



5-21-90

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 21 1990

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Revised Dietary Exposure Analysis for Atrazine Special Review.

FROM: Richard Griffin *Richard Griffin*
Dietary Risk Evaluation System (DRES) Staff
SACB / Health Effects Division (H7509C)

THROUGH: James P. Kariya *James P. Kariya*
Acting Section Head, DRES
Health Effects Division (H7509C) *[Signature]*

TO: Jude Andreassen, Review Manager
Special Review Branch
Special Review and Reregistration Division (H7508C)

Action Requested

Provide a dietary exposure/risk estimate for Atrazine based on revised anticipated residues. Estimate exposure/risk due to water contamination.

Discussion

1. Toxicology Endpoint: This chronic DRES analysis compared exposure estimates to a Reference Dose (RfD) of 0.005 mg/kg body weight/day based on a NOEL of 0.5 mg/kg bwt/day and an uncertainty factor of 100. The NOEL is based on a two generation rat reproduction study which demonstrated decreased body weights of F2 generation pups on the twenty-first postnatal day. This RfD value has been verified by HED (6/3/88) and EPA (2/21/90) Reference Dose committees.

Atrazine has been classified as a category C (possible human) carcinogen by the HED Peer Review Committee with an upper bound carcinogenic potency estimate (Q₁*) of 0.22 (mg/kg/day)¹.

2. Residue Information: Food uses evaluated in this analysis are the published tolerances established under 40 CFR 180.220 for corn, guava, wheat, pineapple, sugarcane, sorghum, millet, macadamia nuts, milk, eggs, poultry, and all red meat products.

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DRES uses current percent crop data to estimate the chronic exposure/risk for published uses. Percent crop data was provided by Economic Analysis Branch (Lapsley memo, 12/21/87) for the first DRES Atrazine analysis, updated by R. Torla for the second DRES dietary analysis (J.R. Tomerlin memo, 11/15/88), and updated again by R. Torla for this dietary analysis. Livestock commodities are evaluated at 100 percent crop treated on the assumption that feed items (such as corn) are nationally distributed. However, percent crop treated is factored into estimates of livestock anticipated residues.

All metabolites containing the intact triazine ring are now considered to be of toxicological (carcinogenic) concern. Based on corn and sorghum metabolism studies, Dietary Exposure Branch has revised (M. Metzger memo, 5/3/90) anticipated residues to account for Atrazine parent and all metabolites containing the intact triazine ring. The anticipated residues of corn forage, fodder, and silage were significantly increased with a resultant increase in the secondary residues in egg, milk, and animal tissues. Anticipated Residues for the remaining commodities remain unchanged pending future plant metabolism studies.

A summary of published uses, tolerances, percent crop treated, and anticipated residues are provided in Table 1.

3. Chronic Exposure Analysis: Tolerance residues and 100 percent crop treated are used to estimate a Theoretical Maximum Residue Contribution (TMRC). The dietary TMRC estimate for the overall U.S. population is 0.000988 mg/kg body weight/day (19.8% RfD). The highest TMRC sub-group estimate is 0.002420 mg/kg bwt/day (48.4% RfD) for children (1-6 yrs old).

The Atrazine Anticipated Residue Contribution (ARC) estimate is based on the averaged (no acute toxicological concerns) anticipated residues and percent crop treated data. Dietary ARC exposure estimates for Atrazine are much reduced from the TMRC estimate. The ARC estimate for the overall U.S. population is now 0.000198 mg/kg bwt/day (4.0% RfD) and for children (1-6 yrs) the current estimate is 0.000495 mg/kg bwt/day (9.9% RfD).

Dietary TMRC, ARC, and % RfD occupied estimates for the overall U.S. population and DRES population sub-groups are provided in Table 2.

Atrazine is a water contaminant with a proposed (by the Office of Drinking Water) Maximum Contaminant Level (MCL) of 3 ppb. All previous DRES analyses used this level to estimate Atrazine exposure due to contaminated water (see J.R. Tomerlin memos, 10/6/88, 11/15/88, 6/7/89, 8/1/89 for discussions of Atrazine exposure/risk due to water and DRES limitations in estimating water

consumption). For the purposes of this analysis, food-based and non food-based water exposure estimates are combined.

Atrazine contamination of water (as shown by actual measurements) occurs at levels up to a reported maximum of 1500 ppb (a point source). If water is contaminated at a level of 1 ppb, estimated exposure will be 0.000034 mg/kg bwt/day (0.7% RfD) for the overall (average) U.S. population. Exposure at 10 ppb adds 7.0% of the RfD/day to the existing dietary exposure of the overall U.S. population.

4. Carcinogenic Risk: A carcinogenic risk estimate for Atrazine is calculated only for the overall U.S. population based on the assumption that averaged exposure (overall U.S. population, ARC estimate) multiplied by the quantified carcinogenic potency (Q_1^*) estimates carcinogenic risk for all individuals over 70 year life spans.

The carcinogenic risk estimate for the overall U.S. population, based on the Anticipated Residue Contribution for food uses only, is 4.359×10^{-5} .

Exposure (in mg/kg bwt/day, ARC) / Carcinogenic risk estimates (overall U.S. population) for individual commodities or commodity groups are as follows:

	Exposure (mg/kg/day)	/	Carcinogenic Risk (Exposure x Q_1^*)
Pineapple	0.0000004		8.99×10^{-8}
Sugarcane	0.0000996		2.19×10^{-5}
Corn	0.0000381		8.37×10^{-6}
Sorghum	0.0000022		4.76×10^{-7}
Wheat	0.0000003		6.18×10^{-8}
Red Meats	0.0000093		2.05×10^{-6}
Poultry	0.0000003		6.84×10^{-8}
Milk	0.0000421		9.27×10^{-6}
Eggs	0.0000058		1.28×10^{-6}
Water @ 1 ppb	0.0000335		7.37×10^{-6}
Water @ 3 ppb (MCL)	0.0001006		2.21×10^{-5}
Water @ 10 ppb	0.0003352		7.37×10^{-5}

A detailed commodity contribution list with carcinogenic risk is provided in Table 3.

Risk Assessment: The health risk for exposing the U.S. population to Atrazine is measured by comparing estimated daily exposure to the RfD and by estimating the carcinogenic risk of this exposure.

By the first measure, the chronic dietary risk appears to be relatively minimal. The overall U.S. population will be exposed to

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Atrazine at an estimated level of 4.0% of the RfD/day and the most highly exposed sub-group (children (1-6 yrs)) at 9.9% of the RfD/day.

By the second measure, carcinogenic risk, Atrazine at current use levels presents a risk that is significantly greater than the 10^{-6} risk generally accepted as negligible by the Agency. Exposure by water contamination at any level is an addition to a dietary carcinogenic risk estimate greater than 4×10^{-5} .

It should be noted that the exposure analysis above, with careful evaluations of percent crop treated and anticipated residues cannot be considered an overestimate.

cc:DRES

Caswell # 063

Dietary Exposure Branch, HED

Toxicology, HED

Table 1. Uses, Tolerances, Anticipated Residues, Percent Crop

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 063

PAGE: 1

DATE: 05/17/90

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
			ADI	UF		
Atrazine Caswell #063 CAS No. 1912-24-9 A.I. CODE: 080803 CFR No. 180.220	2-gen repro-rat	Decreased body weights of pups in the second generation on postnatal day 21	OPP RfD= 0.005000 EPA RfD= 0.005000	-->100	No data gaps.	HED complete 07/09/86. EPA verified 05/20/87. HED reassess 06/03/88. EPA verified 06/22/88. EPA verified 02/21/90.
	NOEL= 0.5000 mg/kg 10.00 ppm					
	LEL= 2.5000 mg/kg 50.00 ppm	Evidence of oncogenicity in rats (mammary).				
	OMCO: Class C (HED NOTE).		Q*: 0.22000		Q* calculated.	

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
03007AA	MACADAMIA NUTS	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000
06006AA	GUAVA	10 RAW-FRESH OR NFS	0E2393	P 0.050000	0.010000	AVG FLD TRIALS	10.00	0.001000
06006AA	GUAVA	21 COOKED-NFS	0E2393	P 0.050000	0.010000	AVG FLD TRIALS	10.00	0.001000
06006AA	GUAVA	62 COOKED-FRESH OR FROZEN-BAKED	0E2393	P 0.050000	0.010000	AVG FLD TRIALS	10.00	0.001000
06013AA	PINEAPPLE-PULP	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.030000	AVG FLD TRIALS	20.00	0.006000
06013AA	PINEAPPLE-PULP	21 COOKED-NFS	7F0620	P 0.250000	0.030000	AVG FLD TRIALS	20.00	0.006000
06013AA	PINEAPPLE-PULP	31 COOKED-FRESH OR CANNED	7F0620	P 0.250000	0.030000	AVG FLD TRIALS	20.00	0.006000
06013DA	PINEAPPLE-DRIED	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.030000	AVG FLD TRIALS	20.00	0.006000
06013JA	PINEAPPLE-JUICE	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.030000	AVG FLD TRIALS	20.00	0.006000
06013JA	PINEAPPLE-JUICE	15 RAW-FRESH OR CANNED	7F0620	P 0.250000	0.030000	AVG FLD TRIALS	20.00	0.006000
06013JA	PINEAPPLE-JUICE	21 COOKED-NFS	7F0620	P 0.250000	0.030000	AVG FLD TRIALS	20.00	0.006000
06013JA	PINEAPPLE-JUICE	31 COOKED-FRESH OR CANNED	7F0620	P 0.250000	0.030000	AVG FLD TRIALS	20.00	0.006000
15004AA	CORN, POP	21 COOKED-NFS	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000
15005AA	CORN, SHEET	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	60.00	0.060000
15005AA	CORN, SHEET	21 COOKED-NFS	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	60.00	0.060000
15005AA	CORN, SHEET	31 COOKED-FRESH OR CANNED	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	60.00	0.060000
24002EA	CORN, GRAIN-ENDO	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000
24002EA	CORN, GRAIN-ENDO	21 COOKED-NFS	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000
24002EA	CORN, GRAIN-ENDO	22 COOKED-FRESH-BAKED	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000
24002EA	CORN, GRAIN-ENDO	23 COOKED-FRESH-BOILED	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000
24002NA	CORN, GRAIN-BRAN	00 NOT SPECIFIED (NO CONSUMPTION)	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000
24002SA	CORN SUGAR	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000
24002SA	CORN SUGAR	21 COOKED-NFS	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000
24002SA	CORN SUGAR	22 COOKED-FRESH-BAKED	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000
24006AA	SORGHUM	00 NOT SPECIFIED (NO CONSUMPTION)	7F0525	P 0.250000	0.130000	AVG FLD TRIALS	70.00	0.091000
24007AA	WHEAT-ROUGH	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007AA	WHEAT-ROUGH	21 COOKED-NFS	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007AA	WHEAT-ROUGH	22 COOKED-FRESH-BAKED	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007AA	WHEAT-ROUGH	23 COOKED-FRESH-BOILED	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007GA	WHEAT-GERM	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007GA	WHEAT-GERM	22 COOKED-FRESH-BAKED	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007NA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007NA	WHEAT-BRAN	21 COOKED-NFS	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007NA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007NA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007NA	WHEAT-FLOUR	21 COOKED-NFS	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007NA	WHEAT-FLOUR	22 COOKED-FRESH-BAKED	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24007NA	WHEAT-FLOUR	23 COOKED-FRESH-FRIED	7F0620	P 0.250000	0.020000	AVG FLD TRIALS	1.00	0.000200
24012AA	MILLET	10 RAW-FRESH OR NFS	8E2076	P 0.250000	0.680000	AVG FLD TRIALS	1.00	0.006800
24012AA	MILLET	21 COOKED-NFS	8E2076	P 0.250000	0.680000	AVG FLD TRIALS	1.00	0.006800

Table 1 cont.

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 063

DATE: 05/17/90

PAGE: 2

CHEMICAL	STUDY TYPE	EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
		2-gen reprod-rat NOEL=	Decreased body weights of pups in the second generation on postnatal day 21	ADI	UF	No data gaps.	HED complete		
Atrazine Caswell #063 CAS No. 1912-24-9 A.I. CODE: 080803 CFR No. 180.220	2-gen reprod-rat NOEL= 0.5000 mg/kg LEL= 10.00 ppm ONCO: Class C (HED NOTE).	0.5000 mg/kg 2.5000 mg/kg 50.00 ppm	Evidence of oncogenicity in rats (mammary).	OPP Rfd= 0.005000 EPA Rfd= 0.005000	Q*: 0.22000	Q* calculated.	On IRIS.		
FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)	
250035A	CANE SUGAR	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.160000	AVG FLD TRIALS	80.00	0.128000	
250035A	CANE SUGAR	21 COOKED-NFS	7F0620	P 0.250000	0.160000	AVG FLD TRIALS	80.00	0.128000	
250035A	CANE SUGAR	22 COOKED-FRESH-BAKED	7F0620	P 0.250000	0.160000	AVG FLD TRIALS	80.00	0.128000	
250035A	CANE SUGAR	31 COOKED-FRESH OR CANNED	7F0620	P 0.250000	0.160000	AVG FLD TRIALS	80.00	0.128000	
250035B	SUGAR-MOLASSES	10 RAW-FRESH OR NFS	7F0620	P 0.250000	0.650000	AVG FLD TRIALS	80.00	0.520000	
250035B	SUGAR-MOLASSES	21 COOKED-NFS	7F0620	P 0.250000	0.650000	AVG FLD TRIALS	80.00	0.520000	
250035B	SUGAR-MOLASSES	22 COOKED-FRESH-BAKED	7F0620	P 0.250000	0.650000	AVG FLD TRIALS	80.00	0.520000	
250035B	SUGAR-MOLASSES	31 COOKED-FRESH OR CANNED	7F0620	P 0.250000	0.650000	AVG FLD TRIALS	80.00	0.520000	
270020A	CORN, GRAIN-OIL	18 PROCESSED OIL	7F0620	P 0.250000	0.100000	AVG FLD TRIALS	70.00	0.070000	
500000B	MILK-NON-FAT SOL	10 RAW-FRESH OR NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
500000B	MILK-NON-FAT SOL	21 COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
500000B	MILK-NON-FAT SOL	51 COOKED-CANNED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
500000F	MILK-FAT SOLIDS	10 RAW-FRESH OR NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
500000F	MILK-FAT SOLIDS	21 COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
500000F	MILK-FAT SOLIDS	51 COOKED-CANNED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
500005A	MILK SUG (LACT)	21 COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
500005A	MILK SUG (LACT)	51 COOKED-CANNED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
500018A	BEEF-NEAT BYP	21 COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-NEAT BYP	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018B	BEEF-OTH ORGAN	21 COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018B	BEEF-OTH ORGAN	51 COOKED-CANNED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-DRIED	21 COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-FAT	10 RAW-FRESH OR NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-FAT	21 COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-FAT	22 COOKED-FRESH-BAKED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-FAT	23 COOKED-FRESH-BOILED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-FAT	24 COOKED-FRESH-BROILED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-FAT	25 COOKED-FRESH-FRIED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-KIDNEY	21 COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-LIVER	25 COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
530018A	BEEF-LIVER	31 COOKED-FRESH OR CANNED	7F0620	P 0.020000	0.020000	AVG METAB STUDY	100.00	0.020000	
530018A	BEEF-LEAN	10 RAW-FRESH OR NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-LEAN	21 COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-LEAN	22 COOKED-FRESH-BAKED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-LEAN	23 COOKED-FRESH-BOILED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530018A	BEEF-LEAN	24 COOKED-FRESH-BROILED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530028A	GOAT-NEAT BYP	00 NOT SPECIFIED (NO CONSUMPTION)	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530028B	GOAT-OTH ORGAN	00 NOT SPECIFIED (NO CONSUMPTION)	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530028A	GOAT-FAT	23 COOKED-FRESH-BOILED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
530028A	GOAT-FAT	25 COOKED-FRESH-FRIED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 063

CHEMICAL		STUDY TYPE		EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS
Atrazine		2-gen reprod-rat NOEL= 0.5000 mg/kg 10.00 ppm LEL= 2.5000 mg/kg 50.00 ppm ONCO: Class C (HED NOTE).		Decreased body weights of pups in the second generation on postnatal day 21 Evidence of oncogenicity in rats (mammary).		ADI UF -->100 OPP RfD= 0.005000 EPA RfD= 0.005000 Q*: 0.22000	No data gaps.		HED complete 07/09/86. EPA verified 05/20/87. HED reassess 06/03/88. EPA verified 06/22/88. EPA verified 02/21/90. On IRIS.	
FOOD CODE	FOOD	0	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)	
53002KA	GOAT-KIDNEY	00	NOT SPECIFIED (NO CONSUMPTION)	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53002LA	GOAT-LIVER	00	NOT SPECIFIED (NO CONSUMPTION)	7F0620	P 0.020000	0.020000	AVG METAB STUDY	100.00	0.020000	
53002NA	GOAT-LEAN	23	COOKED-FRESH-BOILED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53002HA	GOAT-LEAN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53003AA	HORSE	00	NOT SPECIFIED (NO CONSUMPTION)	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53005BA	SHEEP-MEAT BYP	21	COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53005BB	SHEEP-OTH ORGAN	21	COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53005FA	SHEEP-FAT	21	COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53005KA	SHEEP-KIDNEY	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53005LA	SHEEP-LIVER	00	NOT SPECIFIED (NO CONSUMPTION)	7F0620	P 0.020000	0.020000	AVG METAB STUDY	100.00	0.020000	
53005MA	SHEEP-LEAN	21	COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53005SA	SHEEP-SKIN	31	COOKED-FRESH OR CANNED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006A	PORK-NEAT BYP	21	COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006B	PORK-OTH ORGAN	21	COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006C	PORK-OTH ORGAN	26	COOKED-FRESH-PICKLED, CORNED, OR CURED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006FA	PORK-FAT	10	RAW-FRESH OR NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006GA	PORK-FAT	21	COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006HA	PORK-FAT	23	COOKED-FRESH-BOILED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006IA	PORK-FAT	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006JA	PORK-FAT	26	COOKED-FRESH-PICKLED, CORNED, OR CURED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006KA	PORK-KIDNEY	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006LA	PORK-LIVER	21	COOKED-NFS	7F0620	P 0.020000	0.020000	AVG METAB STUDY	100.00	0.020000	
53006MA	PORK-LIVER	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006NA	PORK-LEAN	21	COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006OA	PORK-LEAN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006PA	PORK-LEAN	26	COOKED-FRESH-PICKLED, CORNED, OR CURED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006QA	PORK-BYP	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006RA	PORK-BYP	26	COOKED-FRESH-PICKLED, CORNED, OR CURED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006SA	TURKEY ORGAN	21	COOKED-NFS	7F0620	P 0.020000	0.002000	AVG METAB STUDY	100.00	0.002000	
53006TA	TURKEY ORGAN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006UA	TURKEY W/O SKIN	31	COOKED-NFS	7F0620	P 0.020000	0.004000	AVG METAB STUDY	100.00	0.004000	
53006HA	TURKEY W/O SKIN	62	COOKED-FRESH OR CANNED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BA	TURKEY W/O SKIN	21	COOKED-FRESH OR FROZEN-BAKED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BB	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BC	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BD	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BE	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BF	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BG	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BH	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BI	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BJ	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BK	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BL	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BM	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BN	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BO	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BP	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BQ	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BR	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BS	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BT	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BU	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BV	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BW	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BX	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BY	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006BZ	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CA	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CB	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CC	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CD	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CE	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CF	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CG	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CH	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CH	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CI	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CJ	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CK	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CL	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CM	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CN	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CO	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CP	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CQ	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CR	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CS	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CT	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CU	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CV	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CW	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CX	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CY	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006CZ	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DA	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DB	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DC	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DD	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DE	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DE	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DF	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DG	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DH	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DH	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DI	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DJ	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DK	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DK	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DL	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DL	TURKEY+SKIN	25	COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DM	TURKEY+SKIN	21	COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000	
53006DM	TURKEY+SKIN	25	COOKED-FRESH-FRIED							

Table 1 cont.

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 063

PAGE: 4

DATE: 05/17/90

CHEMICAL		STUDY TYPE		EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Atrazine		2-gen reprod-rat		Decreased body weights of pups in the second generation on postnatal day 21		ADI UF -->100		No data gaps.		HED complete 07/09/86.	
Caswell #063		NOEL=		10.00 ppm		OPP RfD= 0.005000				EPA verified 05/20/87.	
CAS No. 1912-24-9		LEL=		2.5000 mg/kg		EPA RfD= 0.005000				HED reassess 06/03/88.	
A.I. CODE: 080803				50.00 ppm						EPA verified 06/22/88.	
CFR No. 180.220		ONCO: Class C (HED NOTE).		Evidence of oncogenicity in rats (mammary).		q*: 0.22000		q* calculated.		EPA verified 02/21/90.	
										On IRIS.	
FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)			
55014AA	EGGS-WHOLE	21 COOKED-NFS	7F0620	P 0.020000	0.010000	AVG METAB STUDY	100.00	0.010000			
55014AA	EGGS-WHOLE	22 COOKED-FRESH-BAKED	7F0620	P 0.020000	0.010000	AVG METAB STUDY	100.00	0.010000			
55014AA	EGGS-WHOLE	23 COOKED-FRESH-BOILED	7F0620	P 0.020000	0.010000	AVG METAB STUDY	100.00	0.010000			
55014AB	EGGS-WHOLE	25 COOKED-FRESH-FRIED	7F0620	P 0.020000	0.010000	AVG METAB STUDY	100.00	0.010000			
55014AB	EGGS-WHITE ONLY	10 RAW-FRESH OR NFS	7F0620	P 0.020000	0.009000	AVG METAB STUDY	100.00	0.009000			
55014AB	EGGS-WHITE ONLY	21 COOKED-NFS	7F0620	P 0.020000	0.009000	AVG METAB STUDY	100.00	0.009000			
55014AB	EGGS-WHITE ONLY	22 COOKED-FRESH-BAKED	7F0620	P 0.020000	0.009000	AVG METAB STUDY	100.00	0.009000			
55014AB	EGGS-WHITE ONLY	62 COOKED-FRESH OR FROZEN-BAKED	7F0620	P 0.020000	0.009000	AVG METAB STUDY	100.00	0.009000			
55014AB	EGGS-WHITE ONLY	81 COOKED-FROZEN	7F0620	P 0.020000	0.009000	AVG METAB STUDY	100.00	0.009000			
55014AC	EGGS-YOLK ONLY	10 RAW-FRESH OR NFS	7F0620	P 0.020000	0.010000	AVG METAB STUDY	100.00	0.010000			
55014AC	EGGS-YOLK ONLY	21 COOKED-NFS	7F0620	P 0.020000	0.010000	AVG METAB STUDY	100.00	0.010000			
55014AC	EGGS-YOLK ONLY	25 COOKED-FRESH-FRIED	7F0620	P 0.020000	0.010000	AVG METAB STUDY	100.00	0.010000			
55014AC	EGGS-YOLK ONLY	31 COOKED-FRESH OR CANNED	7F0620	P 0.020000	0.010000	AVG METAB STUDY	100.00	0.010000			
55015BA	CHICKEN-BYP	00 NOT SPECIFIED (NO CONSUMPTION)	7F0620	P 0.020000	0.010000	AVG METAB STUDY	100.00	0.010000			
55015LA	CHICKEN-ORGAN	21 COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.010000			
55015LA	CHICKEN-ORGAN	25 COOKED-FRESH-FRIED	7F0620	P 0.020000	0.002000	AVG METAB STUDY	100.00	0.000600			
55015LA	CHICKEN-ORGAN	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	7F0620	P 0.020000	0.002000	AVG METAB STUDY	100.00	0.002000			
55015MA	CHICKEN-W/O SKIN	21 COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.002000			
55015MA	CHICKEN-W/O SKIN	22 COOKED-FRESH-BAKED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000			
55015MA	CHICKEN-W/O SKIN	25 COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000			
55015MA	CHICKEN-W/O SKIN	31 COOKED-FRESH OR CANNED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000			
55015MA	CHICKEN-W/O SKIN	53 COOKED-CANNED-BOILED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000			
55015MB	CHICKEN+SKIN	21 COOKED-NFS	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000			
55015MB	CHICKEN+SKIN	25 COOKED-FRESH-FRIED	7F0620	P 0.020000	0.006000	AVG METAB STUDY	100.00	0.006000			

Table 2. Exposure Analysis

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 05/17/90

PAGE: 1

CHEMICAL INFORMATION		STUDY TYPE		EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Atrazine		2-gen reprod-rat NOEL= 0.5000 mg/kg 10.00 ppm LEL= 2.5000 mg/kg 50.00 ppm ONCO: Class C (HED NOTE).		Decreased body weights of pups in the second generation on postnatal day 21 Evidence of oncogenicity in rats (mammary).		ADI UF --> 100 OPP RfD= 0.005000 EPA RfD= 0.005000 q*: 0.22000		No data gaps. q* calculated.		HED complete 07/09/86. EPA verified 05/20/87. HED reassess 06/03/88. EPA verified 06/22/88. EPA verified 02/21/90. On IRIS.	
Caswell #063 CAS No. 1912-24-9 A.I. CODE: 080803 CFR No. 180.220											
POPULATION SUBGROUP		TOTAL THRC (MG/KG BODY WEIGHT/DAY)		NEW THRC**		NEW THRC AS PERCENT OF RFD		DIFFERENCE AS PERCENT OF RFD		EFFECT OF ANTICIPATED RESIDUES	
		CURRENT THRC*								ARC	%RFD
U.S. POPULATION - 48 STATES		0.000988	0.000988	0.000988	19.755880	0.000000	0.000198	3.96270			
U.S. POPULATION - SPRING SEASON		0.000951	0.000951	0.000951	19.024960	0.000000	0.000193	3.86844			
U.S. POPULATION - SUMMER SEASON		0.000985	0.000985	0.000985	19.709080	0.000000	0.000200	4.00272			
U.S. POPULATION - FALL SEASON		0.000997	0.000997	0.000997	19.938900	0.000000	0.000197	3.93172			
U.S. POPULATION - WINTER SEASON		0.000994	0.000994	0.000994	19.877900	0.000000	0.000194	3.87556			
NORTHEAST REGION		0.000973	0.000973	0.000973	19.466720	0.000000	0.000185	3.69258			
NORTH CENTRAL REGION		0.001011	0.001011	0.001011	20.228420	0.000000	0.000203	4.06962			
SOUTHERN REGION		0.000956	0.000956	0.000956	19.128360	0.000000	0.000198	3.96564			
WESTERN REGION		0.000994	0.000994	0.000994	19.883700	0.000000	0.000196	3.92550			
HISPANICS		0.001096	0.001096	0.001096	21.913620	0.000000	0.000222	4.43878			
NON-HISPANIC WHITES		0.000977	0.000977	0.000977	19.544720	0.000000	0.000193	3.85612			
NON-HISPANIC BLACKS		0.000956	0.000956	0.000956	19.129920	0.000000	0.000204	4.07758			
NON-HISPANIC OTHERS		0.000994	0.000994	0.000994	19.884360	0.000000	0.000199	3.97178			
NURSING INFANTS (< 1 YEAR OLD)		0.000625	0.000625	0.000625	12.501100	0.000000	0.000129	2.57390			
NON-NURSING INFANTS (< 1 YEAR OLD)		0.002308	0.002308	0.002308	46.152260	0.000000	0.000485	9.70764			
FEMALES (13+ YEARS, PREGNANT)		0.000707	0.000707	0.000707	14.148820	0.000000	0.000138	2.75448			
FEMALES 13+ YEARS, NURSING		0.000824	0.000824	0.000824	16.474520	0.000000	0.000161	3.21688			
CHILDREN (1-6 YEARS OLD)		0.002420	0.002420	0.002420	48.396340	0.000000	0.000495	9.89860			
CHILDREN (7-12 YEARS OLD)		0.001662	0.001662	0.001662	33.247320	0.000000	0.000338	6.76424			
MALES (13-19 YEARS OLD)		0.001104	0.001104	0.001104	22.077840	0.000000	0.000222	4.44048			
FEMALES (13-19 YEARS OLD, NOT PREG. OR NURSING)		0.000883	0.000883	0.000883	17.656800	0.000000	0.000184	3.68934			
MALES (20 YEARS AND OLDER)		0.000688	0.000688	0.000688	13.769260	0.000000	0.000131	2.61986			
FEMALES (20 YEARS AND OLDER, NOT PREG. OR NURS)		0.000596	0.000596	0.000596	11.916220	0.000000	0.000116	2.32166			

*Current THRC does not include new or pending tolerances.

**New THRC includes new, pending, and published tolerances.

Table 3. Commodity Contribution and Carcinogenic Risk

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 05/18/90

PAGE: 1

CHEMICAL INFORMATION		STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Atrazine	Caswell #063	2-gen repro-rat	Decreased body weights of pups in the second generation on postnatal day 21	ADI UF -->100	No data gaps.	HED complete 07/09/86.
	CAS No. 1912-24-9	NOEL= 0.5000 mg/kg		OPP RfD= 0.005000		EPA verified 05/20/87.
	A.I. CODE: 080803	LEL= 2.5000 mg/kg		EPA RfD= 0.005000		HED reassess 06/03/88.
	CFR No. 180.220	ONCO: Class C (HED NOTE).	Evidence of oncogenicity in rats (mammary).	q*: 0.22000	q* calculated.	EPA verified 06/22/88.
ONCO: Class C (HED NOTE).						

COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TMRC		TMRC	XRFD	TMRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	XRFD	ARC ONCO RISK
			TYPE	(UG/KG/DAY)							
06006AA	GUAVA	0.050	P	0.000005	0.000	0.000000000110	0.00100	0.000000	0.000	0.000000000000	
	10 RAW-FRESH OR NFS						0.00100	0.000000	0.000	0.000000000000	
	21 COOKED-NFS						0.00100	0.000000	0.000	0.000000000000	
	62 COOKED-FRESH OR FROZEN-BAKED						0.00100	0.000000	0.000	0.000000000000	
06013AA	PINEAPPLE-FRESH/PULP	0.250	P	0.007707	0.154	0.00000169554	0.00600	0.000067	0.001	0.00000001474	
	10 RAW-FRESH OR NFS						0.00600	0.000005	0.000	0.000000000110	
	21 COOKED-NFS						0.00600	0.000113	0.002	0.000000002486	
	31 COOKED-FRESH OR CANNED						0.00600	0.000001	0.000	0.000000000022	
06013DA	PINEAPPLE-DRIED	0.250	P	0.000031	0.001	0.000000000682	0.00600	0.000004	0.000	0.000000000088	
	10 RAW-FRESH OR NFS						0.00600	0.000103	0.002	0.00000002266	
	15 RAW-FRESH OR NFS						0.00600	0.000003	0.000	0.000000000066	
	21 COOKED-NFS						0.00600	0.000113	0.002	0.00000002486	
06013JA	PINEAPPLE-FRESH/JUICE	0.250	P	0.015803	0.316	0.00000347666	0.12800	0.010796	0.216	0.00000237512	
	10 RAW-FRESH OR NFS						0.12800	0.024294	0.486	0.00000534468	
	15 RAW-FRESH OR NFS						0.12800	0.015942	0.319	0.00000350724	
	21 COOKED-NFS						0.12800	0.043145	0.863	0.00000949190	
25003SA	CANE SUGAR	0.250	P	0.183941	0.053	0.00000057860	0.52000	0.000000	0.000	0.000000000000	
	10 RAW-FRESH OR NFS						0.52000	0.001677	0.034	0.00000036894	
	21 COOKED-NFS						0.52000	0.002898	0.058	0.00000063756	
	31 COOKED-FRESH OR CANNED						0.52000	0.000896	0.018	0.00000019712	
CROP GROUP TOTALS FOR UNSPECIFIED:											
15004AA	CORN,POP	0.250	P	0.001693	0.034	0.00000037246	0.07000	0.000474	0.009	0.00000010428	
15005AA	CORN/SHEET	0.250	P	0.059177	1.184	0.00001301894	0.06000	0.000006	0.000	0.00000000132	
	10 RAW-FRESH OR NFS						0.06000	0.011959	0.239	0.00000263098	
	21 COOKED-NFS						0.06000	0.002238	0.045	0.00000049236	
	31 COOKED-FRESH OR CANNED						0.06000	0.000043	0.001	0.00000000946	
24002EA	CORN/GRAIN-ENDOSPERM	0.250	P	0.041350	0.827	0.00000909700	0.07000	0.001525	0.031	0.00000033550	
	10 RAW-FRESH OR NFS						0.07000	0.008602	0.172	0.00000189244	
	21 COOKED-NFS						0.07000	0.001408	0.028	0.00000030976	
	22 COOKED-FRESH-BAKED						0.07000	0.000000	0.000	0.000000000000	
24002HA	23 COOKED-FRESH-BOILED	0.250	P	0.000000	0.000	0.000000000000	0.07000	0.000000	0.000	0.000000000000	
	CORN/GRAIN-BRAN						0.07000	0.000000	0.000	0.000000000000	
	00 NOT SPECIFIED (NO CONSUMPTION)										

corn-oil 5.2 x 10⁻⁶

Table 3 cont.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 05/18/90

PAGE: 2

CHEMICAL INFORMATION			STUDY TYPE		EFFECTS		REFERENCE DOSES			DATA GAPS/COMMENTS		STATUS	
Atrazine Caswell #063 CAS No. 1912-24-9 A.I. CODE: 080803 CFR No. 180.220			2-gen reprod-rat NOEL= 0.5000 mg/kg 10.00 ppm LEL= 2.5000 mg/kg 50.00 ppm ONCO: Class C (HED NOTE).		Decreased body weights of pups in the second generation on postnatal day 21 Evidence of oncogenicity in rats (mammary).		ADI	UF	No data gaps.		HED complete 07/09/86. EPA verified 05/20/87. HED reassess 06/03/88. EPA verified 06/22/88. EPA verified 02/21/90. On IRIS.		
							OPP RfD= 0.005000						
							EPA RfD= 0.005000						
							Q*: 0.22000		Q* calculated.				
COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES													
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TYPE	THRC (UG/KG/DAY)	THRC	%RFD	THRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD	ARC ONCO RISK		
24002SA	CORN SUGAR 10 RAW-FRESH OR NFS 21 COOKED-NFS	0.250	P	0.036437		0.729	0.00000801614	0.07000	0.000397	0.008	0.00000008734		
24006AA	22 COOKED-FRESH-BAKED SORGHUM (INCLUDING MILO) 4.8×10^{-7}	0.250	P	0.005942		0.119	0.00000130724	0.07000	0.00846	0.177	0.00000194612		
24007AA	00 NOT SPECIFIED (NO CONSUMPTION) WHEAT-ROUGH 10 RAW-FRESH OR NFS 21 COOKED-NFS	0.250	P	0.035153		0.703	0.00000773366	0.07000	0.000959	0.019	0.0000021098		
24007GA	23 COOKED-FRESH-BOILED WHEAT-GERM 10 RAW-FRESH OR NFS 21 COOKED-NFS	0.250	P	0.000201		0.004	0.00000004422	0.00020	0.002163	0.043	0.00000047566		
24007HA	22 COOKED-FRESH-BAKED WHEAT-BRAN 10 RAW-FRESH OR NFS 21 COOKED-NFS	0.250	P	0.003039		0.061	0.00000066858	0.00020	0.000000	0.000	0.00000000000		
24007JA	22 COOKED-FRESH-BAKED WHEAT-FLOUR 10 RAW-FRESH OR NFS 21 COOKED-NFS	0.250	P	0.314312		6.286	0.00006914864	0.00020	0.000002	0.000	0.00000000044		
24012AA	25 COOKED-FRESH-FRIED MILLET 10 RAW-FRESH OR NFS 21 COOKED-NFS	0.250	P	0.000005		0.000	0.00000000110	0.00020	0.000000	0.000	0.00000000000		
270020A	CORN/GRAIN-OIL 18 PROCESSED OIL	0.250	P	0.005700		0.114	0.00000125400	0.00680	0.000000	0.000	0.00000000000		
CROP GROUP TOTALS FOR CEREAL GRAINS: 0.503009 10.060 0.00011066198 0.07000 0.001596 0.032 0.00000035112 0.810 0.00000890934													
03007AA	MACADAMIA NUTS (BUSH NUTS) 10 RAW-FRESH OR NFS	0.250	P	0.000012		0.000	0.00000000264	0.07000	0.000003	0.000	0.00000000066		
CROP GROUP TOTALS FOR TREE NUTS: 0.000012 0.000 0.00000000264 0.000003 0.000 0.00000000066													

Table 3 cont.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 05/18/90

PAGE: 3

CHEMICAL INFORMATION		STUDY TYPE		EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Atrazine	Caswell #063	2-gen reprod-rat NOEL= 0.5000 mg/kg 10.00 ppm LEL= 2.5000 mg/kg 50.00 ppm ONCO: Class C (HED NOTE).		Decreased body weights of pups in the second generation on postnatal day 21	Evidence of oncogenicity in rats (mammary).	AD1 UF -->100 OPP RfD= 0.005000 EPA RfD= 0.005000		No data gaps.		HED complete 07/09/86. EPA verified 05/20/87. HED reassess 06/03/88. EPA verified 06/22/88. EPA verified 02/21/90. On IRIS.	
	CAS No. 1912-24-9										
	A.I. CODE: 080803										
	CFR No. 180.220										

COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)		THRC (UG/KG/DAY)		THRC ONCO RISK		ANTICIPATED RESIDUE (PPM)		ARC (UG/KG/DAY)		ARC ONCO RISK	
		0.020	P	0.000353	0.007	0.00000007766	0.001	0.00400	0.000066	0.000000000000	0.000	0.000000000000	0.000
53001BA	BEEF-MEAT BYPRODUCTS 21 COOKED-NFS	0.020	P	0.000353	0.007	0.00000007766	0.001	0.00400	0.000066	0.000000000000	0.000	0.000000000000	0.000
53001BB	BEEF(ORGAN MEATS)-OTHER 21 COOKED-NFS 51 COOKED-CANNED	0.020	P	0.000121	0.002	0.00000002662	0.000	0.00400	0.000005	0.000000000000	0.000	0.000000000000	0.000
53001DA	BEEF-DRIED 21 COOKED-NFS	0.020	P	0.000051	0.001	0.00000001122	0.000	0.00400	0.000021	0.000000000000	0.000	0.000000000000	0.000
53001FA	BEEF(BONELESS)-FAT (BEEF TALLOW) 10 RAW-FRESH OR NFS	0.020	P	0.007442	0.149	0.00000163724	0.149	0.00400	0.000010	0.000000000000	0.000	0.000000000000	0.000
53001KA	BEEF(ORGAN MEATS)-KIDNEY 21 COOKED-NFS	0.020	P	0.000010	0.000	0.000000000220	0.000	0.00400	0.000006	0.000000000000	0.000	0.000000000000	0.000
53001LA	BEEF(ORGAN MEATS)-LIVER 25 COOKED-FRESH-FRIED 31 COOKED-FRESH OR CANNED	0.020	P	0.000414	0.008	0.00000009108	0.008	0.00400	0.000593	0.000000000000	0.012	0.000000000000	0.000
53001MA	BEEF(BONELESS)-LEAN (W/O REMOVEABLE FAT) 10 RAW-FRESH OR NFS	0.020	P	0.023240	0.465	0.00000511280	0.465	0.00400	0.000100	0.000000000000	0.002	0.000000000000	0.000
53002BA	GOAT-MEAT BYPRODUCTS 00 NOT SPECIFIED (NO CONSUMPTION)	0.020	P	0.000000	0.000	0.000000000000	0.000	0.00400	0.000000	0.000000000000	0.000	0.000000000000	0.000
53002BB	GOAT(ORGAN MEATS)-OTHER 00 NOT SPECIFIED (NO CONSUMPTION)	0.020	P	0.000000	0.000	0.000000000000	0.000	0.00400	0.000279	0.000000000000	0.055	0.000000000000	0.000
53002FA	GOAT(BONELESS)-FAT 23 COOKED-FRESH-BOILED	0.020	P	0.000001	0.000	0.000000000022	0.000	0.00400	0.000191	0.000000000000	0.004	0.000000000000	0.000
53002KA	GOAT(ORGAN MEATS)-KIDNEY 00 NOT SPECIFIED (NO CONSUMPTION)	0.020	P	0.000000	0.000	0.000000000000	0.000	0.00400	0.000295	0.000000000000	0.006	0.000000000000	0.000
53002LA	GOAT(ORGAN MEATS)-LIVER 00 NOT SPECIFIED (NO CONSUMPTION)	0.020	P	0.000000	0.000	0.000000000000	0.000	0.00400	0.001394	0.000000000000	0.028	0.000000000000	0.000
53002MA	GOAT(BONELESS)-LEAN (W/O REMOVEABLE FAT) 23 COOKED-FRESH-BOILED	0.020	P	0.000004	0.000	0.000000000088	0.000	0.00400	0.000000	0.000000000000	0.000	0.000000000000	0.000
53003AA	HORSE 00 NOT SPECIFIED (NO CONSUMPTION)	0.020	P	0.000000	0.000	0.000000000000	0.000	0.00400	0.000001	0.000000000000	0.000	0.000000000000	0.000

Table 3 cont.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 05/18/90

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CHEMICAL INFORMATION		STUDY TYPE		EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Atrazine	2-gen reprod-rat	Decreased body weights of pups in the second generation on postnatal day 21	AD1	UF -->100	OPP RfD= 0.005000	EPA RfD= 0.005000	No data gaps.	HED complete 07/09/86. EPA verified 05/20/87. HED reassess 06/03/88. EPA verified 06/22/88. EPA verified 02/21/90. On IRIS.			
	Caswell #063										
	CAS No. 1912-24-9										
	A.I. CODE: 080803										
CFR No. 180.220	ONCO: Class C (HED NOTE).	Evidence of oncogenicity in rats (mammary).	Q*: 0.22000	Q* calculated.							
COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES											
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TMRC TYPE (UG/KG/DAY)	TMRC XRFD	TMRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	ARC XRFD	ARC ONCO RISK		
530058A	SHEEP-MEAT BYPRODUCTS	0.020	P	0.000001	0.000	0.0000000000022	0.00400	0.000	0.000000000000		
530058B	21 COOKED-NFS	0.020	P	0.000000	0.000	0.0000000000000	0.00400	0.000	0.000000000000		
53005FA	SHEEP(ORGAN MEATS)-OTHER	0.020	P	0.000086	0.002	0.000000001892	0.00400	0.000	0.000000000000		
53005KA	21 COOKED-NFS	0.020	P	0.000000	0.000	0.0000000000000	0.00400	0.000	0.000000000374		
53005LA	SHEEP(ORGAN MEATS)-KIDNEY	0.020	P	0.000000	0.000	0.0000000000000	0.00600	0.000	0.000000000000		
53005LA	21 COOKED-NFS	0.020	P	0.000000	0.000	0.0000000000000	0.02000	0.000	0.000000000000		
53005MA	00 NOT SPECIFIED (NO CONSUMPTION)	0.020	P	0.000250	0.005	0.000000005500	0.00400	0.001	0.000000001012		
53005MA	SHEEP(BONELESS)-LEAN (W/O REMOVEABLE FAT)	0.020	P	0.000250	0.005	0.000000005500	0.00400	0.000	0.000000000088		
530068A	21 COOKED-NFS	0.020	P	0.000502	0.010	0.000000011044	0.00400	0.001	0.000000000000		
530068A	31 COOKED-FRESH OR CANNED	0.020	P	0.000502	0.010	0.000000011044	0.00400	0.002	0.000000002200		
530068B	PORK-MEAT BYPRODUCTS	0.020	P	0.000077	0.002	0.000000001694	0.00400	0.000	0.000000000308		
530068B	21 COOKED-NFS	0.020	P	0.000077	0.002	0.000000001694	0.00400	0.000	0.000000000022		
53006FA	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0.020	P	0.004164	0.083	0.000000091608	0.00400	0.000	0.000000000154		
53006FA	10 RAW-FRESH OR NFS	0.020	P	0.004164	0.083	0.000000091608	0.00400	0.008	0.00000000558		
53006KA	21 COOKED-NFS	0.020	P	0.000000	0.000	0.0000000000000	0.00400	0.002	0.000000002024		
53006KA	23 COOKED-FRESH-BOILED	0.020	P	0.000000	0.000	0.0000000000000	0.00400	0.002	0.000000002134		
53006KA	25 COOKED-FRESH-FRIED	0.020	P	0.000000	0.000	0.0000000000000	0.00400	0.005	0.000000005456		
53006KA	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0.020	P	0.000000	0.000	0.0000000000000	0.00400	0.000	0.000000000000		
53006LA	21 COOKED-NFS	0.020	P	0.000096	0.002	0.000000002112	0.00600	0.000	0.000000000000		
53006LA	PORK(ORGAN MEATS)-LIVER	0.020	P	0.000096	0.002	0.000000002112	0.02000	0.002	0.00000001892		
53006LA	21 COOKED-NFS	0.020	P	0.000096	0.002	0.000000002112	0.02000	0.000	0.000000002200		
53006MA	25 COOKED-FRESH-FRIED	0.020	P	0.007825	0.157	0.00000172150	0.00400	0.015	0.00000015972		
53006MA	PORK(BONELESS)-LEAN (W/O REMOVEABLE FAT)	0.020	P	0.007825	0.157	0.00000172150	0.00400	0.004	0.00000004202		
53006MA	21 COOKED-NFS	0.020	P	0.007825	0.157	0.00000172150	0.00400	0.013	0.00000014256		
53006MA	25 COOKED-FRESH-FRIED	0.020	P	0.007825	0.157	0.00000172150	0.00400	0.187	0.000000205392		
53006MA	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0.020	P	0.007825	0.157	0.00000172150	0.00400	0.009336	0.000000205392		
CROP GROUP TOTALS FOR RED MEAT:											

Table 3 cont.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 05/18/90

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CHEMICAL INFORMATION			STUDY TYPE		EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS		
Atrazine	Caswell #063	2-gen reprod-rat	Decreased body weights of pups in the second generation on postnatal day 21		Evidence of oncogenicity in rats (mammary).		ADI	UF -->100	No data gaps.		HED complete 07/09/86. EPA verified 05/20/87. HED reassess 06/03/88. EPA verified 06/22/88. EPA verified 02/21/90. On IRIS.		
	CAS No. 1912-24-9	NOEL= 0.5000 mg/kg 10.00 ppm					OPP RfD= 0.005000						
	A.I. CODE: 080803	LEL= 2.5000 mg/kg 50.00 ppm					EPA RfD= 0.005000						
	CFR No. 180.220	ONCO: Class C (HED NOTE).					q*: 0.22000		q* calculated.				
COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES													
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	THRC TYPE	THRC (UG/KG/DAY)	ZRFD	THRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	ZRFD	ARC ONCO RISK			
550088A	TURKEY-BYPRODUCTS 21 COOKED-NFS	0.020	P	0.000005	0.000	0.000000000110	0.00060	0.000000	0.000	0.000000000000			
550088A	26 COOKED-FRESH-PICKLED, CORNED, OR CURED TURKEY-GIBLETS (LIVER)	0.020	P	0.000001	0.000	0.000000000022	0.00060	0.000000	0.000	0.000000000000			
550088A	21 COOKED-NFS 25 COOKED-FRESH-FRIED TURKEY-FLESH(W/O SKIN & W/O BONES)	0.020	P	0.000159	0.003	0.000000003498	0.00200	0.000000	0.000	0.000000000000			
550088B	31 COOKED-FRESH OR CANNED 62 COOKED-FRESH OR FROZEN-BAKED TURKEY-FLESH(+SKIN & W/O BONES)	0.020	P	0.000963	0.019	0.000000021186	0.00060	0.000003	0.001	0.00000000594			
550088B	21 COOKED-NFS 25 COOKED-FRESH-FRIED TURKEY-UNSPECIFIED	0.020	P	0.000002	0.000	0.000000000044	0.00060	0.000002	0.000	0.000000000044			
550138A	POULTRY/OTHER-BYPRODUCTS 00 NOT SPECIFIED (NO CONSUMPTION)	0.020	P	0.000000	0.000	0.000000000000	0.00060	0.000000	0.000	0.000000000000			
550138A	POULTRY/OTHER-GIBLETS(LIVER)	0.020	P	0.000005	0.000	0.000000000110	0.00060	0.000000	0.000	0.000000000000			
550138A	25 COOKED-FRESH-FRIED POULTRY/OTHER-FLESH (+SKIN & W/O BONES)	0.020	P	0.000108	0.002	0.000000002376	0.00200	0.000000	0.000	0.000000000000			
550158A	21 COOKED-NFS CHICKEN-BYPRODUCTS	0.020	P	0.000000	0.000	0.000000000000	0.00060	0.000003	0.000	0.000000000066			
550158A	00 NOT SPECIFIED (NO CONSUMPTION)	0.020	P	0.000000	0.000	0.000000000000	0.00060	0.000000	0.000	0.000000000000			
550158A	21 COOKED-NFS CHICKEN-GIBLETS(LIVER)	0.020	P	0.000101	0.002	0.000000002222	0.00060	0.000000	0.000	0.000000000000			
550158A	25 COOKED-FRESH-FRIED CHICKEN-FLESH(W/O SKIN & W/O BONES)	0.020	P	0.001203	0.024	0.000000026466	0.00200	0.000000	0.000	0.000000000000			
550158A	22 COOKED-FRESH-BAKED 25 COOKED-FRESH-FRIED 31 COOKED-FRESH OR CANNED 53 COOKED-CANNED-BOILED	0.020	P	0.007586	0.152	0.00000166892	0.00060	0.000024	0.000	0.00000000528			
550158B	21 COOKED-NFS 25 COOKED-FRESH-FRIED	0.020	P	0.007586	0.152	0.00000166892	0.00060	0.000003	0.000	0.000000000066			
550158B	CHICKEN-FLESH(+SKIN & W/O BONES)	0.020	P	0.007586	0.152	0.00000166892	0.00060	0.000001	0.000	0.000000000022			
550158B	21 COOKED-NFS	0.020	P	0.007586	0.152	0.00000166892	0.00060	0.000005	0.000	0.000000000110			
550158B	25 COOKED-FRESH-FRIED	0.020	P	0.007586	0.152	0.00000166892	0.00060	0.000003	0.000	0.000000000066			
550158B	CHICKEN-FLESH(+SKIN & W/O BONES)	0.020	P	0.007586	0.152	0.00000166892	0.00060	0.000124	0.002	0.00000002728			
550158B	21 COOKED-NFS	0.020	P	0.007586	0.152	0.00000166892	0.00060	0.000104	0.002	0.00000002288			
CROP GROUP TOTALS FOR POULTRY:					0.010133	0.0000022926	0.00311	0.000311	0.006	0.00000006942			

Table 3 cont.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 05/18/90

PAGE: 6

CHEMICAL INFORMATION		STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Atrazine	Caswell #063	2-gen reprod-rat	Decreased body weights of pups in the second generation on postnatal day 21	AD1 UF -->100	No data gaps.	HED complete 07/09/86.
	CAS No. 1912-24-9	NOEL= 0.5000 mg/kg		OPP Rfd= 0.005000		EPA verified 05/20/87.
	A.I. CODE: 080803	LEL= 10.00 ppm		EPA Rfd= 0.005000		HED reassess 06/03/88.
	CFR No. 180.220	50.00 ppm	Evidence of oncogenicity in rats (summary).	Q*: 0.22000	Q* calculated.	EPA verified 06/22/88.
		ONCO: Class C (HED NOTE).				EPA verified 02/21/90.

COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	THRC TYPE (UG/KG/DAY)	THRC 2RFD	THRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	2RFD	ARC ONCO RISK
500000B	MILK-NON-FAT SOLIDS 10 RAW-FRESH OR NFS	0.020	P	0.140631	2.813	0.00003093882	0.00400	0.022818	0.0000501996
	21 COOKED-NFS					0.00400	0.00400	0.004624	0.00000101728
	51 COOKED-CANNED					0.00400	0.001010	0.020	0.00000022220
50000FA	MILK-FAT SOLIDS 10 RAW-FRESH OR NFS	0.020	P	0.066899	1.338	0.00001471778	0.00400	0.010655	0.00000234410
	21 COOKED-NFS					0.00400	0.002838	0.057	0.00000062436
	51 COOKED-CANNED					0.00400	0.000041	0.001	0.00000000902
50000SA	MILK SUGAR (LACTOSE) 21 COOKED-NFS	0.020	P	0.000749	0.015	0.00000016478	0.00400	0.000000	0.00000000000
	51 COOKED-CANNED					0.00400	0.000150	0.003	0.00000003300
55014AA	EGGS-WHOLE 10 RAW-FRESH OR NFS	0.020	P	0.011290	0.226	0.00000248380	0.01000	0.000043	0.00000000946
	21 COOKED-NFS					0.01000	0.003120	0.062	0.00000068640
	22 COOKED-FRESH-BAKED					0.01000	0.000600	0.012	0.00000013200
	23 COOKED-FRESH-BOILED					0.01000	0.000247	0.005	0.00000005434
	25 COOKED-FRESH-FRIED					0.01000	0.001636	0.033	0.00000035992
55014AB	EGGS-WHITE ONLY 10 RAW-FRESH OR NFS	0.020	P	0.000184	0.004	0.00000004048	0.00900	0.000001	0.00000000022
	21 COOKED-NFS					0.00900	0.000006	0.000	0.00000000132
	22 COOKED-FRESH-BAKED					0.00900	0.000058	0.001	0.00000001276
	62 COOKED-FRESH OR FROZEN-BAKED					0.00900	0.000006	0.000	0.00000000132
	81 COOKED-FROZEN					0.00900	0.000012	0.000	0.00000000264
55014AC	EGGS-YOLK ONLY 10 RAW-FRESH OR NFS	0.020	P	0.000133	0.003	0.00000002926	0.01000	0.000008	0.00000000176
	21 COOKED-NFS					0.01000	0.000020	0.000	0.00000000440
	25 COOKED-FRESH-FRIED					0.01000	0.000025	0.001	0.00000000550
	31 COOKED-FRESH OR CANNED					0.01000	0.000013	0.000	0.00000000286
CROP GROUP TOTALS FOR DAIRY PRODUCTS:				0.219886	4.398	0.00004837492		0.047931	0.00001054482

GRAND TOTALS FOR U.S. POPULATION - 48 STATES

0.198135

3.963

0.00004358970

TOLERANCE TYPE: N=NEW; A=PENDING; P=PUBLISHED
 THRC=THEORETICAL MAXIMUM RESIDUE CONTRIBUTION
 ARC = ANTICIPATED RESIDUE CONTRIBUTION
 RFD = REFERENCE DOSE

THRC

ARC