

他誌掲載論文 (2023 年 10 月～2024 年 9 月)

(1) Estimated daily intake of residual agricultural chemicals across general Japanese people based on the total diet study from 2019 to 2021

(Miki Takahashi^{*1}, Yoshinari Suzuki^{*1}, Mitsutoshi Aoyagi^{*2}, Eita Toda^{*3}, Koichi Ito^{*3}, Toru Fukumitsu^{*4}, Masahito Hagio^{*4}, Takako Hayashi^{*4}, Saori Shintaku^{*5}, Sayaka Ihara, Akie Nakashima, Tamaki Sato^{*6}, Fuyuki Okamoto^{*6}, Tsuguhide Hori^{*6}, Hiroshi Akiyama^{*1,7}, Tomoaki Tsutsumi^{*1} 日本食品化学学会誌, 31, 2, 65-75, 2024)

Public perceptions are significantly more concerned about agricultural chemicals including pesticides, feed additives, and animal drugs than food safety experts. To address these perceptions, we estimated the mean daily intake of 28 agricultural chemicals across the entire Japanese population (≥ 1 year old) using the total diet samples based on the market basket method (14 food groups). The survey was conducted with the collaboration of six local government research institutes (Hokkaido, Tohoku, Kanto, Kansai, Chugoku, and Kyushu) from 2019 to 2021. The estimation of the mean daily intake of residual agricultural chemicals through the consumption of each food group was calculated by multiplying the concentration in the respective food group by the daily food consumption. The highest ratio of estimated daily intake over acceptable daily intake was observed for acephate (0.39%). The contribution rates from crops were higher than those from livestock and aquatic products for many agricultural chemicals.

Our results show that all of agricultural chemicals evaluated in this study were far below the ADIs, and these findings considered to be useful to bridge the perception gap.

^{*1}Division of Foods, National Institute of Health Sciences, ^{*2}Hokkaido Institute of Public Health, ^{*3}Akita City Public Health Center, ^{*4}Kanagawa Prefectural Institute of Public Health, ^{*5}Wakayama Prefectural Research Center of Environment and Public Health, ^{*6}Fukuoka Institute of Health and Environmental Sciences, ^{*7}School of Pharmacy and Pharmaceutical Sciences, Hoshi University

(2) 広島湾八幡川河口干潟における被覆網保護域でのアサリの個体群動態

(後田俊直, 濱脇亮次, 全国環境研会誌, 49, 2, 34-39, 2024)

里海づくり活動のひとつとして県内で実施されている被覆網によるアサリの保全活動を支援することを目的に、広島湾内の八幡川河口干潟の被覆網漁場においてアサリの動態調査を行った。被覆網のない場所では、殻長 20mm を超える成貝が出現することはなかったが、被覆網で保護することにより殻長 30mm を超える大型のアサリが継続して出現した。稚貝の発生は、5 月（前年秋産卵群）と 8 月（春産卵群）の年 2 回認められ、いずれの個体群も漁獲サイズへ成長した。その成長速度は 1 年で約 28mm と速く、5 月に発生した個体群は翌春には漁獲サイズとなった。同時に新たな個体群の発生もみられ再生産が成り立っていた。