



HOKKAIDO UNIVERSITY

Title	世界のルールの作り方・使い方 第1回：食の安全と国際経済 - 成長ホルモン・遺伝子組み換え食品の輸出入をめぐる攻防
Relation	世界のルールの作り方・使い方 第1回：食の安全と国際経済 - 成長ホルモン・遺伝子組み換え食品の輸出入をめぐる攻防. 2015年7月3日(金). 北海道大学法学研究科附属高等法政教育研究センター、北海道大学附属図書館, 札幌市
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第二部 資料・情報の探し方セミナー 資料 8

JECFA データベース

2015/6/19 作成

附属図書館 調査支援担当

消費者の健康の保護、食品の公正な貿易の確保等を目的として 1963 年に FAO と WHO が合同で設立したコーデックス委員会（Joint FAO/WHO Codex Alimentarius Commission）の言わばリスク評価機関にあたる専門家委員会が FAO/WHO 合同食品添加物専門家委員会（JECFA: The Joint FAO/WHO Expert Committee on Food Additives）である。FAO、WHO、それぞれの Web サイトにある JECFA のデータベースについて説明する。

1. WHO における JECFA のデータベース

【トップページ】

コーデックス委員会のトップページ → Scientific basis for Codex work → JECFA → JECFA at WHO → JECFA database の順でたどる。検索方法は 3 種類。

<http://apps.who.int/food-additives-contaminants-jecfa-database/search.aspx>

The screenshot shows the JECFA database search interface. At the top is the World Health Organization logo and the title 'Evaluations of the Joint FAO/WHO Expert Committee on Food Additives (JECFA)'. Below this, there are three search options: 'Partial Name/CAS', 'First Character', and 'Functional Class'. A text input field is labeled 'Partial name or CAS number:' and a 'Search' button is next to it. Annotations with blue boxes and arrows point to specific parts of the interface:

- A box labeled '物質名か CAS number' points to the 'Partial Name/CAS' search option.
- A box labeled '物質名の最初の一字で' points to the 'First Character' search option.
- A box labeled '用途の分野で検索' points to the 'Functional Class' search option.

Additional text on the page includes: 'Includes all updates up to the 78th JECFA (November 2013).', 'es, contaminants, toxicants and veterinary drugs JECFA has performed.', 's and monographs as well as to the specification database, and a', 'rst character (letter or symbol), or by functional class.'

【検索例 (Zeranol)】

The image shows a screenshot of the JECFA database search interface and results for 'Zeranol'. Red arrows and blue boxes with Japanese text provide annotations for the search process and the data presented.

Search Interface:

- Search tabs: Partial Name/CAS, First Character, Functional Class.
- Search input: Partial name or CAS number: Zeranol
- Search button: Search
- Search results for Zeranol: ZERANOL (0 - 0.5 µg/kg bw)
- Annotation: クリック (Click) points to the search results.

ZERANOL Results Page:

- General Information:**
 - Synonyms: P-1496, alpha-ZEARALANOL
 - Chemical Names: 6-(6,10-DIHYDROXYUNDECYL)-beta-RESORCYLIC ACID-alpha-LACTONE
 - CAS number: 55331-29-8
 - Functional Class: Veterinary Drug, GROWTH_PROMOTER
 - Annotation: General Information : 別名や CAS number 等 (General Information: Aliases or CAS number, etc.)
- Evaluations:**
 - Evaluation year: 1988
 - ADI: 0 - 0.5 µg/kg bw
 - Comments: Zeranol was shown to be a weak estrogen in long-term studies in mice, rats, dogs, and monkeys. A no-hormonal-effect level could not be established in male cynomolgus monkeys since no estrogenic effects were observed even at the highest dose administered (5 mg/kg bw/d). In intact female cynomolgus and rhesus macaque monkeys, 5 mg/kg bw/d was the no-hormonal-effect level. In ovariectomized female cynomolgus monkeys the no-hormonal-effect level was 0.05 mg/kg bw/d. The Committee concluded that this study was relevant to the human population and, since the ovariectomized female cynomolgus monkey is highly sensitive to estrogenic substances, set an ADI of 0 - 0.5 µg/kg bw using the NOEL in ovariectomized cynomolgus monkeys and a 100-fold safety factor.
 - MRL Comment: Acceptable residue level: 0.01 mg/kg muscle
 - MRL Code: MRL
 - Intake: TMDI 70 µg/d for 70-kg person
 - Meeting: 32
 - Report: TRS 763-JECFA 32/26
 - Tox Monograph: FAS 23-JECFA 32/123
 - Residues: FNP 41-JECFA 32/38
 - Previous Years: 1983, TRS 696-JECFA 27/33, NOT PREPARED, NOT PREPARED. MAXIMUM TOLERABLE DAILY INTAKE (MTDI) LIMITED BY GOOD HUSBANDRY PRACTICE (PROVISIONAL ACCEPTANCE). 1982, TRS 683-JECFA 26/33, NOT PREPARED, NOT PREPARED. NO ADI ALLOCATED. NO. 0
 - Annotation: Evaluations : JECFA における審査結果 (Evaluations: Review results in JECFA)
 - Annotation: Report : 該当する JECFA 会合の報告書 (Report: Report of the JECFA meeting that applies)
 - Annotation: Tox Monograph : 毒性 についての評価書 (Tox Monograph: Evaluation of toxicity)
- Toxicological study:**
 - Pivotal Study: 13-week monkey study (Singh et al., 1984a; CIC, 1985): Bilaterally-ovariectomized cynomolgus monkeys (6/group) were dosed orally with zeranol in 0.2% carboxymethylcellulose in a flavoured beverage at levels equivalent to 0.05, 0.5, or 5 mg/kg bw/d for 13 weeks. A control group was not used. Routine clinical chemistry, haematology, and urinalysis determinations were made one month prior to dosing, and at 1 and 3 months during the test period. Serum insulin and TSH were determined once prior to dosing, and at 1 and 3 months during the dosing period. FSH was determined on a weekly basis during the study through 4 weeks post-dosing. Baseline measurements and measurements of maturation index of vaginal epithelial cells during the course of the study indicated an estrogenic effect in animals receiving 0.5 and 5 mg/kg bw/d. The effect was not apparent at 0.05 mg/kg bw/d.
 - Animal specie: Cynomolgus monkeys
 - Effect: Estrogenic effects on maturation of vaginal epithelial cells
 - NOEL: 0.05 mg/kg bw/d
 - Point of departure: 0.05 mg/kg bw/d
 - Annotation: Toxicological study : 毒性学上の主要試験 (Toxicological study: Main toxicological tests)

2. FAO における JECFA のデータベース

【トップページ】

コーデックス委員会のトップページ → Scientific basis for Codex work → JECFA → JECFA at FAO → JECFA databases のうち、Residues of veterinary drugs の順でたどる (FAO では、食品添加物、香料、動物用医薬品でデータベースが分かれている)。

<http://www.fao.org/food/food-safety-quality/scientific-advice/jecfa/jecfa-vetdrugs/en/>

Food safety and quality

> Food > Scientific advice > Chemical risks and JECFA

Online Edition: "Residues of some veterinary drugs in foods and animals"

Online help Terminology

العربية 中文 Français Español

This database contains the most recent information on maximum residue levels for veterinary drugs as recommended by JECFA. All monographs published in the FAO Food and Nutrition Paper monographs are available only in English although some parts of the information are provided in English, French, Spanish, Arabic and Chinese.

To search for veterinary drugs select a field below, enter a search term (name or fragment) in Keyword, and click SEARCH or press ENTER

Keyword:

Drug name or fragment

Search Clear

Or search for veterinary drugs according to their evaluation status:

No ADI allocated

Search

物質名もしくは用途名での検索

一日摂取許容量や 残留基準値での検索

【検索例 (Zeranol)】

Keyword:

Drug name or fragment

Search Clear

New search

Found 1 veterinary drugs whose name contains keyword "x"

Zeranol

Search

クリック

Veterinary Drug	Zeranol		
Functional class	Xenobiotic growth promoter		
Latest evaluation	1987		
JECFA meeting	32		
ADI	0-0.5 µg/kg bw		
ADI status	Full		
Residue monographs	41-1 		
Marker residue	Parent drug		
Maximum residue limits (MRL) recommended	Cattle	Muscle	2 µg/kg
	Cattle	Liver	10 µg/kg
Other remarks			
Summary of the evaluation	An ADI of 0-0.5 µg/kg of body weight was established for zeranol. For a 70 kg person consuming 50 g of meat, the maximum permissible level of residue in meat would be 70 µg/kg of edible tissue. However, the Committee pointed out that levels of residues of zeranol in meat from animals treated according to good practice in the use of veterinary drugs would be below this figure. Therefore an Acceptable Residue Level was established for zeranol: 10 µg/kg for bovine liver and 2 µg/kg for bovine muscle. The latter level is higher than that observed in cattle treated according to good practice in the use of veterinary drugs, but is the lowest level consistent with the practical analytical methods available for routine residue analysis. TRS 763		

「Temporary」、「T」の場合は暫定値。

部位ごとの残留基準値

Residue monographs :
残留値についての評価書