the Middle East and North Africa (MENA): A Systematic Review and Meta-Analysis. <i>Toxins</i> , 2023, 15, 214.	1.5	4
106	A specific fine-grained identification model for plasma-treated rice growth using multiscale shortcut convolutional neural network. <i>Mathematical Biosciences and Engineering</i> , 2023, 20, 10223-10243.	1.0	0
107	Impact of Enniatin and Deoxynivalenol Co-Occurrence on Plant, Microbial, Insect, Animal and Human Systems: Current Knowledge and Future Perspectives. <i>Toxins</i> , 2023, 15, 271.	1.5	3
108	Mycotoxin Contamination Status of Cereals in China and Potential Microbial Decontamination Methods. <i>Metabolites</i> , 2023, 13, 551.	1.3	6
109	Effect of treatment of Fusarium head blight infected barley grains with hop essential oil nanoemulsion on the quality and safety of malted barley. <i>Food Chemistry</i> , 2023, 421, 136172.	4.2	2
111	The occurrence of aflatoxin M1 in milk samples of Iran: a systematic review and meta-analysis. <i>Environmental Monitoring and Assessment</i> , 2023, 195, .	1.3	3

#	ARTICLE	IF	CITATIONS
---	---------	----	-----------