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Correction

Correction: Chakraborty et al. Bromelain a Potential Bioactive Compound: A Comprehensive Overview from a Pharmacological Perspective. *Life* 2021, *11*, 317

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Citation: Chakraborty, A.J.; Mitra, S.; Tallei, T.E.; Tareq, A.M.; Nainu, F.; Cicia, D.; Dhama, K.; Emran, T.B.; Simal-Gandara, J.; Capasso, R. Correction: Chakraborty et al. Bromelain a Potential Bioactive Compound: A Comprehensive Overview from a Pharmacological Perspective. *Life* 2021, *11*, 317. *Life* **2024**, *14*, 483. https://doi.org/10.3390/life14040483

Received: 10 April 2023
Accepted: 12 March 2024
Published: 7 April 2024

Text Correction

The authors were not aware of errors made in one small subsection (Section 6.17. Antidiarrheal Effect, including the data in the table of effects) of this paper [1], and, hence, wish to make the following corrections to this paper.

The authors wish to delete Section 6.17: Antidiarrheal Effect, including the data in the table of effects, and reorganize the references. The deleted section appears as follows:

6.17. Antidiarrheal Effect

Diarrhea has long been a cause of death and illness in children and young animals [120,121,122]. Enterotoxigenic in ileus, *E. coli* (ETEC), and *Vibrio cholerae* are two primary microorganisms that cause diarrhea [123]. ETEC produces one or both of a heat-labile (LT) or heat-stable enterotoxin (either STa or STb), and *V. cholerae* releases cholera toxin (CT) [7]. Drugs, such as nicotinic acid, berberine sulfate, loperamide, and chlorpromazine, have been applied in animal models to inhibit the secretion of CT and LT [124,125,126]. Indomethacin, chlorpromazine, and berberine also decrease secretion induced by STa [124,126,127]. Despite the efficacy of these antisecretory compounds in animals, none are routinely available for use in humans because the doses required for efficacy are large enough to cause adverse side effects [128]. Over time, oral rehydration therapy was introduced, significantly improving patients' mortality and morbidity with acute infectious diarrhea. Oral rehydration, however, does not hinder the secretion of toxins or alleviate diarrhea [129]. Scientists have demonstrated that bromelain has antidiarrheal properties [128,130]. A study by Mynott et al. (1997) used stem bromelain to demonstrate these antisecretory traits. The results showed that bromelain could prevent net changes in intestinal short-circuit current (Isc) using rabbit ileum installed in chambers, as well as mediate fluid secretion by secretagogues working via cAMP (cyclic-3′,5′-adenosine

monophosphate), cGMP (cyclic-3′,5′-guanosine monophosphate), and calcium-dependent signaling pathways [131]. As one of these mechanisms is triggered by most toxins that induce diarrhea, bromelain is expected to be an important nutraceutical medication for this ailment. Bromelain was 62% effective in preventing LT-mediated secretion in this study, 51% effective against CT, and 35% effective against STa. Prostaglandin E2, theophylline, calcium-ionophore A23187, 8-Br-cAMP (8-bromo-cyclic-3′,5′-adenosine monophosphate), and 8-Br-cGMP (8-bromo-cyclic-3′,5′-guanosine monophosphate), well-known intracellular ion secretion mediators, also experienced secretory modifications. The effectiveness of bromelain has not been attributed to decreased tissue viability, due to its proteolytic effects on enterocytes, as shown by experiments measuring the absorption of nutrients into intestinal cells and others measuring the short-circuit response to glucose. A study performed by Roselli et al. (2007) on the impact of various plant extracts and natural substances (PENS) on ETEC-induced membrane damage in pig intestinal cells has shown that bromelain is among those with a protective effect [122].

Error in Table

In the original publication, there was a mistake in Table 1. The data of reference [128] have been deleted. The corrected Table 1 appears below.

Table 1. Therapeutic studies of bromelain based on experimental studies.

Fields of Study	Subjects	Dosage	Outcomes	References
Anti-inflammatory	Rats	10 and 20 mg/kg	Large reduction in exudate concentrations of both substance P and PGE2	[60]
Antimicrobial Activity	*Streptococcus mutans*, *Enterococcus fecalis*, Aggregatibacteractino-mycetemcomitans (Aa), and Porphyromonasgingivalis	Minimum inhibitory concentration (MIC) of bromelain	*S. mutans* showed sensitivity at the lowest concentration of 2 mg/mL as compared to *E. fecalis* (31.25 mg/mL), while Pgingivalis showed sensitivity at the lowest concentration of 4.15 mg/mL as compared to Aa (16.6 mg/mL)	[128]
Antibiotic Potentiation	Rabbits	20–25 mg/kg	Intramuscular and intraduodenal administration of bromelain enhanced penicillin-content of the cerebrospinal fluid, which normallyis much lower than in serum	[129,130]
Hepatic Microcirculation	140 Rats	0.1, 1.0, or 10 mg/kg	Increased leukocyte adherence, apoptosis rate, Kupffer cell activation, and endothelial cell damage, AST and ALT levels were significantly increased, improved microcirculation, increased eNOS expression	[131]
Anti-ulcer activity	Rats	200 ng/kg	Ulcer index and total acidity level were significantly reduced.	[111]
Anti-tumoral activity	Mice	12.5 and 25 mg/kg	Significantly decreased the amount of lung metastasis used by LLC transplantation	[46]
Anthelmintic efficacy	*Haemonchus contortus*	150 µM concentration	Important adulticidal action on *Haemonchus contortus* to destroy all worms, damage their cuticle after 8 h of incubation, and eventually cause worms to disintegrate	[105]
	Female CD1 mice	Different concentrations	Decreased amount of *Heligmosomoides polygyrus*	[132]
	Chickens	1008 mg/kg, 504 mg/kg, 255 mg/kg	Total worm count was significantly decreased	[133]
	Mice	0.2 mL containing 240 nmol stem bromelain	24.5% reduction in worm burdens	[134]
Anti-rheumatic activity	Rats	50, 100, 250 and 500 mg/kg	Significantly reduced the swelling in the paw of rats	[135]
Antinociceptive	48 Wistar rats	30 mg/kg and 50 mg/kg	The thermal hyperalgesia and allodynic mechanical indices of neuropathic pain were greatly reduced by bromelain	[75]
Immunomodulatory	Mice	200 mg/mL	Bromelain improved T-cell-dependent Ag-specific B-cell antibody responses	[63]
Anti-platelet Activity	Rats	1, 5, 10, 20, and 30 mg/kg	Blood coagulation was delayed significantly	[17,130]

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With this correction, the order of some references has been adjusted accordingly. The authors state that the scientific conclusions are unaffected. This correction was approved by the Academic Editor. The original publication has also been updated.

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