

Supplemental Material

Table S1. Retrieval strategies and results about aflatoxins in China in 2010-2020.

| Databases * | Retrieval Strategy | Number of Articles |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Pubmed | aflatoxin AND (exposure OR "risk assessment" OR contaminants) AND China AND ("2010/01/01" : "2020/12/31") | 696 |
| CNKI (In Chinese) | (TKA= aflatoxin OR TKA=AFB1) AND (TKA= exposure OR TKA=risk OR TKA=food OR TKA= assessment OR TKA= contaminants) * Date: 2010-2020 | 2427 |
| WAN FANG (In Chinese) | Title or Keyword: (aflatoxin OR AFB1) * Title or Keyword: (exposure OR risk OR food OR assessment OR contaminants) * Language: Chinese * Date: 2010-2020 | 2090 |
| CBMdisc (In Chinese) | "(aflatoxin OR AFB1) AND (exposure OR risk OR food OR assessment OR contaminants)" * Date: 2010-2020" | 426 |

* China National Knowledge Internet (CNKI), Wan Fang, and China Biology Medicine Disc (CBMdisc) are the professional academic databases of China. TKA: Title or Keyword or Abstract.

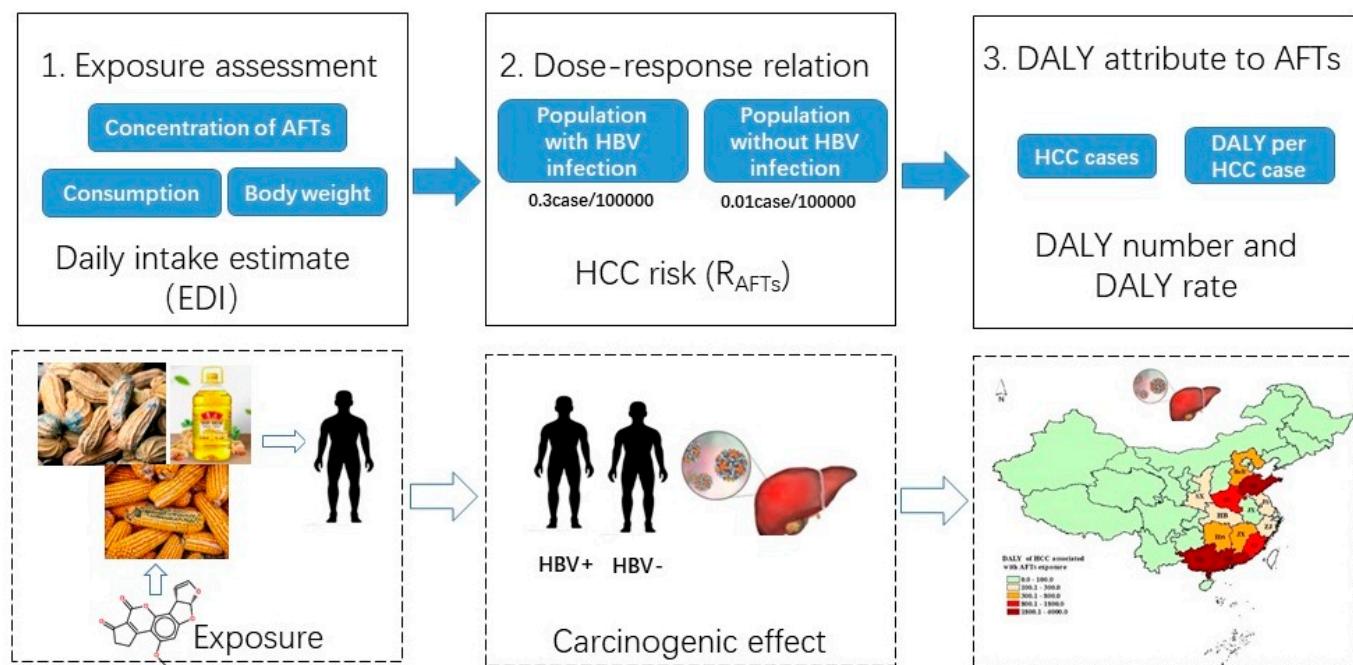


Figure S1. The framework of study design.

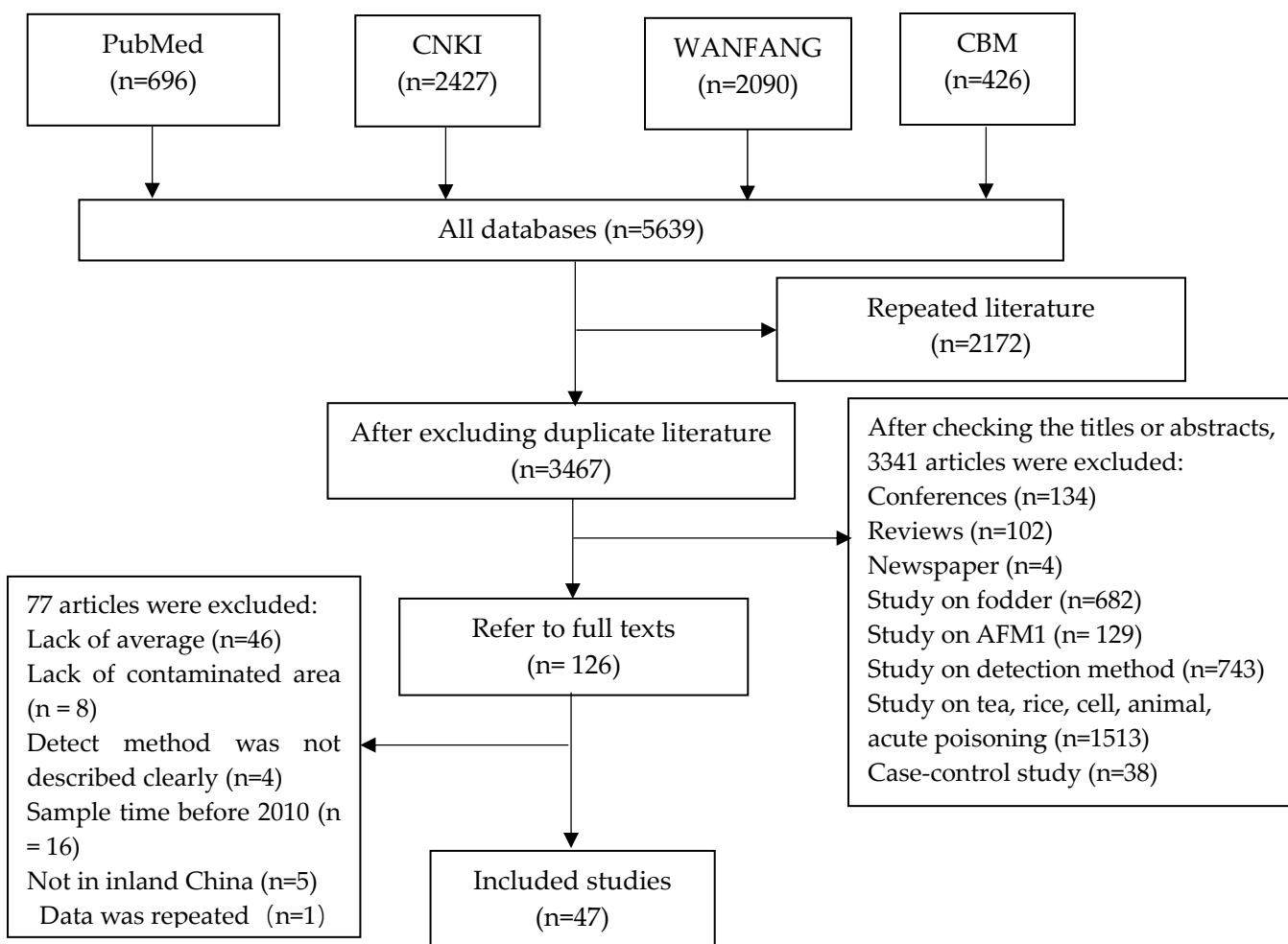


Figure S2. Flow chart of literature retrieval about aflatoxin contaminant. Notes: The retrieval results shown that we identified 696 titles from PubMed, 2427 titles from CNKI, 2090 titles from WANFANG, and 426 titles from CBMdisc. We filter titles and abstracts to identify articles that meet the requirements. There were 2172 repeated studies. After deduplication, 3467 articles were screened. Then checked the titles and abstracts, 3341 articles were excluded because some conferences, reviews, reports, newspapers, or the research content were about fodder, AFM1, detection method, and other contents that did not conform to this study. After a full-text review, we removed 77 papers, due to the lack of average, contaminated area data, the time of sample was not in conformity with our requirements. Finally, we included 47 studies that provided information about the contamination of AFTs in peanut, peanut oil, corn and corn product. We used a standardized database to extract the title, journal, location, study year, sample time, detection methods.

DALY calculator

DALY was calculated as the sum of the years of life lost (YLL) and the years lived with disability (YLD). The DALY was estimated by using the following formula:

$$\text{DALYs} = \text{YLL} + \text{YLD}$$

$$\text{YLL} = N * L$$

$$\text{YLD} = I * DW * L'$$

DALYs meant Disability-adjusted life years; YLL meant the years of life lost; YLD meant the years lived with disability; N meant number of deaths; L meant the remaining life expectancy at death; P meant prevalence; I meant the number of new cases; DW meant disability weights; L' meant the time of disease duration. The World Health Organization provided the templates to calculate DALY. But firstly, we need to calculate the L'. So we used Dismod II software to estimate the L'. Then we substituted population data, liver cancer incidence data, death data, duration and other parameters into the DALY calculation template to obtain the total DALY number. The average number of DALYs in each case was obtained by dividing the number of DALYs by the total number of cases.

Dismod II software was developed by WHO (download from http://www.epigear.com/index_files/dismod_ii.html), which was an epidemiological model and could be used to calculate the parameters related to DALY. **The main interface of the DALY calculator was shown below:**

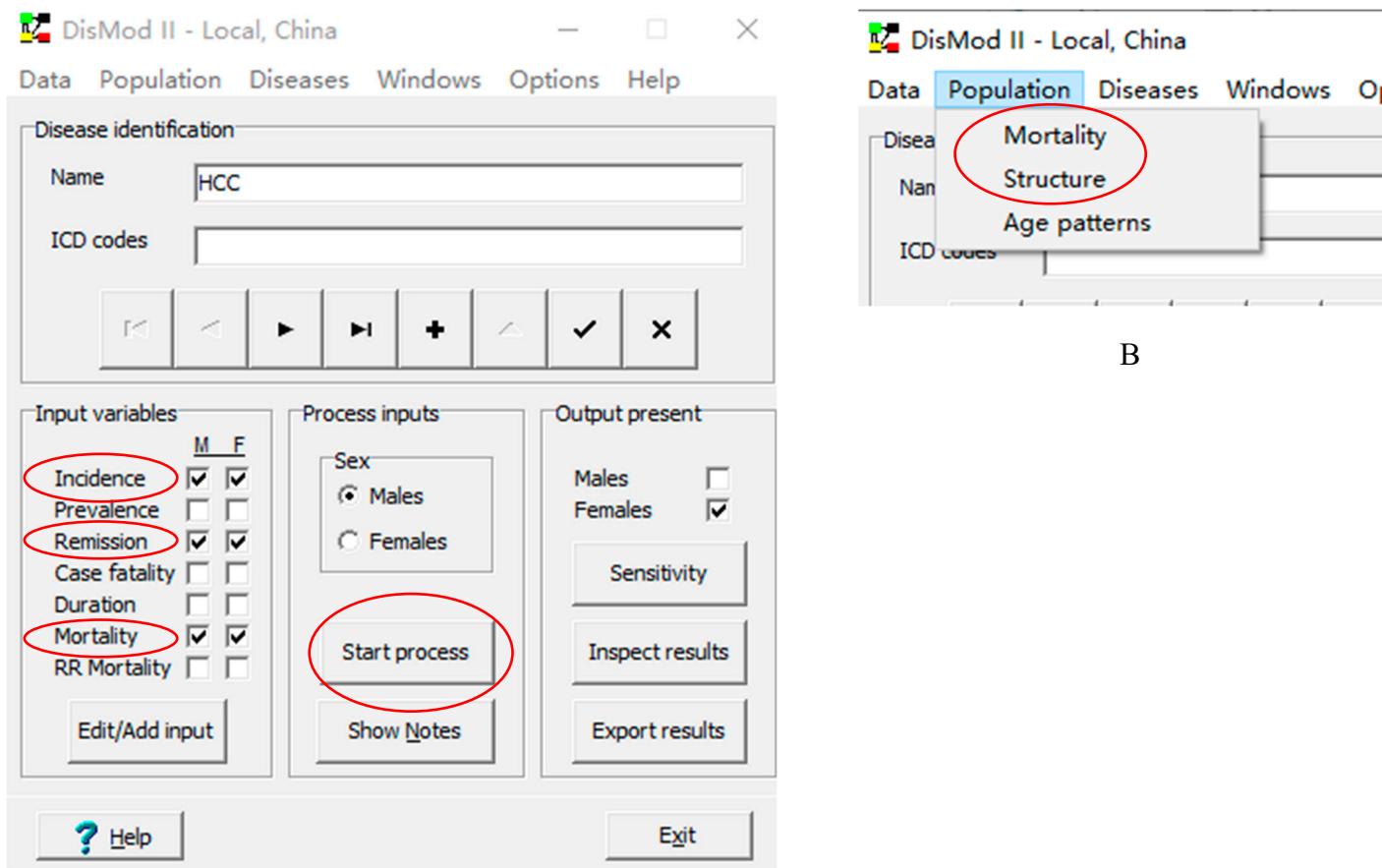
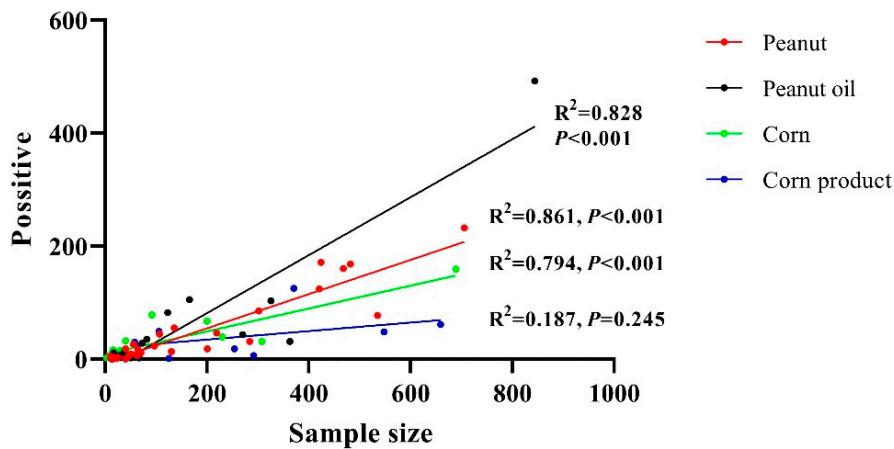


Figure S3. The main interface of the DALY calculator. (A) the main interface; (B) total population mortality and structure input interface input incidence, remission, mortality, and the total population mortality and structure, and then click on the “start process”.



| Peanut | Peanut oil | Corn | Corn product |
|------------------------|------------------------|------------------------|-------------------------|
| $Y = 0.3027*X - 6.073$ | $Y = 0.5128*X - 21.23$ | $Y = 0.2022*X + 8.606$ | $Y = 0.07515*X + 19.55$ |

Figure S4. Correlation between the AFTs positive rate and the total number of test samples. The positive number of aflatoxins in peanut, peanut oil, and corn were correlated with the number of tested samples ($P<0.001$). While the Positive number of aflatoxins in corn product was not associated with the number of tested samples ($P=0.245$).

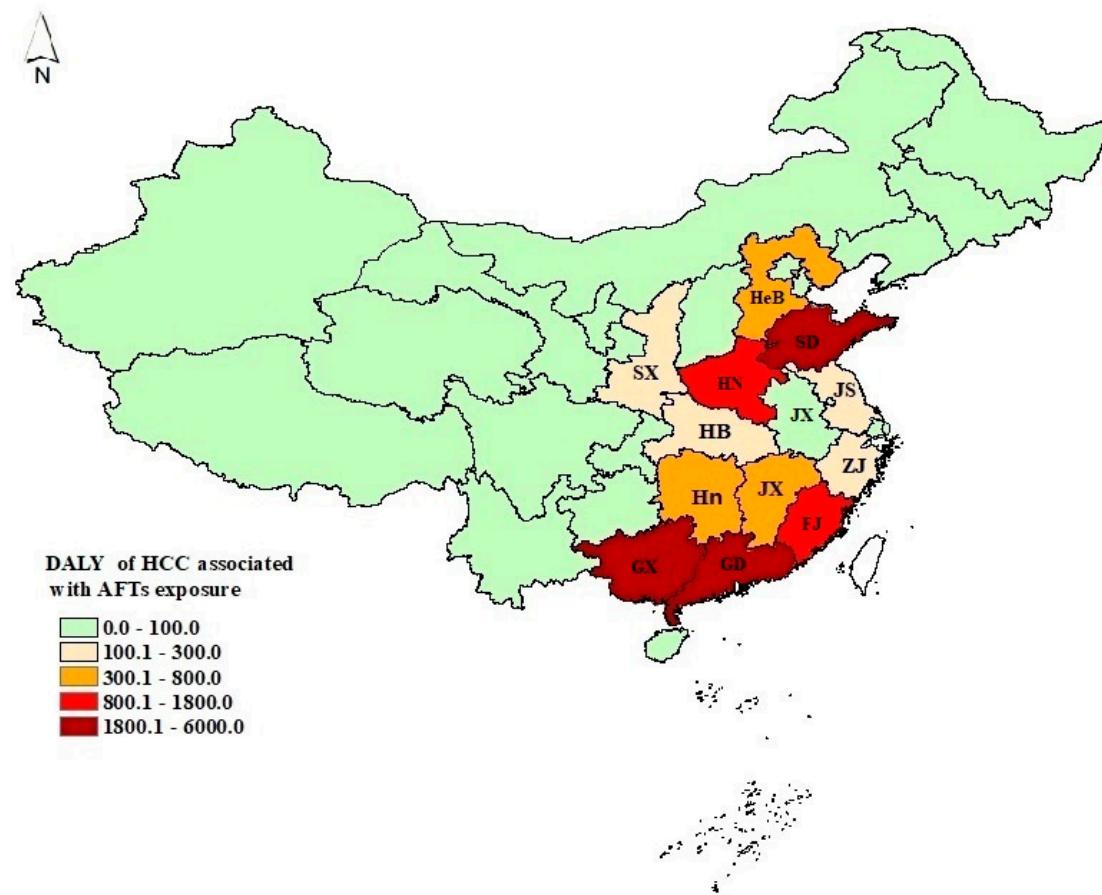


Figure S5. DALY of HCC associated with AFTs exposure from peanuts, peanut oil, corn, and corn products. HeB: Hebei, HB: Hubei, SD: Shandong, SX: Shaanxi, HN: Henan; JS: Jiangsu; Hn: Hunan, JX: Jiangxi; ZJ: Zhejiang, FJ: Fujian, GD: Guangdong, GX: Guangxi,

Table S2. Relevant information of aflatoxin contaminate in peanuts.

| Province | Sample Time (year) | Aflatoxin | Detection Method | Number | Positive Number | Mean(µg/kg) | weighted Means (µg/kg) | Max(µg/kg) | Literature |
|-----------|-----------------------|-----------|-----------------------------------|--------|-----------------|-------------|---------------------------|----------------------|----------------------|
| Anhui | 2010 | AFTs | UPLC-MS / MS | 58 | 16 | 0.26 | 9.25 | - | Ma et al, 2010[1] |
| Anhui | 2010 | AFB1 | HPLC | 82 | 25 | 4.48 | - | Ding et al, 2015[2] | |
| Anhui | 2011 | AFB1 | HPLC | 149 | 68 | 2.48 | - | Ding et al, 2015[2] | |
| Anhui | 2012 | AFB1 | HPLC | 150 | 32 | 2.94 | - | Ding et al, 2015[2] | |
| Anhui | 2013 | AFB1 | HPLC | 149 | 61 | 12.66 | - | Ding et al, 2015[2] | |
| Anhui | 2014 | AFB1 | HPLC | 79 | 22 | 43.11 | - | Ding et al, 2015[2] | |
| Anhui | 2013-2018 | AFTs | HPLC-MS/MS | 39 | 8 | 1.1 | 14.49 | Qin et al, 2020[3] | |
| Beijing | 2013-2018 | AFTs | HPLC-MS/MS | 15 | 3 | 0.71 | 0.71 | 0.73 | Qin et al, 2020[3] |
| Chongqing | 2013-2014 | AFTs | UPLC | 100 | 39 | 0.834 | 0.97 | 157.2 | Zhang et al, 2016[4] |
| Chongqing | 2013 | AFB1 | ELISA | 16 | 16 | 1.74 | 4.04 | Feng et al, 2014[5] | |
| Chongqing | 2013-2018 | AFTs | HPLC-MS/MS | 20 | 0 | 1.01 | 1.4 | Qin et al, 2020[3] | |
| Fujian | 2010-2011 | AFTs | HPLC-photochemical derivatization | 62 | 19 | 39.025 | 14.02 | 815 | Qiu et al, 2012[6] |
| Fujian | 2014-2015 | AFB1 | HPLC-fluorometer | 173 | >0 | 6.76 | 332.28 | Liu and Pan, 2016[7] | |
| Fujian | 2010 | AFTs | UPLC-MS / MS | 27 | 7 | 1.15 | 3.7 | Ma et al, 2010[1] | |
| Fujian | 2013-2018 | AFTs | HPLC-MS/MS | 22 | 5 | 16.49 | 356.7 | Qin et al, 2020[3] | |
| Gansu | 2010 | AFTs | UPLC-MS / MS | 30 | 6 | 0.46 | 0.59 | - | Ma et al, 2010[1] |
| Gansu | 2013-2018 | AFTs | HPLC-MS/MS | 33 | 0 | 0.7 | 3 | Qin et al, 2020[3] | |
| Guangdong | 2015-2017 | AFTs | UPLC | 92 | 40 | 0.44 | 11.73 | 15.816 | Li et al, 2018[8] |

| | | | | | | | | |
|--------------|-----------|------|------------------|-----|----|-------|-------|-----------------------|
| Guangdong | 2013-2018 | AFTs | HPLC-MS/MS | 74 | 13 | 5.13 | 291.5 | Qin et al, 2020[3] |
| Guangdong | 2015 | AFB1 | HPLC | 136 | 32 | 22.95 | 862 | Pan, 2016[9] |
| Guangxi | 2010 | AFTs | UPLC-MS / MS | 34 | 26 | 12.75 | 7.78 | 107.9 |
| Guangxi | 2013-2018 | AFTs | HPLC-MS/MS | 22 | 0 | 0.09 | 0.09 | Qin et al, 2020[3] |
| Guizhou | 2013-2018 | AFTs | HPLC-MS/MS | 23 | 1 | 0.21 | 0.21 | 0.59 |
| Hainan | 2010 | AFTs | UPLC-MS / MS | 6 | 0 | 0 | 0.47 | Ma et al, 2010[1] |
| Hainan | 2013-2018 | AFTs | HPLC-MS/MS | 10 | 1 | 0.16 | 0.4 | Qin et al, 2020[3] |
| Hainan | 2019 | AFB1 | HPLC-MS/MS | 30 | 4 | 0.67 | 10.27 | Wang et al, 2019[10] |
| Hebei | 2017 | AFTs | HPLC-fluorometer | 10 | 10 | 67.72 | 21.42 | Cheng et al. 2018[11] |
| Hebei | 2013-2018 | AFTs | HPLC-MS/MS | 30 | 8 | 5.99 | 67.8 | Qin et al, 2020[3] |
| Heilongjiang | 2013-2018 | AFTs | HPLC-MS/MS | 10 | 2 | 0.41 | 0.41 | 2.92 |
| Henan | 2014-2015 | AFTs | HPLC-fluorometer | 30 | 18 | 4.57 | 5.89 | 16.1 |
| Henan | 2017 | AFTs | HPLC-fluorometer | 10 | 5 | 27.69 | | Cheng et al. 2018[11] |
| Henan | 2013-2018 | AFTs | HPLC-MS/MS | 67 | 21 | 3.22 | 16.18 | Qin et al, 2020[3] |
| Hubei | 2010 | AFTs | UPLC-MS / MS | 29 | 20 | 20.43 | 6.55 | 339.6 |
| Hubei | 2010 | AFB1 | HPLC | 93 | 63 | 3.18 | 4.29 | Ding et al, 2015[2] |
| Hubei | 2011 | AFB1 | HPLC | 99 | 31 | 2.98 | 0.64 | Ding et al, 2015[2] |

| | | | | | | | | |
|---------|-----------|------|------------------|-----|----|-------|--------|-----------------------|
| Hubei | 2012 | AFB1 | HPLC | 47 | 10 | 2.33 | 7.96 | Ding et al, 2015[2] |
| Hubei | 2013 | AFB1 | HPLC | 98 | 33 | 14.86 | 73.23 | Ding et al, 2015[2] |
| Hubei | 2014 | AFB1 | HPLC | 17 | 0 | 0 | 0 | Ding et al, 2015[2] |
| Hubei | 2013-2018 | AFTs | HPLC-MS/MS | 41 | 14 | 0.72 | 7.92 | Qin et al, 2020[3] |
| Hunan | 2010 | AFTs | UPLC-MS/MS | 15 | 4 | 0.57 | 13.49 | - |
| Hunan | 2010 | AFB1 | HPLC | 70 | 30 | 3 | 2.08 | Ding et al, 2015[2] |
| Hunan | 2011 | AFB1 | HPLC | 86 | 50 | 11.96 | 33.4 | Ding et al, 2015[2] |
| Hunan | 2012 | AFB1 | HPLC | 140 | 33 | 15.49 | 48.56 | Ding et al, 2015[2] |
| Hunan | 2013 | AFB1 | HPLC | 110 | 34 | 21.51 | 113.5 | Ding et al, 2015[2] |
| Hunan | 2014 | AFB1 | HPLC | 7 | 0 | 0 | 0 | Ding et al, 2015[2] |
| Hunan | 2013-2018 | AFTs | HPLC-MS/MS | 40 | 9 | 13.28 | 3.33 | 251.87 |
| Jiangsu | 2010 | AFB1 | HPLC | 60 | 0 | 0 | 0 | Ding et al, 2015[2] |
| Jiangsu | 2011 | AFB1 | HPLC | 100 | 55 | 0.56 | 0.39 | Ding et al, 2015[2] |
| Jiangsu | 2012 | AFB1 | HPLC | 100 | 14 | 0.44 | 0.2 | Ding et al, 2015[2] |
| Jiangsu | 2013 | AFB1 | HPLC | 100 | 53 | 12.79 | 59.95 | Ding et al, 2015[2] |
| Jiangsu | 2014 | AFB1 | HPLC | 12 | 0 | 0 | 0 | Ding et al, 2015[2] |
| Jiangsu | 2013-2018 | AFTs | HPLC-MS/MS | 49 | 2 | 0.44 | 3.5 | Qin et al, 2020[3] |
| Jiangxi | 2010 | AFTs | UPLC-MS / MS | 23 | 7 | 28.82 | 10.81 | 166.8 |
| Jiangxi | 2010 | AFB1 | HPLC | 92 | 37 | 6.59 | 12.43 | Ding et al, 2015[2] |
| Jiangxi | 2011 | AFB1 | HPLC | 93 | 54 | 11.41 | 39.35 | Ding et al, 2015[2] |
| Jiangxi | 2012 | AFB1 | HPLC | 130 | 44 | 6.49 | 21.76 | Ding et al, 2015[2] |
| Jiangxi | 2013 | AFB1 | HPLC | 100 | 20 | 11.73 | 46.56 | Ding et al, 2015[2] |
| Jiangxi | 2014 | AFB1 | HPLC | 24 | 2 | 7.98 | 0 | Ding et al, 2015[2] |
| Jiangxi | 2013-2018 | AFTs | HPLC-MS/MS | 20 | 4 | 33.7 | 343.15 | Qin et al, 2020[3] |
| Jilin | 2013-2018 | AFTs | HPLC-MS/MS | 10 | 3 | 1.7 | 1.28 | 1.93 |
| Jilin | 2017 | AFTs | HPLC-fluorometer | 15 | 0 | 1 | 1 | Cheng et al. 2018[11] |

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|-----------|-----------|------|------------------|-----|----|-------|-------|--------|-----------------------|
| Liaoning | 2017 | AFTs | HPLC-fluorometer | 10 | 0 | 1 | 0.34 | 1 | Cheng et al. 2018[11] |
| Liaoning | 2019-2020 | AFTs | HPLC-MS/MS | 120 | 13 | 0.28 | | 6.616 | Wang et al, 2020[13] |
| Neimongol | 2017 | AFTs | HPLC-fluorometer | 5 | 0 | 1 | 0.34 | 1 | Cheng et al. 2018[11] |
| Neimongol | 2013-2018 | AFTs | HPLC-MS/MS | 10 | 0 | 0.01 | | 0.01 | Qin et al, 2020[3] |
| Ningxia | 2013-2018 | AFTs | HPLC-MS/MS | 10 | 5 | 0.89 | 0.89 | 4.59 | Qin et al, 2020[3] |
| Qinghai | 2013-2018 | AFTs | HPLC-MS/MS | 14 | 0 | 1.2 | 1.2 | 4 | Qin et al, 2020[3] |
| Shaanxi | 2012-2015 | AFTs | UPLC | 37 | 9 | 34 | 34.50 | 323 | Hu et al, 2016[14] |
| Shaanxi | 2013-2018 | AFTs | HPLC-MS/MS | 27 | 8 | 35.18 | | 316.17 | Qin et al, 2020[3] |
| Shandong | 2017 | AFTs | HPLC-fluorometer | 110 | 17 | 2.95 | 1.95 | | Cheng et al, 2018[11] |
| Shandong | 2013-2018 | AFTs | HPLC-MS/MS | 91 | 1 | 0.74 | | 11.4 | Qin et al, 2020[3] |
| Shanghai | 2010 | AFTs | UPLC-MS/MS | 54 | 22 | 18.19 | 12.09 | 334.7 | Ma et al, 2010[1] |
| Shanghai | 2013-2018 | AFTs | HPLC-MS/MS | 43 | 1 | 4.43 | | 18.44 | Qin et al, 2020[3] |
| Shanxi | 2013-2018 | AFTs | HPLC-MS/MS | 16 | 0 | 4 | 4.00 | 4 | Qin et al, 2020[3] |
| Sichuan | 2017 | AFTs | HPLC | 24 | 4 | 0.3 | 5.75 | - | Zhang et al, 2019[15] |
| Sichuan | 2010 | AFB1 | HPLC | 80 | 2 | 0.3 | | 0 | Ding et al, 2015[2] |
| Sichuan | 2011 | AFB1 | HPLC | 97 | 21 | 8.37 | | 4.82 | Ding et al, 2015[2] |
| Sichuan | 2012 | AFB1 | HPLC | 140 | 26 | 8.19 | | 22.63 | Ding et al, 2015[2] |
| Sichuan | 2013 | AFB1 | HPLC | 140 | 21 | 7.41 | | 8.59 | Ding et al, 2015[2] |
| Sichuan | 2013-2018 | AFTs | HPLC-MS/MS | 54 | 3 | 0.93 | | 8.31 | Qin et al, 2020[3] |
| Tianjin | 2013-2018 | AFTs | HPLC-MS/MS | 19 | 0 | 2.17 | 7.47 | 4 | Qin et al, 2020[3] |
| Tianjin | 2016-2018 | AFB1 | UPLC-MS/MS | 200 | 46 | 7.97 | | 189 | Wu et al, 2019[16] |
| Xinjiang | 2013-2018 | AFTs | HPLC-MS/MS | 40 | 0 | 0.11 | 0.11 | 0.13 | Qin et al, 2020[3] |
| Xizang | 2017 | AFTs | HPLC | 23 | 0 | 0 | 0.00 | - | Zhang et al, 2019[15] |
| Yunan | 2017 | AFTs | HPLC | 24 | 1 | 0.25 | 0.56 | - | Zhang et al, 2019[15] |
| Yunnan | 2010 | AFTs | UPLC-MS / MS | 16 | 10 | 0.27 | | - | Ma et al, 2010[1] |
| Yunnan | 2013-2018 | AFTs | HPLC-MS/MS | 30 | 0 | 0.97 | | 2 | Qin et al, 2020[3] |
| Zhejiang | 2013-2018 | AFTs | HPLC-MS/MS | 50 | 9 | 9.9 | 9.9 | 249.17 | Qin et al, 2020[3] |

AFTs: includes four aflatoxins: AFB1, AFB2, AFG1, AFG2.

Table S3. Relevant information of aflatoxin contaminate in peanut oil.

| Province | Sample Time (year) | Aflatoxin | Detection Method | Number | Positive Number | Mean(µg/kg) | weighted Means (µg/kg) | Max(µg/kg) | Literature |
|-----------|-----------------------|-----------|------------------------------------------|--------|-----------------|-------------|---------------------------|------------|--------------------------|
| Chongqing | 2013 | AFB1 | ELISA | 16 | 16 | 0.29 | 0.99 | 0.51 | Feng et al, 2014[5] |
| Chongqing | 2013-2018 | AFTs | HPLC-MS/MS | 27 | 0 | 1.4 | | 1.40 | Qin et al, 2020[3] |
| Chongqing | 2013-2014 | AFTs | HPLC- photochemical derivatization | 30 | 12 | 0.13 | | | Zhang et al, 2016[4] |
| Fujian | 2010-2011 | AFTs | HPLC- photochemical derivatization | 20 | 9 | 2.962 | 27.42 | 11.4 | Qiu et al, 2012[6] |
| Fujian | 2013-2018 | AFTs | HPLC-MS/MS | 146 | 96 | 30.77 | | 583.09 | Qin et al, 2020[3] |
| Guangdong | 2016-2017 | AFB1 | ELISA and UPLC- MS/MS | 427 | 80 | 4.3881 | 14.42 | 234.8 | Qi et al, 2019[17] |
| Guangdong | 2017 | AFB1 | HPLC- photochemical derivatization | 3221 | 1833 | 12.9 | | 950 | Song et al, 2019[18] |
| Guangdong | 2012-2013 | AFTs | HPLC- photochemical derivatization | 30 | - | 13.21 | | 75.3 | Li et al, 2014[19] |
| Guangdong | 2017 | AFB1 | HPLC | 126 | 111 | 16.2 | | 288 | Yin et al, 2017[20] |
| Guangdong | 2012-2018 | AFB1 | ELISA | 248 | 214 | 12.83 | | 181 | Chen et al, 2017[21] |
| Guangdong | 2019 | AFB1 | ELISA | 243 | 53 | 21.3 | | 114 | Huang et al, 2019[22] |

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|-----------|-----------|------|------------------------------------------|-----|-----|-------|-------|---------|--------------------------|
| Guangdong | 2015-2017 | AFB1 | HPLC | 96 | 74 | 38.74 | | 283 | Zhang et al, 2020[23] |
| Guangdong | 2013-2018 | AFTs | HPLC-MS/MS | 153 | 113 | 37.63 | | 1043.50 | Qin et al, 2020[3] |
| Guangdong | 2015 | AFB1 | HPLC | 200 | 110 | 26.69 | | 119.7 | Pan, 2016[9] |
| Guangdong | 2015-2017 | AFTs | UPLC | 53 | 35 | 2.69 | | 30.8 | Li et al, 2018[8] |
| Guangxi | 2017 | AFB1 | HPLC-fluorometer | 146 | 114 | 30.8 | 31.92 | 320 | Cheng et al, 2017[24] |
| Guangxi | 2020 | AFB1 | HPLC- photochemical derivatization | 183 | 108 | 16.91 | | 243 | Liang et al, 2020[25] |
| Guangxi | 2014-2017 | AFB1 | | 310 | 231 | 16.76 | | 510.01 | Wang et al, 2020[26] |
| Guangxi | 2014 | AFB1 | HPLC-fluorometer | 39 | >18 | 70.2 | | 139.8 | Liu et al, 2015[27] |
| Guangxi | 2014 | AFB1 | HPLC-fluorometer | 43 | >16 | 160.3 | | 320 | Liu et al, 2015[27] |
| Guangxi | 2014 | AFB1 | HPLC-fluorometer | 47 | >12 | 74.9 | | 149.4 | Liu et al, 2015[27] |
| Guangxi | 2013-2018 | AFTs | HPLC-MS/MS | 76 | 39 | 13.18 | | 149.50 | Qin et al, 2020[3] |
| Guizhou | 2013-2018 | AFTs | HPLC-MS/MS | 17 | 11 | 1.02 | 1.02 | 3.37 | Qin et al, 2020[3] |
| Hebei | 2013-2018 | AFTs | HPLC-MS/MS | 82 | 35 | 7.08 | 7.08 | 200.25 | Qin et al, 2020[3] |

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|----------|-----------|------|------------------|-----|-----|--------|-------|--------|----------------------------------------------|
| Henan | 2014-2015 | AFTs | HPLC-fluorometer | 87 | 14 | 1.3 | 1.99 | 13.2 | Li et al, 2017[28] |
| Henan | 2013-2018 | AFTs | HPLC-MS/MS | 183 | 29 | 2.32 | | 21.32 | Qin et al, 2020[3] |
| Hubei | 2013-2018 | AFTs | HPLC-MS/MS | 67 | 2 | 1.60 | 1.60 | 2.00 | Qin et al, 2020[3] |
| Jiangsu | 2013-2018 | AFTs | HPLC-MS/MS | 33 | 8 | 1.31 | 1.31 | 4.00 | Qin et al, 2020[3] |
| Jiangxi | 2013-2018 | AFTs | HPLC-MS/MS | 38 | 12 | 10.29 | 10.29 | 32.99 | Qin et al, 2020[3] |
| Jilin | 2013-2018 | AFTs | HPLC-MS/MS | 13 | 0 | 0.5 | 0.50 | 0.50 | Qin et al, 2020[3] |
| Liaoning | 2013-2018 | AFTs | HPLC-MS/MS | 50 | 2 | 1.68 | 1.68 | 4.23 | Qin et al, 2020[3] |
| Shaanxi | 2012-2015 | AFTs | UPLC | 61 | 41 | 1.2 | 1.14 | 5.84 | Hu et al, 2016[14] Li and Ma, 2016[29] |
| Shaanxi | 2014 | AFTs | HPLC-MS/MS | 7 | 7 | 1.15 | | 3.24 | |
| Shaanxi | 2013-2018 | AFTs | HPLC-MS/MS | 55 | 34 | 1.08 | | 5.64 | Qin et al, 2020[3] |
| Shandong | 2013-2018 | AFTs | HPLC-MS/MS | 326 | 103 | 6.78 | 6.78 | 317.20 | Qin et al, 2020[3] |
| Yunnan | 2010 | AFB1 | ELISA | 5 | 5 | 6.819 | 3.44 | 10.027 | Lan et al, 2010[30] |
| Yunnan | 2013-2018 | AFTs | HPLC-MS/MS | 23 | 1 | 2.71 | | 4.21 | Qin et al, 2020[3] |
| Zhejiang | 2016 | AFB1 | HPLC | 345 | 18 | 0.2561 | 0.26 | 4.9 | Zhou et al, 2017[31] |
| Zhejiang | 2013-2018 | AFTs | HPLC-MS/MS | 18 | 13 | 0.35 | | 1.09 | Qin et al, 2020[3] |

AFTs: includes four aflatoxins: AFB1, AFB2, AFG1, AFG2.

Table S4. Relevant information of aflatoxin contaminate in corn and corn product.

| Province | Sample Time (year) | Aflatoxi n | Detection Method | Number | Positive Number | Mean(µg/kg) | weighted Means (µg/kg) | Max(µg/kg) | Literature |
|------------------|-----------------------|---------------|---------------------|--------|--------------------|-------------|------------------------------|------------|----------------------|
| Anhui | 2010 | AFTs | UPLC-MS / MS | 30 | 15 | 1.06 | 1.06 | 1.70 | Ma et al, 2010 [30] |
| Chongqing | 2013 | AFB1 | ELISA | 16 | 16 | 6.44 | 6.44 | 63.33 | Feng et al, 2014[5] |
| Fujian | 2010 | AFTs | UPLC-MS / MS | 16 | 6 | 0.57 | 0.57 | 0.70 | Ma et al, 2010[1] |
| Gansu | 2010 | AFTs | UPLC-MS / MS | 17 | 3 | 0.58 | 0.58 | - | Ma et al, 2010[1] |
| Guangxi | 2017-2019 | AFB1 | HPLC | 186 | >127 | 177.87 | | 3089.00 | Chen, 2020[32] |
| Guangxi | 2010 | AFTs | UPLC-MS / MS | 44 | 39 | 24.72 | | 581.30 | Ma et al, 2010[1] |
| Hainan | 2010 | AFTs | UPLC-MS / MS | 3 | 2 | 6.15 | 6.15 | 8.00 | Ma et al, 2010[1] |
| Hebei | 2015-2016 | AFB1 | ELISA | 92 | 78 | 8.96 | 8.96 | 61.50 | Ji et al, 2017[33] |
| Heilongjian g | 2010 | AFTs | UPLC-MS / MS | 18 | 10 | 0.57 | 0.57 | - | Ma et al, 2010[1] |
| Henan | 2014 | AFB1 | HPLC | 40 | 32 | 50.32 | 50.32 | 284.32 | Wu et al, 2014[34] |
| Hubei | 2010 | AFTs | UPLC-MS / MS | 20 | 12 | 3.40 | 3.40 | 9.50 | Ma et al, 2010[1] |
| Hunan | 2010 | AFTs | UPLC-MS / MS | 10 | 7 | 22.10 | 22.10 | 67.60 | Ma et al, 2010[1] |
| Jiangxi | 2010 | AFTs | UPLC-MS / MS | 11 | 5 | 0.43 | 0.43 | - | Ma et al, 2010[1] |
| Shaanxi | 2012-2015 | AFTs | UPLC | 268 | 31 | 1.77 | 1.54 | 16.60 | Hu et al, 2016[14] |
| Shaanxi | 2016 | AFTs | HPLC | 40 | 0 | 0.02 | | - | Hu et al, 2017[14] |
| Shandong | 2016 | AFTs | HPLC | 90 | 8 | 0.14 | | 1.69 | Yang et al, 2018[35] |
| Shandong | 2013-2014 | AFTs | UPLC-Q-TOF | 540 | 94 | 7.62 | | 573.13 | Wang et al, 2016[36] |

| | | | | | | | | | |
|-----------|-----------|------|------------------|-----|----|-------|-------|--------|--------------------------|
| Shandong | 2016 | AFB1 | ELISA | 59 | 57 | 2.11 | - | 10.76 | Zhang et al, 2017[37] |
| Shanghai | 2010 | AFTs | UPLC-MS / MS | 19 | 7 | 1.26 | 1.26 | 2.20 | Ma et al, 2010[1] |
| Shanxi | 2010 | AFTs | UPLC-MS / MS | 13 | 8 | 1.83 | 1.83 | 6.50 | Ma et al, 2010 [1] |
| Tianjin | 2016-2018 | AFB1 | UPLC-MS/MS | 200 | 67 | 8.98 | 8.98 | 206.00 | Wu et al, 2019[16] |
| Yunnan | 2010 | AFTs | UPLC-MS / MS | 14 | 11 | 65.74 | 65.74 | 451.80 | Ma et al, 2010[1] |
| Chongqing | 2013-2014 | AFTs | UPLC | 63 | 24 | 0.95 | 0.95 | 29.5 | Zhang et al, 2016[4] |
| Guangdong | 2015-2017 | AFTs | UPLC | 90 | 39 | 0.51 | 0.26 | 4. 413 | Li et al, 2018[8] |
| Guangdong | 2012-2013 | AFTs | HPLC | 30 | >0 | 0.19 | | 0.47 | Li et al, 2014[19] |
| Guangdong | 2017 | AFB1 | HPLC | 46 | 0 | 0.50 | | <0.5 | Yin et al, 2017[20] |
| Guangdong | 2012-2018 | AFB1 | ELISA | 43 | 6 | 0.26 | | 1 | Chen et al, 2017[21] |
| Guangdong | 2015-2017 | AFB1 | HPLC | 339 | 3 | 0.17 | | 6.3 | Zhang et al, 2020[23] |
| Guangxi | 2014-2017 | AFB1 | HPLC | 58 | 30 | 3.03 | 3.03 | 43.6 | Wang et al, 2020[26] |
| Henan | 2014-2015 | AFTs | HPLC-fluorometer | 25 | 0 | 0.97 | 0.81 | - | Li et al, 2017[12] |

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|----------|-----------|------|------------------|-----|----|----------|------|-------|-----------------------|
| Henan | 2014-2015 | AFTs | HPLC-fluorometer | 87 | 6 | 0.61 | | 22 | Li et al, 2017[12] |
| Henan | 2013-2014 | AFB1 | HPLC | 447 | >0 | 0.48 | | 1.81 | Li et al, 2016[28] |
| Henan | 2018-2019 | AFB1 | UPLC-MS/MS | 100 | 55 | 2.44 | | 140.3 | Li et al, 2020[38] |
| Jiangsu | 2011 | AFTs | HPLC | 81 | 41 | 10.51198 | 8.06 | 374.2 | Cai et al, 2013[39] |
| Jiangsu | 2013 | AFTs | HPLC | 25 | 8 | 0.12 | | 0.66 | Zhao et al, 2015[40] |
| Shaanxi | 2012-2015 | AFTs | UPLC | 44 | 0 | 0.07 | 0.37 | - | Hu et al, 2016[14] |
| Shaanxi | 2013-2016 | AFTs | UPLC-MS/MS | 120 | 6 | 0.60 | | 16.6 | Hu et al, 2017[41] |
| Shaanxi | 2016 | AFTs | HPLC | 40 | 5 | 0.07 | | 0.59 | Hu et al, 2017[42] |
| Shaanxi | 2016 | AFTs | HPLC | 40 | 1 | 0.02 | | 0.17 | Hu et al, 2017[42] |
| Shaanxi | 2014 | AFTs | HPLC-MS/MS | 10 | 6 | 1.62 | | 6.09 | Li and Ma, 2016[29] |
| Shandong | 2016 | AFTs | UPLC-MS/MS | 90 | 29 | 0.23 | 1.44 | 8.04 | Jiang et al, 2019[43] |
| Shandong | 2015 | AFTs | HPLC-fluorometer | 40 | 18 | 3.70 | | 17.7 | Wang and Ma, 2015[44] |
| Shandong | 2014-2017 | AFTs | HPLC | 91 | >0 | 0.15 | | 3.44 | Gong et al, 2018[45] |
| Shandong | 2011-2013 | AFTs | UPLC | 150 | 78 | 2.352 | | 8.54 | Yang et al, 2016[46] |
| Yunnan | 2012-2017 | AFB1 | UPLC-MS/MS | 292 | >6 | 1.83 | 1.83 | 2.239 | Hu et al, 2020[47] |
| Zhejiang | 2016 | AFB1 | HPLC | 125 | 1 | 0.0744 | 0.07 | - | Zhou et al, 2017[31] |

AFTs: includes four aflatoxins: AFB1, AFB2, AFG1, AFG2.

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