The interplay of $\hat{I}\pm\text{-amylase}$ and amyloglucosidase activities of the enzymic systems

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Citation Report

#	Article	IF	CITATIONS
1	Extrusion induced low-order starch matrices: Enzymic hydrolysis and structure. Carbohydrate Polymers, 2015, 134, 485-496.	10.2	54
2	Characterization of saccharides released during an in vitro pepsinâ€pancreatin digestion of corn flour using HPAECâ€PAD. Starch/Staerke, 2016, 68, 691-699.	2.1	4
3	Sequential transformation of the structural and thermodynamic parameters of the complex particles, combining covalent conjugate (sodium caseinate + maltodextrin) with polyunsaturated lipids stabilized by a plant antioxidant, in the simulated gastro-intestinal conditions in vitro. Food Research International, 2016, 88, 173-177.	6.2	1
4	Structure and digestion of hybrid Indica rice starch and its biosynthesis. International Journal of Biological Macromolecules, 2016, 93, 402-407.	7.5	25
5	Intactness of cell wall structure controls the in vitro digestion of starch in legumes. Food and Function, 2016, 7, 1367-1379.	4.6	184
6	Synthesis, characterization, and antibacterial property of novel starch derivatives with 1,2,3-triazole. Carbohydrate Polymers, 2016, 142, 1-7.	10.2	50
7	Synthesis and antioxidant property of novel 1,2,3-triazole-linked starch derivatives via â€~click chemistry'. International Journal of Biological Macromolecules, 2016, 82, 404-410.	7.5	73
8	The influence of starch derivatives with benzene or halogenated benzene on antibacterial activity. Starch/Staerke, 2017, 69, 1600350.	2.1	8
9	Synthesis of aminopyridiniumâ€grafted starch derivatives and evaluation of their antioxidant property. Starch/Staerke, 2017, 69, 1600259.	2.1	11
10	Starch phosphorylation plays an important role in starch biosynthesis. Carbohydrate Polymers, 2017, 157, 1628-1637.	10.2	35
11	Production of Glucose Sweetener by Simple Single- Step Hydrolysis of Native Cassava Root Starch. Transactions of the ASABE, 2017, 60, 2199-2207.	1.1	2
12	Evaluation of different enzymatic treatment procedures on sugar extraction from microalgal biomass, experimental and kinetic study. Energy, 2018, 148, 258-268.	8.8	21
13	Temperature-pressure-time combinations for the generation of common bean microstructures with different starch susceptibilities to hydrolysis. Food Research International, 2018, 106, 105-115.	6.2	31
14	Synthesis of Novel Amino Lactose and Evaluation of Its Antioxidant Property. Starch/Staerke, 2018, 70, 1700293.	2.1	1
15	Tea polyphenols enhance binding of porcine pancreatic α-amylase with starch granules but reduce catalytic activity. Food Chemistry, 2018, 258, 164-173.	8.2	53
16	Effects of formulation and process conditions on microstructure, texture and digestibility of extruded insect-riched snacks. Innovative Food Science and Emerging Technologies, 2018, 45, 344-353.	5.6	106
17	Influence of variety, harvesting date and drying temperature on the composition and the inÂvitro digestibility of corn grain. Journal of Cereal Science, 2018, 79, 218-225.	3.7	17
18	Characteristics of α-amylase from Lactobacillus fermentum EN38-44 and its application in producing local tuber paste flour. AIP Conference Proceedings, 2018, , .	0.4	0

#	Article	IF	CITATIONS
19	Grafting the Indeterminate Tomato Cultivar Moneymaker onto Multifort Rootstock Improves Cold Tolerance. Hortscience: A Publication of the American Society for Hortcultural Science, 2018, 53, 1610-1617.	1.0	10
20	Surface structural features control in vitro digestion kinetics of bean starches. Food Hydrocolloids, 2018, 85, 343-351.	10.7	34
22	Synergism of cellulases and amylolytic enzymes in the hydrolysis of microalgal carbohydrates. Biofuels, Bioproducts and Biorefining, 2018, 12, 749-755.	3.7	17
23	Modeling Starch Digestograms: Computational Characteristics of Kinetic Models for <i>in vitro</i> Starch Digestion in Food Research. Comprehensive Reviews in Food Science and Food Safety, 2018, 17, 1422-1445.	11.7	40
24	The contents of glucose and lactic acid in tube paste flour additional amylolytic Lactobacillus bulgaricus FNCC 004P and Streptococcus thermophillus FNCC 1.9.03. AIP Conference Proceedings, 2018, , .	0.4	0
25	The rise in glucose concentration in saliva samples mixed with test foods monitored using a glucometer: An observational pilot study. Journal of Oral Biosciences, 2019, 61, 201-206.	2.2	4
26	Influence of enzymatic hydrolysis on the properties of red rice starch. International Journal of Biological Macromolecules, 2019, 141, 1210-1219.	7.5	55
27	The influence of starch structure and anthocyanin content on the digestibility of Thai pigmented rice. Food Chemistry, 2019, 298, 124949.	8.2	33
28	Effect of liquefaction time and enzyme addition on liquid sugar production from sweet sorghum starch by enzymatic hydrolysis. IOP Conference Series: Earth and Environmental Science, 0, 250, 012042.	0.3	4
29	Gaining insights into α‑amylase inhibition by glucose through mathematical modeling and analysis of the hydrolysis kinetics of gelatinized corn starch dispersions. International Journal of Biological Macromolecules, 2019, 132, 766-771.	7.5	7
30	In vitro inhibitory effect of tea extracts on starch digestibility. Journal of Food Process Engineering, 2019, 42, e13023.	2.9	11
31	Salivary α-Amylase Activity and Starch-Related Sweet Taste Perception in Humans. Chemical Senses, 2019, 44, 249-256.	2.0	19
32	Kinetics of Î \pm -Amylase Action on Starch. , 2019, , 291-302.		0
33	Quantitative Characterization of Digestion Processes. , 2019, , 159-184.		3
34	Starchy Foods: Human Nutrition and Public Health. , 2019, , 277-290.		3
35	Interdisciplinary Approaches to Food Digestion. , 2019, , .		7
36	Influence of Physical and Structural Aspects of Food on Starch Digestion. , 2019, , 303-336.		0
37	Monkey orange fruit juice improves the nutritional quality of a maize-based diet. Food Research International, 2019, 116, 870-877.	6.2	9

#	Article	IF	CITATIONS
38	Preparation of a starch-based carrier for oral delivery of Vitamin E to the small intestine. Food Hydrocolloids, 2019, 91, 26-33.	10.7	40
39	Enzymeâ€assisted development of biofunctional polyphenolâ€enriched buckwheat protein: physicochemical properties, in vitro digestibility, and antioxidant activity. Journal of the Science of Food and Agriculture, 2019, 99, 3176-3185.	3.5	9
40	Dietary polyphenols modulate starch digestion and glycaemic level: a review. Critical Reviews in Food Science and Nutrition, 2020, 60, 541-555.	10.3	227
41	Effect of semolina pudding prepared from starch branching enzyme IIa and b mutant wheat on glycaemic response in vitro and in vivo: a randomised controlled pilot study. Food and Function, 2020, 11, 617-627.	4.6	15
42	Inhibition of α-amylase by polyphenolic compounds: Substrate digestion, binding interactions and nutritional intervention. Trends in Food Science and Technology, 2020, 104, 190-207.	15.1	99
43	Simulation of Human Small Intestinal Digestion of Starch Using an In Vitro System Based on a Dialysis Membrane Process. Foods, 2020, 9, 913.	4.3	11
44	Starch Structure, Functionality and Application in Foods. , 2020, , .		14
45	Effect of Controlled Hydrothermal Treatments on Mung Bean Starch Structure and Its Relationship with Digestibility. Foods, 2020, 9, 664.	4.3	11
46	Viscosity decay of hydrocolloids under oral conditions. Food Research International, 2020, 136, 109300.	6.2	11
47	Effects of Dietary Starch Structure on Growth Performance, Serum Glucose–Insulin Response, and Intestinal Health in Weaned Piglets. Animals, 2020, 10, 543.	2.3	12
48	Number of galloyl moieties and molecular flexibility are both important in alpha-amylase inhibition by galloyl-based polyphenols. Food and Function, 2020, 11, 3838-3850.	4.6	27
49	Black rice (Oryza sativa L.) processing: Evaluation of physicochemical properties, in vitro starch digestibility, and phenolic functions linked to type 2 diabetes. Food Research International, 2021, 141, 109898.	6.2	31
50	The preparation of modified nano-starch and its application in food industry. Food Research International, 2021, 140, 110009.	6.2	30
51	Enzymes in grain processing. Current Opinion in Food Science, 2021, 37, 153-159.	8.0	4
52	<i>In vitro</i> protein and starch digestion kinetics of individual chickpea cells: from static to more complex <i>in vitro</i> digestion approaches. Food and Function, 2021, 12, 7787-7804.	4.6	23
53	Forty-One Plant Extracts Screened for Dual Antidiabetic and Antioxidant Functions: Evaluating the Types of Correlation between α-Amylase Inhibition and Free Radical Scavenging. Molecules, 2021, 26, 317.	3.8	13
54	Recovery of Biomolecules from Agroindustry by Solid-Liquid Enzyme-Assisted Extraction: a Review. Food Analytical Methods, 2021, 14, 1744-1777.	2.6	8
55	Investigating the structural properties and in vitro digestion of rice flours. Food Science and Nutrition, 2021, 9, 2668-2675.	3.4	8

#	Article	IF	Citations
56	Insight into rice (Oryza sativa L.) cooking: Phenolic composition, inhibition of α-amylase and α-glucosidase, and starch physicochemical and functional properties. Food Bioscience, 2021, 40, 100917.	4.4	15
57	The Physical Adsorption of Gelatinized Starch with Tannic Acid Decreases the Inhibitory Activity of the Polyphenol against α-Amylase. Foods, 2021, 10, 1233.	4.3	13
58	Fermentation of Jamaican Cherries Juice Using Lactobacillus plantarum Elevates Antioxidant Potential and Inhibitory Activity against Type II Diabetes-Related Enzymes. Molecules, 2021, 26, 2868.	3.8	12
59	Formation, structure and properties of the starch-polyphenol inclusion complex: A review. Trends in Food Science and Technology, 2021, 112, 667-675.	15.1	96
60	In vitro digestibility of starches with different crystalline polymorphs at low α-amylase activity to substrate ratio. Food Chemistry, 2021, 349, 129170.	8.2	12
61	Elucidation of the low resistant starch phenotype in Phaseolus vulgaris exhibited in the yellow bean Cebo Cela. Journal of Food Science, 2021, 86, 3975-3986.	3.1	3
62	Effect of roasting pulse seeds at different tempering moisture on the flour functional properties and nutritional quality. Food Research International, 2021, 147, 110489.	6.2	15
63	Essential moieties of myricetins, quercetins and catechins for binding and inhibitory activity against α-Glucosidase. Bioorganic Chemistry, 2021, 115, 105235.	4.1	30
64	Caffeoyl substitution decreased the binding and inhibitory activity of quinic acid against α-amylase: The reason why chlorogenic acid is a relatively weak enzyme inhibitor. Food Chemistry, 2022, 371, 131278.	8.2	14
65	Modification of Plant Carbohydrates Using Fungal Enzymes. , 2021, , 370-384.		3
66	Inhibition of pancreatic α-amylase by Lonicera caerulea berry polyphenols in vitro and their potential as hyperglycemic agents. LWT - Food Science and Technology, 2020, 126, 109288.	5.2	30
67	Expression of an (Engineered) 4,6-α-Glucanotransferase in Potato Results in Changes in Starch Characteristics. PLoS ONE, 2016, 11, e0166981.	2.5	2
68	Both Acidic pH Value and Binding Interactions of Tartaric Acid With α-Glucosidase Cause the Enzyme Inhibition: The Mechanism in α-Glucosidase Inhibition of Four Caffeic and Tartaric Acid Derivates. Frontiers in Nutrition, 2021, 8, 766756.	3.7	5
69	Use of amyloglucosidase in a soft wheat dough: Impact of process and formulation on glucose production. Applied Food Research, 2021, 1, 100007.	4.0	2
70	Structural factors governing starch digestion and glycemic responses and how they can be modified by enzymatic approaches: A review and a guide. Comprehensive Reviews in Food Science and Food Safety, 2021, 20, 5965-5991.	11.7	22
71	Replacing Fishmeal With Palm Kernel Meal In Formulated Feed For The Pacific White Shrimp (Litopenaeus Vannamei). Journal of Aquaculture Science, 2021, 6, 99-109.	0.1	1
72	In Vitro Starch Digestion: Mechanisms and Kinetic Models. , 2020, , 151-167.		5
73	Lactic Acid Bacteria Co-Encapsulated with Lactobionic Acid: Probiotic Viability during In Vitro Digestion. Applied Sciences (Switzerland), 2021, 11, 11404.	2.5	3

#	Article	IF	CITATIONS
74	Current application of algae derivatives for bioplastic production: A review. Bioresource Technology, 2022, 347, 126698.	9.6	60
75	Response surface optimisation of enzymatic hydrolysis of cassava peels without chemical and hydrothermal pretreatment. Biomass Conversion and Biorefinery, 2023, 13, 17087-17100.	4.6	3
76	New glucogenesis inhibition model based on complete <scp><i>α</i>â€glucosidases</scp> from rat intestinal tissues validated with various types of natural and pharmaceutical inhibitors. Journal of the Science of Food and Agriculture, 2022, 102, 4419-4424.	3.5	3
77	The encapsulation of probiotics by polysaccharides. , 2022, , 31-64.		О
78	α-Amylase inhibition of a certain dietary polyphenol is predominantly affected by the concentration of α-1, 4-glucosidic bonds in starchy and artificial substrates. Food Research International, 2022, 157, 111210.	6.2	15
79	α-Amylase Changed the Catalytic Behaviors of Amyloglucosidase Regarding Starch Digestion Both in the Absence and Presence of Tannic Acid. Frontiers in Nutrition, 2022, 9, 817039.	3.7	о
82	Enzymic catalyzing affinity to substrate affects inhibitor-enzyme binding interactions: Inhibition behaviors of EGCG against starch digestion by individual and co-existing α-amylase and amyloglucosidase. Food Chemistry, 2022, 388, 133047.	8.2	12
83	Advancements of fermentable sugar yield by pretreatment and steam explosion during enzymatic saccharification of Amorphophallus sp. starchy tuber for bioethanol production. Fuel, 2022, 323, 124406.	6.4	9
84	Kinetic evaluation of the starch molecular behavior under extrusion-based or laser powder bed fusion 3D printing systems: A systematic structural and biological comparison. Additive Manufacturing, 2022, 57, 102934.	3.0	7
85	The presence of propylene glycol alginate increased the stability and intestine-targeted delivery potential of carboxymethyl starch-stabilized emulsions. Food Research International, 2022, 157, 111387.	6.2	5
86	Effect of enzymatic hydrolysis on digestibility and morpho-structural properties of hydrothermally pre-treated red rice starch. International Journal of Biological Macromolecules, 2022, 222, 65-76.	7.5	8
87	Polysaccharides from pinhão seeds of Araucaria angustifolia: Extraction, isolation and structural characterization. Journal of Food Composition and Analysis, 2023, 115, 104888.	3.9	4
88	Dietary Polyphenols as Natural Inhibitors of α-Amylase and α-Glucosidase. Life, 2022, 12, 1692.	2.4	24
89	Inconsistency between polyphenol-enzyme binding interactions and enzyme inhibition: Galloyl moiety decreases amyloglucosidase inhibition of catechins. Food Research International, 2023, 163, 112155.	6.2	5
90	High-starchy carbohydrate diet aggravates NAFLD by increasing fatty acids influx mediated by NOX2. Food Science and Human Wellness, 2023, 12, 1081-1101.	4.9	6
91	Effects of Far-Infrared Radiation Drying on Starch Digestibility and the Content of Bioactive Compounds in Differently Pigmented Rice Varieties. Foods, 2022, 11, 4079.	4.3	3
92	Organoleptic, hypoglycaemic, and in vitro starch digestion effects of formulated Melon Manis Terengganu peel powder. , 2022, 29, 1293-1303.		2
93	Characterization of Arrowhead-Derived Type 3 Resistant Starch Prepared by Ultrasound-Assisted α-Amylase Degradation. Journal of Food Quality, 2023, 2023, 1-11.	2.6	2

#	ARTICLE	IF	Citations
94	Fractional extraction and structural characterization of glycogen particles from the whole cultivated caterpillar fungus Ophiocordyceps sinensis. International Journal of Biological Macromolecules, 2023, 229, 507-514.	7.5	0
95	The critical roles of α-amylase and amyloglucosidase in improving the quality of black waxy corn beverages: Special attentions to the color and flavor. Journal of Cereal Science, 2023, 110, 103625.	3.7	1
96	Soluble dietary fibres decrease α-glucosidase inhibition of epigallocatechin gallate through affecting polyphenol-enzyme binding interactions. Food Chemistry, 2023, 409, 135327.	8.2	8
97	Exploring the inhibitory mechanism of p-coumaric acid on α-amylase via multi-spectroscopic analysis, enzymatic inhibition assay and molecular docking. Food Hydrocolloids, 2023, 139, 108524.	10.7	10
98	How Cooking Time Affects In Vitro Starch and Protein Digestibility of Whole Cooked Lentil Seeds versus Isolated Cotyledon Cells. Foods, 2023, 12, 525.	4.3	4
99	Essential Oils: Recent Advances on Their Dual Role as Food Preservatives and Nutraceuticals against the Metabolic Syndrome. Foods, 2023, 12, 1079.	4.3	4
100	Reinvention of starch for oral drug delivery system design. International Journal of Biological Macromolecules, 2023, 241, 124506.	7.5	5
101	In vitro macronutrient digestibility and mineral bioaccessibility of lentil-based pasta: The influence of cellular intactness. Food Chemistry, 2023, 423, 136303.	8.2	5
102	Development of a fermented plant-based beverage from discarded bread flour. LWT - Food Science and Technology, 2023, 182, 114795.	5.2	3
103	Pasta Fortification with Leaves of Edible Wild Plants to Lower the P Glycaemic Index of Handmade Fresh Noodles. , 2023, 03, 1-21.		2
104	An Accessible Method to Improve the Stability and Reusability of Porcine Pancreatic α-Amylase via Immobilization in Gellan-Based Hydrogel Particles Obtained by Ionic Cross-Linking with Mg2+ Ions. Molecules, 2023, 28, 4695.	3.8	3
105	Enrichment of linoleic acid from yellow horn seed oil through low temperature crystallization followed by urea complexation method and hypoglycemic activities. Food Science and Biotechnology, 2024, 33, 145-157.	2.6	Ο
106	Elucidation of alphaâ€amylase inhibition by natural shikimic acid derivates regarding the infrequent uncompetitive inhibition mode and structure–activity relationship. Food Frontiers, 2023, 4, 2058-2069.	7.4	2
107	Interfacial Catalysis during Amylolytic Degradation of Starch Granules: Current Understanding and Kinetic Approaches. Molecules, 2023, 28, 3799.	3.8	7
108	Brush border enzyme hydrolysis and glycaemic effects of isomaltulose compared to other saccharides in dogs. Journal of Animal Physiology and Animal Nutrition, 0, , .	2.2	0
109	Physicochemical characterizations, α-amylase inhibitory activities and inhibitory mechanisms of five bacterial exopolysaccharides. International Journal of Biological Macromolecules, 2023, 249, 126047.	7.5	2
110	Multicomponent diastereoselective synthesis of tetrahydropyridines as α-amylase and α-glucosidase enzymes inhibitors. Future Medicinal Chemistry, 0, , .	2.3	0
111	Impact of a retrograded starch ingredient obtained from Negro Jamapa beans (Phaseolus vulgaris L.) Tj ETQq1 1 International Journal of Biological Macromolecules, 2023, 253, 127447.	0.784314 7.5	rgBT /Overloo 1

ARTICLE IF CITATIONS # Mechanistic insights into α-amylase inhibition, binding affinity and structural changes upon 112 10.7 4 interaction with gallic acid. Food Hydrocolloids, 2024, 148, 109467. Presence of digestible starch impacts <i>in vitro</i> fermentation of resistant starch. Food and 114 4.6 Function, 0, , . From static to semi-dynamic <i>in vitro</i> digestion conditions relevant for the older population: 115 0 4.6 starch and protein digestion of cooked lentils. Food and Function, 0, , . Purification of <i&gt;l²&lt;/i&gt;-Glucan of Oyster Mushroom (&lt;i&gt;Pleurotus pulmonarius&lt;/i&gt;) and Its Application in Model Food. Agricultural Sciences, 2023, 14, 1732-1750. The action of endo-xylanase and endo-glucanase on cereal cell wall polysaccharides and its implications for starch digestion kinetics in an in vitro poultry model. Carbohydrate Polymers, 2024, 117 10.2 0 331, 121861. Synthesis of benzimidazoles containing piperazine ring as potential therapeutic agents against diabetes mellitus and antioxidant activities. Journal of Molecular Structure, 2024, 1304, 137714. 3.6 Milk casein hydrolysate peptides regulate starch digestion through inhibition of α-glucosidase: An insight into the active oligopeptide screening, enzyme inhibition behaviors, and oligopeptide-enzyme binding interactions. Food Hydrocolloids, 2024, 152, 109926. 119 10.7 0 Changes in the structure and enzyme binding of starches during in vitro enzymatic hydrolysis using 10.2 mammalian mucosal enzyme mixtures. Carbohydrate Polymers, 2024, 335, 122070.

CITATION REPORT