

Table S1. Search strategy.

#1: "grain*", whole" OR "whole-grain*" OR "grain cereal*, whole" OR "whole-amaranth" OR "whole-barley" OR "whole-buckwheat" OR "whole-corn" OR "whole-millet" OR "whole-oats" OR "whole-quinoa" OR "brown rice" OR "whole-sorghum" OR "whole-teff" OR "whole-triticale" OR "whole-wheat" OR "whole-rice" OR "whole-wild rice"

#2: bran OR "rice germ" OR "corn germ" OR "wheat germ" OR endosperm

#3: diabete OR "blood glucose" OR "blood sugar" OR insulin OR cardiovascular diseases OR metabolize OR metabolic syndrome OR hypertension OR "blood pressure" "blood lipids" OR "serum lipid" OR coronary OR heart disease OR cholesterol OR obesity OR "body weight" OR fat OR gout OR cancer OR tumor OR intestinal OR gut OR microbiome OR "enteric organisms" OR constipation OR diarrhea OR anti-inflammatory OR inflammation OR antioxidant OR oxidative OR brain OR health

#4: feed OR fungus OR "heavy metal" OR contamination OR pollution OR grow OR plant OR arsenic OR cadmium OR rheolog* OR oil OR pasting OR physic* OR "pesticide residu*" OR carcass OR egg*

#5: #1 OR #2 AND #3 NOT #4

Table S2. Cooperation and contributions of countries/regions to publications.

Rank	Count	Centrality	Year	Country/Region
1	1188	0	2000	USA
2	626	0.06	2005	PEOPLES R CHINA
3	212	0.03	2002	ITALY
4	207	0	2001	SOUTH KOREA
5	206	0.02	2002	ENGLAND
6	203	0	2000	CANADA
7	201	0	2002	SWEDEN
8	169	0.12	2000	JAPAN
9	152	0	2007	INDIA
10	148	0.12	2000	AUSTRALIA
11	146	0.06	2000	DENMARK
12	127	0.44	2001	SPAIN
13	127	0.24	2001	FINLAND
14	117	0	2003	GERMANY
15	105	0	2009	BRAZIL
16	102	0.18	2008	THAILAND
17	96	0	2005	IRAN
18	95	0	2001	NETHERLANDS
19	83	0.3	2001	FRANCE
20	58	0.11	2001	NORWAY
21	56	0.06	2010	TURKEY
22	55	0.06	2006	MEXICO
23	54	0.49	2003	SWITZERLAND
24	49	0.1	2010	MALAYSIA
25	47	0.12	2009	POLAND
26	44	0	2008	BELGIUM
27	42	0.07	2007	PAKISTAN
28	28	0	2010	GREECE
29	28	0.18	2008	EGYPT
30	25	0.11	2004	NEW ZEALAND

Table S3. Cooperation and contributions of institutions to publications.

Rank	Count	Centrality	Year	Institution
1	123	0.18	2000	Harvard Univ
2	101	0.21	2000	Univ Minnesota
3	84	0.27	2002	Tufts Univ
4	72	0.09	2005	Univ Copenhagen
5	70	0.27	2000	Brigham & Womens Hosp
6	48	0.02	2017	Harvard TH Chan Sch Publ Hlth
7	44	0.04	2006	Lund Univ
8	43	0.15	2003	Swedish Univ Agr Sci
9	38	0.27	2002	Univ Helsinki
10	33	0.12	2011	Univ Eastern Finland
11	26	0	2009	Jiangnan Univ
12	21	0.04	2017	Harvard Med Sch
13	21	0	2015	Chalmers Univ Technol
14	21	0	2009	Beijing Technol & Business Univ
15	19	0	2016	Univ Wollongong
16	16	0.1	2005	Karolinska Inst
17	16	0	2013	Isfahan Univ Med Sci
18	16	0	2000	Gen Mills Inc
19	16	0.04	2011	Aarhus Univ
20	15	0.02	2016	Univ Tehran Med Sci
21	13	0	2000	USDA ARS
22	13	0	2009	ARS
23	13	0.02	2012	VTT Tech Res Ctr Finland
24	12	0.04	2000	Univ Toronto
25	12	0	2016	Zhejiang Univ
26	10	0.02	2017	Univ Washington
27	10	0	2007	Univ Manitoba
28	10	0	2013	Univ Putra Malaysia
29	10	0.05	2001	Univ Oslo
30	10	0	2010	Cornell Univ