



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

JUN 29 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Dietary Exposure Analysis for Permethrin through
the Proposed Use on Wheat (PP#7F3514).

FROM: Jennifer M. Wintersteen *Jennifer Wintersteen*
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Science Analysis Branch/HED (7509C)

TO: L. Arrington/G. LaRocca, PM Team 13
Insecticide-Rodenticide Branch
Registration Division (7505C)

THROUGH: James P. Kariya, Section Head *Kariya*
Dietary Risk Evaluation Section *HAP for W.B.*
SAB/Health Effects Division

Action Requested

Provide estimates of chronic dietary exposure, upper bound carcinogenic risk and acute dietary risk for the proposed use of permethrin on wheat grain at 0.05 ppm.

Discussion

1. Toxicological Endpoints: For chronic dietary exposure the Reference Dose (RfD) of 0.05 mg/kg bwt/day is based on a NOEL of 5.0 mg/kg/day and an uncertainty factor of 100. The NOEL is taken from a two year rat feeding study and the effect is increased liver weights at 25 mg/kg/day. The RfD has been approved by both HED (9/12/86) and Agency (10/28/86) RfD committees.

Based on weight of the evidence (WOTE), permethrin has been classified as a Category C₁ (possible human) carcinogen with a Q₁ of 0.0184 (mg/kg/day)⁻¹ [K. Dearfield note, 3/31/94].

A Toxicology Endpoint Selection Document for permethrin (M. Copley and J. Doherty memo, 4/26/94) indicates that acute neurotoxicity is of concern. In order to calculate the acute dietary risk a NOEL of 25 mg/kg bwt/day was supplied in the same memo as appropriate for acute dietary assessment.

2. Residue Information: Food uses indicated in the Tolerance Index System and in 40 CFR §180.378 were included in the analysis. A time-limited tolerance on cottonseed due to expire on 11/15/94 was included in the analysis as a published tolerance. Pending tolerances on sunflower seeds and raspberries and pending increases in tolerances for pistachio nuts and asparagus were included also. CBTS recommends for the proposed tolerance on wheat grain at 0.05



Recycled/Recyclable
Printed with Soy/Canoia Ink on paper that
contains at least 50% recycled fiber

ppm (G. Otakie memo, 3/18/94).

Percent crop treated information used in this analysis was provided by BEAD in two J. Faulkner memos dated 3/6/90 and 6/21/90.

Anticipated residues were provided by Chemistry Branch Tolerance Support in a L. Cheung memo dated 3/13/90.

Meat and milk tolerances exist for permethrin in 40 CFR §180.378 (c). The proposed use on wheat grain will not result in residues above current tolerances on meat and dairy products already established for permethrin (G. Otakie memo, 3/18/94).

For chronic and upper bound carcinogenicity exposure estimates anticipated residue and percent crop treated information were incorporated into the analyses. For the acute dietary analysis tolerance level residues were used and only published tolerances were included. A summary of the residue information is attached as Table 1.

3. Chronic Exposure Analysis: For chronic dietary exposure the anticipated residue contribution (ARC) for the general U.S. population and the highest exposed subgroups is as follows (as percent of the Reference Dose):

U.S. population	0.5%
Children (1-6)	0.8%
Children (7-12)	0.6%

The ARC from the proposed use on wheat is 7.1×10^{-5} mg/kg/day, representing 0.1% of the RfD. The pending uses contribute an additional 1.6×10^{-5} mg/kg/day, representing 0.03% of the RfD. If all pending uses and the proposed wheat tolerance are published the resulting ARC would be 2.4×10^{-4} mg/kg/day, or 0.5% of the RfD for the general U.S. population. A summary of the chronic exposure estimates is attached as Table 2. Table 3 is a summary of the chronic exposure contribution for each tolerance type.

4. Upper Bound Carcinogenic Exposure: The upper bound carcinogenic risk from food uses of permethrin was calculated using the following equation:

$$\text{Upper Bound Cancer Risk} = \text{Dietary Exposure (ARC)} \times Q_1^*$$

Based on a Q_1^* of $0.0184 \text{ (mg/kg/day)}^{-1}$, the upper bound cancer risk was calculated to be 4.5×10^{-6} , contributed through all the published and proposed uses for permethrin. The upper bound risk from wheat alone, using tolerance residues is 1.3×10^{-6} . A summary of the commodity contribution by raw agricultural commodity (RAC) for the overall U.S. population subgroup is attached as Table 4.

5. Acute Exposure: The DRES detailed acute exposure analysis evaluates individual food consumption as reported by respondents in the USDA 77-78 Nationwide Food Consumption Survey (NFCS) and estimates the distribution of single day exposures through the diet for the U.S. population and certain subgroups. The analysis assumes uniform distribution of permethrin in the commodity supply. Since

the toxicological effect to which high end exposure is being compared to in this analysis is neurotoxicity, all standard DRES subgroups are of concern. The analysis includes the U.S. population-48 states and four subgroups: Infants (<1 year), children (1-6 years), females (13+ years) and males (13+ years).

The Margin of Exposure (MOE) is a measure of how closely the high end exposure comes to the NOEL (the highest dose at which no effects were observed in the laboratory test), and is calculated as the ratio of the NOEL to the exposure (NOEL/exposure = MOE). For substances whose acute NOEL is based on animal studies, the Agency is not generally concerned unless the MOE is below 100.

Using only published tolerances and the proposed wheat tolerance of 0.05 ppm, the MOE for the U.S. general population is 167 for high end exposure and 1465 for mean exposure. The estimated percent of potential person days that are consumers of any commodity for which permethrin has published tolerances ranges from 93-100% of the population. The table below provides the calculated MOEs for all five subgroups.

DRES Subgroup	High End Exposure (mg/kg bwt/day)	Mean MOE NOEL/Mean Exposure	MOE NOEL/High Exposure
U.S. pop. -48 states	0.15	1465	167
Infants (< 1 year)	0.25	736	100
Children (1-6 years)	0.2	887	125
Females (13+ years)	0.1	1682	250
Males (13+ years)	0.1	1746	250

This is the first time that acute exposure has been calculated for permethrin using the DRES system. The calculated MOEs are at or above the level the Agency generally considers negligible for the five subgroups used in the DRES acute program. A table of distribution of exposures in this analysis is attached as Table 5.

Conclusions

The chronic and acute dietary risk estimates are not of concern for the proposed wheat tolerance for permethrin. When using present refinements in the residue and percent of crop treated information the upper bound carcinogenic risk exceeds the Agency's *de minimis* value for negligible risk of 10^{-6} . Because anticipated residues were not available for all commodities and 100 percent crop treated was assumed for many of the commodities, including wheat, these cancer risks are probably overestimated. However, DRES has concern for granting the proposed use on wheat until supportable data can be obtained which lowers the upper bound carcinogenic risk to the level generally considered negligible by the Agency.

Attachments

cc: DRES, CBTS (G. Otakie), Tox I (J. Doherty), Caswell #652BB

Table 1.

CHEMICAL		STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS
Permethrin Caswell #6528B CAS No. 52645-53-1 A.I. CODE: 109701 CFR No. 180.378	2yr feeding- rat NOEL=		5,0000 mg/kg	Increased liver weights.	ADI	UF -->100	No data gaps.		HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.
	LEL=		25,0000 mg/kg	Evidence of carcinogenic- ity in mice (liver, lung) negative in rat.	OPP RfD=	0.050000			
	ONCO: C(q)(HED NOTE)		500.00 ppm		EPA RfD=	0.050000			
					Q*: 0.01840				
FOOD CODE	FOOD	FOOD FORM		PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
01006AA	RASPBERRIES	10 RAW-FRESH OR NFS		8E3675	A 1.000000	1.000000		100.00	1.000000
01006AA	RASPBERRIES	15 RAW-FRESH OR CANNED		8E3675	A 1.000000	1.000000		100.00	1.000000
01006AA	RASPBERRIES	31 COOKED-FRESH OR CANNED		8E3675	A 1.000000	1.000000		100.00	1.000000
01006AA	RASPBERRIES	62 COOKED-FRESH OR FROZEN-BAKED		8E3675	A 1.000000	1.000000		100.00	1.000000
01006AA	RASPBERRIES	70 RAW-FROZEN		8E3675	A 1.000000	1.000000		10.00	0.005000
03001AA	ALMONDS	10 RAW-FRESH OR NFS		2F2675	P 0.050000	0.050000		10.00	0.005000
03001AA	ALMONDS	21 COOKED-NFS		2F2675	P 0.050000	0.050000		10.00	0.005000
03001AA	ALMONDS	22 COOKED-FRESH-BAKED		2F2675	P 0.050000	0.050000		100.00	0.050000
03005AA	FILBERTS	10 RAW-FRESH OR NFS		4F3130	P 0.050000	0.050000		100.00	0.050000
03005AA	FILBERTS	21 COOKED-NFS		4F3130	P 0.050000	0.050000		100.00	0.050000
03005AA	FILBERTS	22 COOKED-FRESH-BAKED		4F3130	P 0.050000	0.050000		100.00	0.050000
03009AA	WALNUTS	10 RAW-FRESH OR NFS		4F3130	P 0.050000	0.050000		100.00	0.050000
03009AA	WALNUTS	21 COOKED-NFS		4F3130	P 0.050000	0.050000		100.00	0.050000
03009AA	WALNUTS	22 COOKED-FRESH-BAKED		4F3130	P 0.050000	0.050000		100.00	0.050000
03011AA	PISTACHIO NUTS	10 RAW-FRESH OR NFS		4F2995	P 0.100000	0.100000		100.00	0.100000
03011AA	PISTACHIO NUTS	10 RAW-FRESH OR NFS		1F2562	A 0.050000	0.050000		100.00	0.050000
04001AA	APPLES-FRESH	10 RAW-FRESH OR NFS		1F2562	P 0.050000	0.050000		100.00	0.050000
04001AA	APPLES-FRESH	21 COOKED-NFS		1F2562	P 0.050000	0.050000		100.00	0.050000
04001AA	APPLES-FRESH	31 COOKED-FRESH OR CANNED		1F2562	P 0.050000	0.050000		100.00	0.050000
04001AA	APPLES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED		1F2562	P 0.050000	0.050000		100.00	0.050000
04001DA	APPLES-DRIED	10 RAW-FRESH OR NFS		1F2562	P 0.050000	0.050000		100.00	0.050000
04001DA	APPLES-DRIED	22 COOKED-FRESH-BAKED		1F2562	P 0.050000	0.050000		100.00	0.050000
04001DA	APPLES-DRIED	62 COOKED-FRESH OR FROZEN-BAKED		1F2562	P 0.050000	0.050000		100.00	0.050000
04001JA	APPLES-JUICE	15 RAW-FRESH OR CANNED		1F2562	P 0.050000	0.050000		100.00	0.050000
04001JA	APPLES-JUICE	31 COOKED-FRESH OR CANNED		1F2562	P 0.050000	0.050000		100.00	0.050000
04003AA	PEARS-FRESH	10 RAW-FRESH OR NFS		0F2425	P 3.000000	0.010000		100.00	0.010000
04003AA	PEARS-FRESH	31 COOKED-FRESH OR CANNED		0F2425	P 3.000000	0.010000		100.00	0.010000
04003AA	PEARS-FRESH	51 COOKED-CANNED		0F2425	P 3.000000	0.010000		100.00	0.010000
04003AA	PEARS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED		0F2425	P 3.000000	0.010000		100.00	0.010000
04003DA	PEARS-DRIED	10 RAW-FRESH OR NFS		0F2425	P 3.000000	0.010000		100.00	0.010000
04003DA	PEARS-DRIED	21 COOKED-NFS		0F2425	P 3.000000	0.010000		100.00	0.010000
05002AA	CHERRIES-FRESH	10 RAW-FRESH OR NFS		5F3271	P 3.000000	0.010000		100.00	0.010000
05002AA	CHERRIES-FRESH	31 COOKED-NFS		5F3271	P 3.000000	0.010000		100.00	0.010000
05002AA	CHERRIES-FRESH	31 COOKED-FRESH OR CANNED		5F3271	P 3.000000	0.010000		100.00	0.010000
05002AA	CHERRIES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED		5F3271	P 3.000000	0.010000		100.00	0.010000
05002JA	CHERRIES-DRIED	00 NOT SPECIFIED (NO CONSUMPTION)		5F3271	P 3.000000	0.010000		100.00	0.010000
05002JA	CHERRIES-JUICE	15 RAW-FRESH OR CANNED		5F3271	P 3.000000	0.010000		100.00	0.010000
05002JA	CHERRIES-JUICE	21 COOKED-NFS		5F3271	P 3.000000	0.010000		100.00	0.010000
05004AA	PEACHES-FRESH	10 RAW-FRESH OR NFS		3F2802	P 5.000000	0.010000		100.00	0.010000
05004AA	PEACHES-FRESH	21 COOKED-NFS		3F2802	P 5.000000	0.010000		100.00	0.010000

Table 1.

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 652BB

DATE: 06/21/94

PAGE: 2

ANTICIPATED RESIDUE INFORMATION FOR CROPS					DATA GAPS/COMMENTS		STATUS
CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES		No data gaps.	HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.	
			2yr feeding- rat NOEL= 5.0000 mg/kg LEL= 100.00 ppm 25.0000 mg/kg 500.00 ppm ONCO: C(q)(HED NOTE)	ADI UF -->100 OPP RfD= 0.050000 EPA RfD= 0.050000 q*: 0.01800			
FOOD FORM		PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
05004AA	PEACHES-FRESH	31	COOKED-FRESH OR CANNED	3F2802	P 5.000000	100.00	0.010000
05004AA	PEACHES-FRESH	51	COOKED-CANNED	3F2802	P 5.000000	100.00	0.010000
05004AA	PEACHES-FRESH	10	RAW-FRESH OR NFS	3F2802	P 5.000000	100.00	0.010000
05004DA	PEACHES-DRIED	21	COOKED-NFS	3F2802	P 5.000000	100.00	0.010000
05004DA	PEACHES-DRIED	21	COOKED-NFS	4E3146	P 1.000000	100.00	1.000000
06001AA	AVOCADOS	10	RAW-FRESH OR NFS	4E3146	P 1.000000	100.00	1.000000
06010AA	PAPAYAS-UNSPEC	00	NOT SPECIFIED (NO CONSUMPTION)	4E3186	P 1.000000	100.00	1.000000
06010AB	PAPAYAS-PULP	10	RAW-FRESH OR NFS	4E3186	P 1.000000	100.00	1.000000
06010AB	PAPAYAS-PULP	51	COOKED-CANNED	4E3186	P 1.000000	100.00	1.000000
06010DA	PAPAYAS-DRIED	10	RAW-FRESH OR NFS	4E3186	P 1.000000	100.00	1.000000
06010JA	PAPAYAS-JUICE	10	RAW-FRESH OR NFS	1E2514	P 2.000000	100.00	1.000000
06018AA	KIWI	10	RAW-FRESH OR NFS	0E2377	P 1.000000	100.00	0.010000
08022AA	HORSERADISH	11	RAW-FRESH-PICKLED, CORNED, OR CURED	8E3625	P 3.000000	100.00	0.010000
10002AA	CANTALOUPE-UNSP	00	NOT SPECIFIED (NO CONSUMPTION)	8E3625	P 3.000000	100.00	0.010000
10002AB	CANTALOUPE-PULP	10	RAW-FRESH OR NFS	8E3625	P 3.000000	100.00	0.010000
10002AB	CANTALOUPE-PULP	21	COOKED-NFS	8E3625	P 3.000000	100.00	0.010000
10003AA	CASABAS	10	RAW-FRESH OR NFS	8E3625	P 3.000000	100.00	0.010000
10004AA	CRENSHAW	00	NOT SPECIFIED (NO CONSUMPTION)	8E3625	P 3.000000	100.00	0.010000
10005AA	HONEYDEW MELONS	10	RAW-FRESH OR NFS	8E3625	P 3.000000	100.00	0.010000
10007AA	PERSION MELONS	00	NOT SPECIFIED (NO CONSUMPTION)	8E3625	P 3.000000	100.00	0.010000
10008AA	WATERMELON	10	RAW-FRESH OR NFS	8E3625	P 3.000000	100.00	0.010000
10008AA	WATERMELON	21	COOKED-NFS	8E3625	P 3.000000	100.00	0.010000
10010AA	CUCUMBERS	10	RAW-FRESH OR NFS	8E3625	P 3.000000	100.00	0.010000
10010AA	CUCUMBERS	11	RAW-FRESH-PICKLED, CORNED, OR CURED	8E3625	P 3.000000	100.00	0.010000
10010AA	CUCUMBERS	21	COOKED-NFS	8E3625	P 3.000000	100.00	0.010000
10011AA	PUMPKIN	21	COOKED-FRESH-BAKED	8E3625	P 3.000000	100.00	0.010000
10011AA	PUMPKIN	22	COOKED-FRESH-BAKED	8E3625	P 3.000000	100.00	0.010000
10011AA	PUMPKIN	62	COOKED-FRESH OR FROZEN-BAKED	8E3625	P 3.000000	100.00	0.010000
10013AA	SQUASH-SUMMER	10	RAW-FRESH OR NFS	8E3625	P 3.000000	100.00	0.010000
10013AA	SQUASH-SUMMER	21	COOKED-NFS	8E3625	P 3.000000	100.00	0.010000
10014AA	SQUASH-WINTER	10	RAW-FRESH OR NFS	8E3625	P 3.000000	100.00	0.010000
10014AA	SQUASH-WINTER	21	COOKED-NFS	8E3625	P 3.000000	100.00	0.010000
10014AA	SQUASH-WINTER	31	COOKED-FRESH OR CANNED	8E3625	P 3.000000	100.00	0.010000
10017AA	BITTER MELON	21	COOKED-NFS	8E3625	P 3.000000	100.00	0.010000
10020AA	TOMELGOURD	00	NOT SPECIFIED (NO CONSUMPTION)	8E3625	P 3.000000	100.00	0.010000
11001AA	EGGPLANT	10	RAW-FRESH OR NFS	3E2892	P 1.000000	100.00	1.000000
11001AA	EGGPLANT	21	COOKED-NFS	3E2892	P 1.000000	100.00	1.000000
11001AA	EGGPLANT	25	COOKED-FRESH-FRIED	3E2892	P 1.000000	100.00	0.010000
11003AA	PEPPERS, SWEET	10	RAW-FRESH OR NFS	3E2892	P 1.000000	100.00	0.010000
11003AA	PEPPERS, SWEET	21	COOKED-NFS	3E2892	P 1.000000	100.00	0.010000
11005AA	TOMATOES-WHOLE	10	RAW-FRESH OR NFS	4F2985	P 2.000000	100.00	0.010000

Table 1.

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 652BB									
DATE: 06/21/94 PAGE: 3									
CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS		RES. VALUE USED IN TAS RUN (ppm)	
			ADI	UF		HED complete	WHO last reviewed		
Permethrin Caswell #652BB CAS No. 52645-53-1 A.I. CODE: 109701 CFR No. 180.378	2yr feeding- rat NOEL= 5.0000 mg/kg LEL= 25.0000 mg/kg ONCO: C(g)(HED NOTE)	Increased liver weights. Evidence of carcinogenicity in mice (liver, lung) negative in rat.	Opp Rfd= 0.050000 EPA Rfd= 0.050000	-->100	No data gaps.	09/12/86	10/28/86		
			q*: 0.01800			(ADI extended to 25:75 mixture).	On IRIS.		
FOOD CODE	FOOD	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED			
11005AA	TOMATOES-WHOLE	4F2985	P 2.000000	0.010000		100.00	0.010000		
11005AA	31 COOKED-FRESH OR CANNED	4F2985	P 2.000000	0.010000		100.00	0.010000		
13002AA	CELERY	8F2099	P 5.000000	0.040000		100.00	0.040000		
13002AA	21 COOKED-NFS	8F2099	P 5.000000	0.040000		100.00	0.070000		
13003AA	CELERY	4F3018	P 20.000000	0.010000		100.00	0.010000		
13003AA	10 RAW-FRESH OR NFS	9F2207	P 1.000000	0.010000		100.00	0.010000		
13005AA	CHICORY	9F2207	P 1.000000	0.010000		100.00	0.010000		
13005AA	21 COOKED-FRESH OR CANNED	9F2207	P 1.000000	0.010000		100.00	0.010000		
13005AA	63 COOKED-FRESH OR FROZEN-BOILED	9F2207	P 1.000000	0.010000		100.00	0.010000		
13005AA	21 COOKED-NFS	9F2207	P 1.000000	0.010000		100.00	0.010000		
13006AA	BRUSSEL SPROUTS	9F2207	P 1.000000	0.010000		100.00	0.030000		
13006AA	23 COOKED-FRESH-BOILED	9F2192	P 6.000000	0.030000		100.00	0.030000		
13006AA	10 RAW-FRESH OR NFS	9F2192	P 6.000000	0.030000		100.00	0.010000		
13007AA	BRUSSEL SPROUTS	9F2192	P 6.000000	0.030000		100.00	0.010000		
13007AA	11 RAW-FRESH-PICKLED, CORNED, OR CURED	9F2207	P 1.000000	0.010000		100.00	0.010000		
13007AA	21 COOKED-NFS	9F2207	P 1.000000	0.010000		100.00	0.010000		
13007AA	10 RAW-FRESH OR NFS	9F2207	P 1.000000	0.010000		100.00	0.150000		
13008AA	CABBAGE	6E3360	P 20.000000	0.150000		100.00	0.150000		
13008AA	21 COOKED-NFS	6E3360	P 20.000000	0.150000		100.00	0.030000		
13009AA	51 COOKED-CANNED	9F2192	P 6.000000	0.030000		100.00	0.030000		
13009AA	63 COOKED-FRESH OR FROZEN-BOILED	9F2192	P 6.000000	0.030000		100.00	0.230000		
13010AA	10 RAW-FRESH OR NFS	4F3018	P 20.000000	0.070000		100.00	0.070000		
13010AA	21 COOKED-NFS	4F3018	P 20.000000	0.070000		100.00	0.070000		
13013AA	10 RAW-FRESH OR NFS	4F3018	P 20.000000	0.070000		100.00	0.070000		
13013AA	63 COOKED-FRESH OR FROZEN-BOILED	4F3018	P 20.000000	0.070000		100.00	0.070000		
13014AA	10 RAW-FRESH OR NFS	4F3018	P 20.000000	0.070000		100.00	0.070000		
13015AA	21 COOKED-NFS	4F3018	P 20.000000	0.070000		100.00	0.070000		
13015AA	00 NOT SPECIFIED (NO CONSUMPTION)	8F2099	P 5.000000	5.000000		100.00	20.000000		
13016AA	00 NOT SPECIFIED (NO CONSUMPTION)	4F3018	P 20.000000	20.000000		100.00	0.010000		
13017AA	21 COOKED-NFS	4F3114	P 10.000000	0.010000		100.00	0.230000		
13018AA	ARTICHOKE-GLOBE	4F3018	P 20.000000	0.020000		100.00	0.020000		
13020AA	LETTUCE-UNSPEC	4F3018	P 20.000000	0.020000		100.00	0.020000		
13022AA	PARSLEY	4F3018	P 20.000000	0.020000		100.00	0.010000		
13022AA	21 COOKED-NFS	4F3018	P 20.000000	0.010000		100.00	0.010000		
13022AA	53 COOKED-CANNED-BOILED	4F3018	P 20.000000	0.010000		100.00	0.010000		
13022AA	10 RAW-FRESH OR NFS	4F3018	P 20.000000	0.010000		100.00	0.010000		
13023AA	PARSLEY	4F3018	P 20.000000	0.010000		100.00	0.010000		
13023AA	21 COOKED-NFS	4F3018	P 20.000000	0.010000		100.00	0.010000		
13023AA	31 COOKED-FRESH OR CANNED	4F3018	P 20.000000	0.010000		100.00	0.010000		
13023AA	62 COOKED-FRESH OR FROZEN-BAKED	4F3018	P 20.000000	0.010000		100.00	0.010000		
13023AA	10 RAW-FRESH OR NFS	2E2701	P 20.000000	0.210000		100.00	0.210000		
13024AA	SPINACH	2E2701	P 20.000000	0.210000		100.00	0.210000		
13024AA	21 COOKED-NFS	2E2701	P 20.000000	0.070000		100.00	0.070000		
13024AA	31 COOKED-FRESH OR CANNED	4F3018	P 20.000000	0.070000		100.00	0.070000		
13025AA	SWISS CHARD	4F3018	P 20.000000	0.070000		100.00	0.070000		
13025AA	31 COOKED-FRESH OR CANNED	4F3018	P 20.000000	0.070000		100.00	0.070000		
13025AA	63 COOKED-FRESH OR FROZEN-BOILED	4F3018	P 20.000000	0.070000		100.00	0.070000		

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 652BB

8

Table 1.

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 6528B

CHEMICAL		STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS
Permethrin	Caswell #65288	2yr feeding- rat		Increased liver weights.	ADI	UF -->100	No data gaps.		HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.
CAS No. 52645-53-1		NOEL=			OPP RfD= 0.050000				
A.I. CODE: 109701		100.00 ppm		Evidence of carcinogenic- ity in mice (liver, lung)	EPA RfD= 0.050000				
CFR No. 180.378		500.00 ppm		negative in rat.	q*: 0.01800				
		ONCO: C(q)(HED NOTE)							
FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)	
16003AA	MUSHROOMS	31 COOKED-FRESH OR CANNED	2f2752	P 6.000000	0.010000		100.00	0.010000	
16003AA	MUSHROOMS	53 COOKED-CANNED-BOILED	2f2752	P 6.000000	0.010000		100.00	0.010000	
24002EA	CORN, GRAIN-ENDO	10 RAW-FRESH OR NFS	1f2476	P 0.050000	0.010000		10.00	0.001000	
24002EA	CORN, GRAIN-ENDO	21 COOKED-NFS	1f2476	P 0.050000	0.010000		10.00	0.001000	
24002EA	CORN, GRAIN-ENDO	22 COOKED-FRESH-BAKED	1f2476	P 0.050000	0.010000		10.00	0.001000	
24002EA	CORN, GRAIN-ENDO	23 COOKED-FRESH-BOILED	1f2476	P 0.050000	0.010000		10.00	0.001000	
24002HA	CORN, GRAIN-BRAN	00 NOT SPECIFIED (NO CONSUMPTION)	1f2476	P 0.050000	0.010000		10.00	0.001000	
24002SA	CORN SUGAR	10 RAW-FRESH OR NFS	1f2476	P 0.050000	0.010000		10.00	0.001000	
24002SA	CORN SUGAR	21 COOKED-NFS	1f2476	P 0.050000	0.010000		100.00	0.050000	
24002SA	CORN SUGAR	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007AA	WHEAT-ROUGH	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007AA	WHEAT-ROUGH	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007AA	WHEAT-ROUGH	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007AA	WHEAT-ROUGH	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007GA	WHEAT-GERM	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007GA	WHEAT-GERM	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	21 COOKED-NFS	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	23 COOKED-FRESH-BOILED	7f3514	N 0.050000	0.050000		100.00	0.050000	
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	7f3514						

NUMBER 652BB

10

Table 1.

CHEMICAL		STUDY TYPE		EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Permethrin Caswell #6528B CAS No. 52645-53-1 A.I. CODE: 109701 CFR No. 180.378	2yr feeding- rat NOEL= 5.0000 mg/kg 100.00 ppm LEL= 25.0000 mg/kg 500.00 ppm ONCO: C(g)(HED NOTE)	Increased liver weights.		AD1	UF -->100	OPP RFD= 0.050000	No data gaps.	HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.			
		Evidence of carcinogenic- ity in mice (liver, lung)									
		negative in rat.									
FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)			
53005FA	SHEEP-FAT	21 COOKED-NFS	0F2389	P 3.000000	0.003000		100.00	0.003000			
53005KA	SHEEP-KIDNEY	21 COOKED-NFS	0F2389	P 2.000000	0.000200		100.00	0.000200			
53005LA	SHEEP-LIVER	00 NOT SPECIFIED (NO CONSUMPTION)	0F2389	P 2.000000	0.000300		100.00	0.000300			
53005MA	SHEEP-LEAN	21 COOKED-NFS	0F2389	P 0.250000	0.000300		100.00	0.000300			
53005NA	SHEEP-LEAN	31 COOKED-FRESH OR CANNED	0F2389	P 0.250000	0.000300		100.00	0.000300			
53005MA	SHEEP-LEAN	21 COOKED-NFS	1F2546	P 3.000000	0.000300		100.00	0.000300			
53006BA	PORK-MEAT BYP	21 COOKED-NFS	1F2546	P 3.000000	0.000300		100.00	0.000300			
53006BB	PORK-OTH ORGAN	21 COOKED-NFS	1F2546	P 3.000000	0.000300		100.00	0.000300			
53006BB	PORK-OTH ORGAN	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	1F2546	P 3.000000	0.000300		100.00	0.000300			
53006FA	PORK-FAT	10 RAW-FRESH OR NFS	0F2389	P 3.000000	0.003000		100.00	0.003000			
53006FA	PORK-FAT	21 COOKED-NFS	0F2389	P 3.000000	0.003000		100.00	0.003000			
53006FA	PORK-FAT	23 COOKED-FRESH-BOILED	0F2389	P 3.000000	0.003000		100.00	0.003000			
53006FA	PORK-FAT	25 COOKED-FRESH-FRIED	0F2389	P 3.000000	0.003000		100.00	0.003000			
53006FA	PORK-FAT	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0F2389	P 3.000000	0.000200		100.00	0.000200			
53006KA	PORK-KIDNEY	21 COOKED-NFS	1F2546	P 3.000000	0.000300		100.00	0.000300			
53006LA	PORK-LIVER	21 COOKED-NFS	1F2546	P 3.000000	0.000300		100.00	0.000300			
53006MA	PORK-LEAN	25 COOKED-FRESH-FRIED	0F2389	P 0.250000	0.000300		100.00	0.000300			
53006MA	PORK-LEAN	25 COOKED-NFS	0F2389	P 0.250000	0.000300		100.00	0.000300			
53006MA	PORK-LEAN	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0F2389	P 0.150000	0.000005		100.00	0.000005			
53006MA	PORK-LEAN	21 COOKED-NFS	0F2389	P 0.150000	0.000005		100.00	0.000005			
53008BA	TURKEY-BYP	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0F2389	P 0.250000	0.000005		100.00	0.000005			
53008BA	TURKEY-BYP	21 COOKED-NFS	0F2389	P 0.250000	0.000005		100.00	0.000005			
53008LA	TURKEY ORGAN	21 COOKED-FRESH-FRIED	0F2389	P 0.050000	0.000005		100.00	0.000005			
53008LA	TURKEY ORGAN	25 COOKED-FRESH-FRIED	1F2564	P 0.050000	0.000005		100.00	0.000005			
53008MA	TURKEY W/O SKIN	21 COOKED-NFS	1F2564	P 0.050000	0.000005		100.00	0.000005			
53008MA	TURKEY W/O SKIN	31 COOKED-FRESH OR CANNED	1F2564	P 0.050000	0.000005		100.00	0.000005			
53008MA	TURKEY W/O SKIN	62 COOKED-FRESH OR FROZEN-BAKED	0F2389	P 0.150000	0.000005		100.00	0.000005			
53008MA	TURKEY+SKIN	21 COOKED-NFS	0F2389	P 0.150000	0.000005		100.00	0.000005			
53008MB	TURKEY+SKIN	25 COOKED-FRESH-FRIED	0F2389	P 0.050000	0.000005		100.00	0.000005			
53008MB	TURKEY+SKIN	21 COOKED-NFS	1F2564	P 0.050000	0.000005		100.00	0.000005			
53008MC	TURKEY-UNSPEC	21 COOKED-NFS	0F2389	P 0.250000	0.000005		100.00	0.000005			
53013BA	POULTRY, OTH-BYP	00 NOT SPECIFIED (NO CONSUMPTION)	0F2389	P 0.250000	0.000005		100.00	0.000005			
53013BA	POULTRY, ORGAN	25 COOKED-FRESH-FRIED	0F2389	P 0.250000	0.000005		100.00	0.000005			
53013LA	POULTRY, OTHER	21 COOKED-NFS	1F2564	P 0.050000	0.000010		100.00	0.000010			
53014AA	EGGS-WHOLE	10 RAW-FRESH OR NFS	0F2389	P 1.000000	0.000010		100.00	0.000010			
53014AA	EGGS-WHOLE	21 COOKED-NFS	0F2389	P 1.000000	0.000010		100.00	0.000010			
53014AA	EGGS-WHOLE	22 COOKED-FRESH-BAKED	0F2389	P 1.000000	0.000010		100.00	0.000010			
53014AA	EGGS-WHOLE	23 COOKED-FRESH-BOILED	0F2389	P 1.000000	0.000010		100.00	0.000010			
53014AA	EGGS-WHOLE	25 COOKED-FRESH-FRIED	0F2389	P 1.000000	0.000010		100.00	0.000010			
53014AA	EGGS-WHOLE	10 RAW-FRESH OR NFS	0F2389	P 1.000000	0.000010		100.00	0.000010			
53014AB	EGGS-WHITE ONLY	21 COOKED-NFS	0F2389	P 1.000000	0.000010		100.00	0.000010			
53014AB	EGGS-WHITE ONLY	10 RAW-FRESH OR NFS	0F2389	P 1.000000	0.000010		100.00	0.000010			
53014AB	EGGS-WHITE ONLY	22 COOKED-FRESH-BAKED	0F2389	P 1.000000	0.000010		100.00	0.000010			

Table 1.

PAGE: 8

DATE: 06/21/94

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 6528B

CHEMICAL		STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS	
Permethrin	2yr feeding- rat	Increased liver weights.	ADI UF -->100	No data gaps.	HED complete 09/12/86		
Caswell #6528B	NOEL= 5.0000 mg/kg	Evidence of carcinogenicity in mice (liver, lung) negative in rat.	OPP RfD= 0.050000		EPA verified 10/28/86		
CAS No. 52645-53-1	100.00 ppm		EPA RfD= 0.050000		WHO last reviewed 1987;		
A.I. CODE: 109701	LEL= 25.0000 mg/kg				(ADI extended to 25:75 mixture).		
CFR No. 180.378	500.00 ppm		q*: 0.01800		On IRIS.		
	ONCO: C(g)(HED NOTE)						
FOOD CODE	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
55014AB	EGGS-WHITE ONLY	62	COOKED-FRESH OR FROZEN-BAKED	0F2389	P 1.000000	100.00	0.000010
55014AB	EGGS-WHITE ONLY	81	COOKED-FROZEN	0F2389	P 1.000000	100.00	0.000010
55014AC	EGGS-YOLK ONLY	10	RAW-FRESH OR NFS	0F2389	P 1.000000	100.00	0.000010
55014AC	EGGS-YOLK ONLY	21	COOKED-NFS	0F2389	P 1.000000	100.00	0.000010
55014AC	EGGS-YOLK ONLY	25	COOKED-FRESH-FRIED	0F2389	P 1.000000	100.00	0.000010
55014AC	EGGS-YOLK ONLY	31	COOKED-FRESH OR CANNED	0F2389	P 1.000000	100.00	0.000010
55015BA	CHICKEN-BYP	00	NOT SPECIFIED (NO CONSUMPTION)	0F2389	P 0.250000	100.00	0.000005
55015LA	CHICKEN-ORGAN	21	COOKED-NFS	0F2389	P 0.250000	100.00	0.000005
55015LA	CHICKEN-ORGAN	25	COOKED-FRESH-FRIED	0F2389	P 0.250000	100.00	0.000005
55015LA	CHICKEN-ORGAN	26	COOKED-FRESH-PICKLED, CORNED, OR CURED	0F2389	P 0.250000	100.00	0.000005
55015MA	CHICKEN-W/O SKIN	21	COOKED-NFS	1F2564	P 0.050000	100.00	0.000005
55015MA	CHICKEN-W/O SKIN	22	COOKED-FRESH-BAKED	1F2564	P 0.050000	100.00	0.000005
55015MA	CHICKEN-W/O SKIN	25	COOKED-FRESH-FRIED	1F2564	P 0.050000	100.00	0.000005
55015MA	CHICKEN-W/O SKIN	31	COOKED-FRESH OR CANNED	1F2564	P 0.050000	100.00	0.000005
55015MA	CHICKEN-W/O SKIN	53	COOKED-CANNED-BOILED	0F2389	P 0.050000	100.00	0.000005
55015MB	CHICKEN+SKIN	21	COOKED-NFS	0F2389	P 0.050000	100.00	0.000005
55015MB	CHICKEN+SKIN	25	COOKED-FRESH-FRIED	0F2389	P 0.050000	100.00	0.000005

Table 2.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 06/21/94

PAGE: 1

CHEMICAL INFORMATION		STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS
Permethrin	2yr feeding- rat	NOEL= 5.0000 mg/kg 100.00 ppm LEL= 25.0000 mg/kg 500.00 ppm ONCO: C(q)(HED NOTE)	Increased liver weights. Evidence of carcinogenic- ity in mice (liver, lung) negative in rat.	ADI	UF -->100 OPP RfD= 0.050000 EPA RfD= 0.050000 Q*: 0.01800	No data gaps.		HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.
POPULATION SUBGROUP			TOTAL TMRC (MG/KG BODY WEIGHT/DAY)		EFFECT OF ANTICIPATED RESIDUES			
			CURRENT TMRC*	NEW TMRC**	NEW TMRC AS PERCENT OF RFD	DIFFERENCE AS PERCENT OF RFD	ARC	%RFD
U.S. POPULATION - 48 STATES			0.016914	0.017001	34.001922	0.173482	0.000243	0.48648
U.S. POPULATION - SPRING SEASON			0.017332	0.017426	34.851860	0.187750	0.000252	0.50336
U.S. POPULATION - SUMMER SEASON			0.018465	0.018545	37.090684	0.160008	0.000224	0.44786
U.S. POPULATION - FALL SEASON			0.015942	0.016026	32.052960	0.168000	0.000254	0.50708
U.S. POPULATION - WINTER SEASON			0.015915	0.016004	32.008670	0.178074	0.000239	0.47835
NORTHEAST REGION			0.017465	0.017553	35.106666	0.177286	0.000258	0.51689
NORTH CENTRAL REGION			0.016218	0.016310	32.620118	0.183528	0.000244	0.48821
SOUTHERN REGION			0.015719	0.015797	31.594730	0.156484	0.000210	0.42049
WESTERN REGION			0.019262	0.019353	38.706208	0.183138	0.000272	0.54494
HISPANICS			0.017793	0.017867	35.734508	0.147574	0.000206	0.41117
NON-HISPANIC WHITES			0.016695	0.016787	33.573258	0.182292	0.000250	0.50030
NON-HISPANIC BLACKS			0.017514	0.017580	35.160328	0.131388	0.000203	0.40586
NON-HISPANIC OTHERS			0.020333	0.020409	40.817816	0.150936	0.000282	0.56429
NURSING INFANTS (< 1 YEAR OLD)			0.015371	0.015398	30.796760	0.053998	0.000132	0.26319
NON-NURSING INFANTS (< 1 YEAR OLD)			0.036314	0.036369	72.738260	0.110072	0.000287	0.57338
FEMALES (13+ YEARS, PREGNANT)			0.012995	0.013051	26.101794	0.111378	0.000157	0.31392
FEMALES 13+ YEARS, NURSING			0.017678	0.017769	35.537122	0.180560	0.000236	0.47242
CHILDREN (1-6 YEARS OLD)			0.028055	0.028226	56.452412	0.342928	0.000384	0.76794
CHILDREN (7-12 YEARS OLD)			0.022497	0.022622	45.243144	0.250090	0.000303	0.60659
MALES (13-19 YEARS OLD)			0.015428	0.015521	31.042696	0.186068	0.000217	0.43386
FEMALES (13-19 YEARS OLD, NOT PREG. OR NURSING)			0.014108	0.014179	28.358746	0.143248	0.000203	0.40580
MALES (20 YEARS AND OLDER)			0.013950	0.014025	28.050226	0.149534	0.000213	0.42681
FEMALES (20 YEARS AND OLDER, NOT PREG. OR NURS)			0.014889	0.014956	29.911360	0.133008	0.000222	0.44488

*Current TMRC does not include new or pending tolerances.

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

Table 3.

TOLERANCE ASSESSMENT SUMMARY FOR Permethrin
 USING ANTICIPATED RESIDUES
 CASWELL #652BB

DATE: 06/21/94

ANALYSIS FOR POPULATION SUB-GROUP: U.S. POPULATION - 48 STATES

EXISTING ANTICIPATED RESIDUES (PUBLISHED ONLY)		
RESULT IN AN ARC OF:	0.000157	MG/KG/DAY
THE EXISTING ARC IS EQUIVALENT TO:	0.313	% OF THE ADI.
PROPOSED NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
RESULT IN AN ARC OF:	0.000071	MG/KG/DAY
THESE NEW ANTICIPATED RESIDUES WILL OCCUPY:	0.141	% OF THE ADI.
IF THE NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
ARE APPROVED THE RESULTANT ARC WILL BE:	0.000227	MG/KG/DAY
THE NEW ARC WILL OCCUPY	0.454	% OF THE ADI.
OTHER PENDING ANTICIPATED RESIDUES EXCLUDING THE		
CURRENT NEW PETITION HAVE AN ARC OF:	0.000016	MG/KG/DAY
THIS ARC WILL OCCUPY	0.032	% OF THE ADI.
IF ALL PENDING ANTICIPATED RESIDUES (INCLUDING THE		
CURRENT NEW PETITION) ARE GRANTED		
THE RESULTANT ARC WILL BE:	0.000243	MG/KG/DAY
THE TOTAL ARC WILL OCCUPY	0.486	% OF THE ADI.

ANALYSIS FOR POPULATION SUB-GROUP: NON-NURSING INFANTS (< 1 YEAR OLD)

EXISTING ANTICIPATED RESIDUES (PUBLISHED ONLY)		
RESULT IN AN ARC OF:	0.000232	MG/KG/DAY
THE EXISTING ARC IS EQUIVALENT TO:	0.463	% OF THE ADI.
PROPOSED NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
RESULT IN AN ARC OF:	0.000052	MG/KG/DAY
THESE NEW ANTICIPATED RESIDUES WILL OCCUPY:	0.103	% OF THE ADI.
IF THE NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
ARE APPROVED THE RESULTANT ARC WILL BE:	0.000283	MG/KG/DAY
THE NEW ARC WILL OCCUPY	0.566	% OF THE ADI.
OTHER PENDING ANTICIPATED RESIDUES EXCLUDING THE		
CURRENT NEW PETITION HAVE AN ARC OF:	0.000003	MG/KG/DAY
THIS ARC WILL OCCUPY	0.007	% OF THE ADI.
IF ALL PENDING ANTICIPATED RESIDUES (INCLUDING THE		
CURRENT NEW PETITION) ARE GRANTED		
THE RESULTANT ARC WILL BE:	0.000287	MG/KG/DAY
THE TOTAL ARC WILL OCCUPY	0.573	% OF THE ADI.

ANALYSIS FOR POPULATION SUB-GROUP: CHILDREN (1-6 YEARS OLD)

EXISTING ANTICIPATED RESIDUES (PUBLISHED ONLY)		
RESULT IN AN ARC OF:	0.000213	MG/KG/DAY
THE EXISTING ARC IS EQUIVALENT TO:	0.425	% OF THE ADI.
PROPOSED NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
RESULT IN AN ARC OF:	0.000158	MG/KG/DAY
THESE NEW ANTICIPATED RESIDUES WILL OCCUPY:	0.315	% OF THE ADI.
IF THE NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
ARE APPROVED THE RESULTANT ARC WILL BE:	0.000370	MG/KG/DAY
THE NEW ARC WILL OCCUPY	0.740	% OF THE ADI.
OTHER PENDING ANTICIPATED RESIDUES EXCLUDING THE		
CURRENT NEW PETITION HAVE AN ARC OF:	0.000014	MG/KG/DAY
THIS ARC WILL OCCUPY	0.027	% OF THE ADI.
IF ALL PENDING ANTICIPATED RESIDUES (INCLUDING THE		
CURRENT NEW PETITION) ARE GRANTED		
THE RESULTANT ARC WILL BE:	0.000384	MG/KG/DAY
THE TOTAL ARC WILL OCCUPY	0.768	% OF THE ADI.

Table 4.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 06/29/94

PAGE: 1

CHEMICAL INFORMATION		STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS					
Permethrin Caswell #65288 CAS No. 52645-53-1 A.I. CODE: 109701 CFR No. 180.378	2yr feeding- rat	Increased liver weights.	AD1	UF -->100	No data gaps.	HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.							
	NOEL= 5.0000 mg/kg		OPP RfD= 0.050000										
	100.00 ppm		EPA RfD= 0.050000										
	LEL= 25.0000 mg/kg	Evidence of carcinogenic- ity in mice (liver, lung)											
	500.00 ppm	negative in rat.	q*: 0.01840										
ONCO: C(q)(HED WOTE)													
COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES													
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)		TMRC TYPE (UG/KG/DAY)		TMRC ONCO RISK		ANTICIPATED RESIDUE (PPM)		ARC (UG/KG/DAY)		ARC ONCO RISK	
						%RFD						%RFD	
03011AA	PISTACHIO NUTS	0.100	P	0.000025		0.000	0.000000000046	0.10000	0.000025	0.000025	0.000	0.000000000046	0.000000000046
	10 RAW-FRESH OR NFS							0.05000	0.000013	0.000013	0.000	0.000000000046	0.000000000046
06001AA	AVOCADOS	1.000	P	0.012537		0.025	0.000000023068	0.01000	0.000125	0.000125	0.000	0.000000000046	0.000000000046
06010AA	10 RAW-FRESH OR NFS	1.000	P	0.000001		0.000	0.000000000002	1.00000	0.000001	0.000001	0.000	0.000000000002	0.000000000002
06010AA	PAPAYAS-UNSPECIFIED	1.000	P	0.000001		0.000	0.000000000002	1.00000	0.000001	0.000001	0.000	0.000000000002	0.000000000002
06010AB	00 NOT SPECIFIED (NO CONSUMPTION)	1.000	P	0.001339		0.003	0.000000002464	1.00000	0.001300	0.001300	0.003	0.000000002393	0.000000002393
06010AB	PAPAYAS-PULP	1.000	P	0.001339		0.003	0.000000002464	1.00000	0.001300	0.001300	0.003	0.000000002393	0.000000002393
06010DA	10 RAW-FRESH OR NFS	1.000	P	0.001728		0.003	0.000000003180	1.00000	0.001728	0.001728	0.003	0.000000003180	0.000000003180
06010DA	51 COOKED-CANNED	1.000	P	0.001728		0.003	0.000000003180	1.00000	0.001728	0.001728	0.003	0.000000003180	0.000000003180
06010DA	PAPAYAS-DRIED	1.000	P	0.001728		0.003	0.000000003180	1.00000	0.001728	0.001728	0.003	0.000000003180	0.000000003180
06010JA	10 RAW-FRESH OR NFS	1.000	P	0.004580		0.009	0.000000008427	1.00000	0.004580	0.004580	0.009	0.000000008427	0.000000008427
06010JA	PAPAYAS-JUICE	1.000	P	0.004580		0.009	0.000000008427	1.00000	0.004580	0.004580	0.009	0.000000008427	0.000000008427
06018AA	10 RAW-FRESH OR NFS	2.000	P	0.000038		0.000	0.000000000070	2.00000	0.000038	0.000038	0.000	0.000000000070	0.000000000070
06018AA	KIWI	2.000	P	0.000038		0.000	0.000000000070	2.00000	0.000038	0.000038	0.000	0.000000000070	0.000000000070
13016AA	10 RAW-FRESH OR NFS	5.000	P	0.001105		0.002	0.000000002033	5.00000	0.001105	0.001105	0.002	0.000000002033	0.000000002033
13016AA	FENNEL	5.000	P	0.001105		0.002	0.000000002033	5.00000	0.001105	0.001105	0.002	0.000000002033	0.000000002033
13018AA	00 NOT SPECIFIED (NO CONSUMPTION)	10.000	P	0.032120		0.064	0.000000059101	0.01000	0.000032	0.000032	0.000	0.000000000000	0.000000000000
13018AA	ARTICHOKES-GLOBE	10.000	P	0.032120		0.064	0.000000059101	0.01000	0.000032	0.000032	0.000	0.000000000000	0.000000000000
13027AA	21 COOKED-NFS	5.000	P	0.001777		0.004	0.000000003270	5.00000	0.001417	0.001417	0.003	0.000000002242	0.000000002242
13027AA	WATERCRESS	5.000	P	0.001777		0.004	0.000000003270	5.00000	0.001417	0.001417	0.003	0.000000002242	0.000000002242
15018AA	10 RAW-FRESH OR NFS	0.050	A	0.000087		0.000	0.000000000160	0.05000	0.000087	0.000087	0.000	0.000000000000	0.000000000000
15018AA	21 COOKED-NFS	0.050	A	0.000087		0.000	0.000000000160	0.05000	0.000087	0.000087	0.000	0.000000000000	0.000000000000
15018AA	SUNFLOWER-SEEDS	1.000	P	0.013110		0.026	0.000000024122	1.00000	0.011684	0.011684	0.023	0.000000021499	0.000000021499
16002AA	10 RAW-FRESH OR NFS	1.000	P	0.013110		0.026	0.000000024122	1.00000	0.011684	0.011684	0.023	0.000000021499	0.000000021499
16002AA	ASPARAGUS	1.000	P	0.013110		0.026	0.000000024122	1.00000	0.011684	0.011684	0.023	0.000000021499	0.000000021499
16002AA	21 COOKED-NFS							1.00000	0.011684	0.011684	0.023	0.000000021499	0.000000021499
16002AA	23 COOKED-FRESH-BOILED							1.00000	0.001425	0.001425	0.003	0.000000002000	0.000000002000
16002AA	23 COOKED-FRESH-BOILED							1.00000	0.001425	0.001425	0.003	0.000000002000	0.000000002000
16003AA	MUSHROOMS	6.000	P	0.128329		0.257	0.000000236125	0.01000	0.000009	0.000009	0.000	0.000000000000	0.000000000000
16003AA	10 RAW-FRESH OR NFS							0.01000	0.000152	0.000152	0.000	0.000000000000	0.000000000000
16003AA	21 COOKED-NFS							0.01000	0.000038	0.000038	0.000	0.000000000000	0.000000000000
16003AA	31 COOKED-FRESH OR CANNED							0.01000	0.000015	0.000015	0.000	0.000000000000	0.000000000000
270030A	53 COOKED-CANNED-BOILED	0.500	P	0.010204		0.020	0.000000018775	0.01000	0.000204	0.000204	0.000	0.000000000000	0.000000000000
270030A	COTTONSEED-OIL	0.500	P	0.010204		0.020	0.000000018775	0.01000	0.000204	0.000204	0.000	0.000000000000	0.000000000000
27003WA	18 PROCESSED OIL	0.500	P	0.000059		0.000	0.000000000109	0.01000	0.000001	0.000001	0.000	0.000000000000	0.000000000000
27003WA	COTTONSEED-MEAL	0.500	P	0.000059		0.000	0.000000000109	0.01000	0.000001	0.000001	0.000	0.000000000000	0.000000000000
270110A	18 PROCESSED OIL	0.050	A	0.000124		0.000	0.000000000228	0.05000	0.000124	0.000124	0.000	0.000000000000	0.000000000000
270110A	SUNFLOWER-OIL	0.050	A	0.000124		0.000	0.000000000228	0.05000	0.000124	0.000124	0.000	0.000000000000	0.000000000000
270110A	18 PROCESSED OIL												

15

Table 4.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 06/29/94

PAGE: 2

CHEMICAL INFORMATION			STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Permethrin Caswell #65288 CAS No. 52645-53-1 A.I. CODE: 109701 CFR No. 180.378	2yr feeding- rat		Increased liver weights. Evidence of carcinogenicity in mice (liver, lung) negative in rat.	AD1	UF -->100	OPP Rfd= 0.050000 EPA Rfd= 0.050000	No data gaps.	HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.		
	NOEL= 5.0000 mg/kg 100.00 ppm									
	LEL= 25.0000 mg/kg 500.00 ppm									
	ONCO: C(Q)(HED NOTE)									
COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES										
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TMRC TYPE (UG/KG/DAY)	%RFD	TMRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD	ARC ONCO RISK	
CROP GROUP TOTALS FOR UNSPECIFIED:										
14013AA	POTATOES(WHITE)-WHOLE 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED	0.050	P 0.017003	0.034	0.00000031286	0.00200 0.00200 0.00200	0.000091 0.000300 0.000289	0.000 0.001 0.001	0.0000000167 0.00000000552 0.00000000532	
14013AB	POTATOES(WHITE)-UNSPECIFIED 22 COOKED-FRESH-BAKED	0.050	P 0.000004	0.000	0.00000000007	0.00200	0.000000	0.000	0.00000000000	
14013AC	POTATOES(WHITE)-PEELED 21 COOKED-NFS 22 COOKED-FRESH-BAKED 23 COOKED-FRESH-BOILED	0.050	P 0.039213	0.078	0.000000072152	0.00200 0.00200 0.00200	0.000144 0.000085 0.000867	0.000 0.000 0.002	0.00000000265 0.00000000156 0.00000001595	
14013DA	POTATOES(WHITE)-FRIED 25 COOKED-FRESH-FRIED 10 RAW-FRESH OR NFS 31 COOKED-FRESH OR CANNED	0.050	P 0.000422	0.001	0.000000000776	0.00200 0.00200	0.000007 0.000010	0.000 0.000	0.00000000013 0.00000000018	
14013HA	POTATOES(WHITE)-PEEL ONLY 22 COOKED-FRESH-BAKED	0.050	P 0.000001	0.000	0.000000000002	0.00200	0.000000	0.000	0.00000000000	
14019AA	TURNIPS-ROOTS 10 RAW-FRESH OR NFS 21 COOKED-NFS	1.000	P 0.008239	0.016	0.00000015160	0.01000 0.01000	0.000005 0.000077	0.000 0.000	0.00000000009 0.00000000142	
CROP GROUP TOTALS FOR ROOT AND TUBER VEGETABLES:										
13026AA	TURNIPS-TOPS 10 RAW-FRESH OR NFS 21 COOKED-NFS 31 COOKED-FRESH OR CANNED	20.000	P 0.294222	0.588	0.000000541368	0.15000 0.15000 0.15000	0.000653 0.000528 0.001025	0.001 0.001 0.002	0.00000001202 0.00000000972 0.00000001886	
CROP GROUP TOTALS FOR LEAVES OF ROOT AND TUBER VEG.:										
14007AA	GARLIC 10 RAW-FRESH OR NFS 21 COOKED-NFS 32 COOKED-FRESH OR CANNED-BAKED	0.100	P 0.000076	0.000	0.000000000140	0.10000 0.10000 0.10000	0.000003 0.000047 0.000026	0.000 0.000 0.000	0.00000000006 0.00000000086 0.00000000048	
14011AA	ONIONS-DRY-BULB (CIPOLLINI) 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED 31 COOKED-FRESH OR CANNED	0.100	P 0.010606	0.021	0.00000019515	0.01000 0.01000 0.01000 0.01000	0.000185 0.000708 0.000103 0.000064	0.000 0.001 0.000 0.000	0.00000000340 0.00000001303 0.00000000190 0.00000000118	

Table 4.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 06/29/94

PAGE: 3

CHEMICAL INFORMATION			STUDY TYPE	EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Permethrin	2yr feeding- rat	NOEL= 5,0000 mg/kg	Increased liver weights.	AD1	UF -->100	No data gaps.	HED complete 09/12/86				
Caswell #65288	NOEL= 100.00 ppm	100.00 ppm		OPP RfD=	0.050000		EPA verified 10/28/86				
CAS No. 52645-53-1	LEL= 25,0000 mg/kg	25,0000 mg/kg	Evidence of carcinogenicity in mice (liver, lung) negative in rat.	EPA RfD=	0.050000		WHO last reviewed 1987;				
A.I. CODE: 109701	500.00 ppm	500.00 ppm		q*:	0.01840		(ADI extended to 25:75 mixture).				
CFR No. 180.378	ONCO: C(q)(HED NOTE)						On IRIS.				
COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES											
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TYPE	TMRC (UG/KG/DAY)	%RFD	TMRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD	ARC ONCO RISK	
CROP GROUP TOTALS FOR BULB VEGETABLES:											
				0.010682	0.021	0.00000019655		0.001136	0.002	0.00000002090	
13002AA	CELERY	5,000	P	0.304806	0.610	0.00000560843	0.04000	0.001912	0.004	0.00000003518	
	10 RAW-FRESH OR NFS						0.04000	0.000526	0.001	0.00000000968	
	21 COOKED-NFS										
13003AA	CHTCORY (FRENCH OR BELGIAN ENDIVE)	20,000	P	0.013414	0.027	0.00000024682	0.07000	0.000047	0.000	0.00000000086	
13013AA	10 RAW-FRESH OR NFS										
	LETTUCE-LEAFY VARIETIES	20,000	P	0.088656	0.177	0.00000163127	0.23000	0.001020	0.002	0.00000001877	
13014AA	10 RAW-FRESH OR NFS										
	DANDELION	20,000	P	0.010078	0.020	0.00000018544	0.07000	0.000035	0.000	0.00000000064	
	63 COOKED-FRESH OR FROZEN-BOILED										
13015AA	ENDIVE (CURLEY AND ESCAROLE)	20,000	P	0.023702	0.047	0.00000043612	0.07000	0.000047	0.000	0.00000000086	
	10 RAW-FRESH OR NFS						0.07000	0.000036	0.000	0.00000000066	
	21 COOKED-NFS										
13017AA	CRESS (GARDEN/FIELD)	20,000	P	0.000020	0.000	0.00000000037	20.00000	0.000020	0.000	0.00000000037	
13020AA	00 NOT SPECIFIED (NO CONSUMPTION)										
	LETTUCE-UNSPECIFIED	20,000	P	0.184016	0.368	0.00000338589	0.23000	0.002116	0.004	0.00000003393	
13022AA	10 RAW-FRESH OR NFS										
	PARSLEY	20,000	P	0.073358	0.147	0.00000134979	0.02000	0.000024	0.000	0.00000000044	
	10 RAW-FRESH OR NFS						0.02000	0.000045	0.000	0.00000000083	
	21 COOKED-NFS						0.02000	0.000004	0.000	0.00000000007	
13023AA	53 COOKED-CANNED-BOILED										
	RHUBARB	20,000	P	0.075370	0.151	0.00000138681	0.01000	0.000004	0.000	0.00000000007	
	10 RAW-FRESH OR NFS						0.01000	0.000001	0.000	0.00000000002	
	21 COOKED-NFS						0.01000	0.000019	0.000	0.00000000035	
	31 COOKED-FRESH OR CANNED						0.01000	0.000013	0.000	0.00000000024	
	62 COOKED-FRESH OR FROZEN-BAKED										
13024AA	SPINACH	20,000	P	0.870620	1.741	0.00001601941	0.21000	0.001558	0.003	0.00000002867	
	10 RAW-FRESH OR NFS						0.21000	0.001345	0.003	0.00000002475	
	21 COOKED-NFS						0.21000	0.006238	0.012	0.00000011478	
	31 COOKED-FRESH OR CANNED										
13025AA	SWISS CHARD	20,000	P	0.033830	0.068	0.00000062247	0.07000	0.000005	0.000	0.00000000009	
	10 RAW-FRESH OR NFS						0.07000	0.000107	0.000	0.00000000197	
	21 COOKED-NFS						0.07000	0.000006	0.000	0.00000000011	
	31 COOKED-FRESH OR FROZEN-BOILED										
13039AA	CRESS/UPLAND	20,000	P	0.000020	0.000	0.00000000037	20.00000	0.000020	0.000	0.00000000037	
	00 NOT SPECIFIED (NO CONSUMPTION)										
13045AA	LETTUCE-HEAD VARIETIES	20,000	P	4.245606	8.491	0.00007811915	0.23000	0.047901	0.096	0.00000008138	
	10 RAW-FRESH OR NFS						0.23000	0.000923	0.002	0.00000001698	
	21 COOKED-NFS										

13

PAGE:

18

Table 4.

DATE: 06/29/94

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

CHEMICAL INFORMATION		STUDY TYPE		EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Permethrin	Caswell #65288	2yr feeding- rat	NOEL= 5.0000 mg/kg	Increased liver weights.	ADI UF -->100	OPP RfD= 0.050000	No data gaps.			HED complete 09/12/86	
	CAS No. 52645-53-1	LEL= 100.00 ppm		Evidence of carcinogenicity in mice (liver, lung) negative in rat.	Q*: 0.01840	EPA RfD= 0.050000				EPA verified 10/28/86	
	A.I. CODE: 109701	500.00 ppm								WHO last reviewed 1987;	
	CFR No. 180.378	ONCO: C(q)(HED NOTE)								(ADI extended to 25:75 mixture).	
										On IRIS.	

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

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TYPE	TMRC (UG/KG/DAY)	%RFD	TMRC ONCO RISK	ANTICIPATED RESIDUE (PPM)		ARC (UG/KG/DAY)	%RFD	ARC ONCO RISK	
28023WB	31 COOKED-FRESH OR CANNED SOYBEANS-FLOUR/LOW FAT	0.050	P	0.000048	0.000	0.000000000088	0.00250	0.000001	0.000849	0.000	0.000000000002	0.000000000004
28023WC	21 COOKED-NFS SOYBEANS-FLOUR/DEFATTED	0.050	P	0.000623	0.001	0.00000001146	0.00250	0.000002	0.000002	0.000	0.000000000004	0.000000000004
	10 RAW-FRESH OR NFS						0.00250	0.000013	0.000008	0.000	0.000000000015	0.000000000013
	21 COOKED-NFS						0.00250	0.000008	0.000007	0.000	0.000000000013	0.000000000013
	22 COOKED-FRESH-BAKED						0.00250	0.000007	0.000007	0.000	0.000000000013	0.000000000013
	51 COOKED-CANNED						0.00250	0.000007	0.000007	0.000	0.000000000013	0.000000000013
	53 COOKED-CANNED-BOILED						0.00250	0.000007	0.000007	0.000	0.000000000013	0.000000000013

CROP GROUP TOTALS FOR LEGUME VEGETABLES:

11001AA	EGGPLANT	1.000	P	0.006186	0.012	0.00000011382	1.00000	0.000011	0.000011	0.000	0.000000000020	0.000000000020
	10 RAW-FRESH OR NFS						1.00000	0.005464	0.005464	0.011	0.00000010054	0.00000010054
	21 COOKED-NFS						1.00000	0.000711	0.000711	0.001	0.00000001308	0.00000001308
11003AA	PEPPERS (SWEET/GARDEN)	1.000	P	0.021552	0.043	0.00000039656	0.01000	0.000068	0.000147	0.000	0.00000000125	0.00000000125
	10 RAW-FRESH OR NFS						0.01000	0.002512	0.002512	0.005	0.00000004622	0.00000004622
	21 COOKED-NFS						0.01000	0.001936	0.001936	0.004	0.00000003562	0.00000003562
11005AA	TOMATOES-WHOLE	2.000	P	0.984033	1.968	0.00001810621	0.01000	0.000472	0.000472	0.001	0.00000000868	0.00000000868
	10 RAW-FRESH OR NFS						0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000
	21 COOKED-NFS						0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000
	31 COOKED-FRESH OR CANNED						0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000

CROP GROUP TOTALS FOR FRUITING VEGETABLES (EXCL. CUCURBITS):

10002AA	CANTALOUPE-UNSPECIFIED	3.000	P	0.000003	0.000	0.000000000006	0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000
	00 NOT SPECIFIED (NO CONSUMPTION)						0.01000	0.000442	0.000442	0.001	0.00000000813	0.00000000813
10002AB	CANTALOUPE-PULP	3.000	P	0.133266	0.267	0.00000245209	0.01000	0.000002	0.000002	0.000	0.000000000004	0.000000000004
	10 RAW-FRESH OR NFS						0.01000	0.000008	0.000008	0.000	0.000000000015	0.000000000015
	21 COOKED-NFS						0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000
10003AA	CASABAS	3.000	P	0.000003	0.000	0.000000000006	0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000
10004AA	CRENSHAW	3.000	P	0.055088	0.110	0.00000101362	0.01000	0.000000	0.000000	0.000	0.0000000000335	0.0000000000335
	00 NOT SPECIFIED (NO CONSUMPTION)						0.01000	0.000184	0.000184	0.000	0.000000000000	0.000000000000
10005AA	HONEYDEW MELONS	3.000	P	0.000003	0.000	0.000000000006	0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000
	10 RAW-FRESH OR NFS						0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000
10007AA	PERSION MELONS	3.000	P	0.000003	0.000	0.000000000006	0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000
	00 NOT SPECIFIED (NO CONSUMPTION)						0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000
10008AA	WATERMELON	3.000	P	0.229516	0.459	0.00000422309	0.01000	0.000764	0.000764	0.002	0.00000000140	0.00000000140
	10 RAW-FRESH OR NFS						0.01000	0.000000	0.000000	0.000	0.000000000000	0.000000000000

Table 4.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

PAGE: 6

DATE: 06/29/94

CHEMICAL INFORMATION			STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS		
Permethrin	Caswell #65288	2yr feeding- rat	NOEL= 5,0000 mg/kg	Increased liver weights.	ADI	UF -->100	No data gaps.	HED complete 09/12/86	EPA verified 10/28/86		
	CAS No. 52645-53-1		100.00 ppm		OPP RfD=	0.0500000		WHO last reviewed 1987;	(ADI last extended to 25:75		
	A.I. CODE: 109701	LEL=	25.0000 mg/kg	Evidence of carcinogenic-	EPA RfD=	0.0500000		mixture).	On IRIS.		
	CFR No. 180.378	500.00 ppm		ity in mice (liver, lung)							
		ONCO: C(q)(HED NOTE)		negative in rat.	q*: 0.01840						
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	ONCO RISK
10010AA	21 COOKED-NFS	3.000	P	0.216246	0.432	0.000000397893	0.01000	0.000001	0.000	0.000	0.000000000002
	CUCUMBERS										
	10 RAW-FRESH OR NFS						0.01000	0.000385	0.001	0.001	0.00000000708
	11 RAW-FRESH-PICKLED, CORNED, OR CURED						0.01000	0.000313	0.001	0.001	0.00000000576
	21 COOKED-NFS						0.01000	0.000023	0.000	0.000	0.00000000042
10011AA	PUMPKIN	3.000	P	0.013255	0.027	0.00000024389	3.00000	0.001105	0.002	0.002	0.00000002033
	21 COOKED-NFS						3.00000	0.001728	0.003	0.003	0.00000003180
	22 COOKED-FRESH-BAKED						3.00000	0.010421	0.021	0.021	0.00000019175
	62 COOKED-FRESH OR FROZEN-BAKED										
10013AA	SQUASH-SUMMER	3.000	P	0.094944	0.190	0.00000174697	0.01000	0.000013	0.000	0.000	0.00000000024
	10 RAW-FRESH OR NFS						0.01000	0.000303	0.001	0.001	0.00000000558
	21 COOKED-NFS										
10014AA	SQUASH-WINTER	3.000	P	0.097325	0.195	0.00000179078	0.01000	0.000000	0.000	0.000	0.00000000000
	10 RAW-FRESH OR NFS						0.01000	0.000283	0.001	0.001	0.00000000521
	21 COOKED-NFS						0.01000	0.000041	0.000	0.000	0.00000000075
	31 COOKED-FRESH OR CANNED										
10017AA	BITTER MELON	3.000	P	0.000070	0.000	0.00000000129	0.01000	0.000000	0.000	0.000	0.00000000000
	21 COOKED-NFS										
10020AA	TOWELGOURD	3.000	P	0.000003	0.000	0.000000000006	0.01000	0.000000	0.000	0.000	0.00000000000
	00 NOT SPECIFIED (NO CONSUMPTION)										
CROP GROUP TOTALS FOR FRUITING VEGETABLES (CUCURBITS):				0.842033	1.684	0.00001549341	0.016016		0.032		0.00000029469
04001AA	APPLES-FRESH	0.050	P	0.022836	0.046	0.00000042018	0.01000	0.003074	0.006	0.006	0.00000005656
	10 RAW-FRESH OR NFS						0.01000	0.000066	0.000	0.000	0.00000000121
	21 COOKED-NFS						0.01000	0.001191	0.002	0.002	0.00000002191
	31 COOKED-FRESH OR CANNED						0.01000	0.000236	0.000	0.000	0.00000000434
	62 COOKED-FRESH OR FROZEN-BAKED										
04001DA	APPLES-DRIED	0.050	P	0.000083	0.000	0.000000000153	0.01000	0.000008	0.000	0.000	0.00000000015
	10 RAW-FRESH OR NFS						0.01000	0.000003	0.000	0.000	0.00000000006
	22 COOKED-FRESH-BAKED						0.01000	0.000005	0.000	0.000	0.00000000009
	62 COOKED-FRESH OR FROZEN-BAKED										
04001JA	APPLES-JUICE	0.050	P	0.016624	0.033	0.00000030588	0.01000	0.002563	0.005	0.005	0.00000004716
	15 RAW-FRESH OR CANNED						0.01000	0.000762	0.002	0.002	0.00000001402
	31 COOKED-FRESH OR CANNED										
04003AA	PEARS-FRESH	3.000	P	0.367420	0.735	0.000000676053	0.01000	0.000527	0.001	0.001	0.00000000970
	10 RAW-FRESH OR NFS						0.01000	0.000467	0.001	0.001	0.00000000859
	31 COOKED-FRESH OR CANNED						0.01000	0.000228	0.000	0.000	0.00000000420
	51 COOKED-CANNED						0.01000	0.000003	0.000	0.000	0.00000000006
	62 COOKED-FRESH OR FROZEN-BAKED										
04003DA	PEARS-DRIED	3.000	P	0.000627	0.001	0.00000001154	0.01000	0.000002	0.000	0.000	0.00000000004
	10 RAW-FRESH OR NFS										

20

Table 4.

DATE: 06/29/94

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

STATUS

CHEMICAL INFORMATION		STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Permethrin	2yr feeding- rat	NOEL= 5.0000 mg/kg 100.00 ppm LEL= 25.0000 mg/kg 500.00 ppm ONCO: C(q)(HED NOTE)	Increased liver weights.	ADI UF -->100 OPP RfD= 0.050000 EPA RfD= 0.050000	No data gaps.	HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.			
Caswell #6528B									
CAS No. 52645-53-1									
A.I. CODE: 109701									
CFR No. 180.378									

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

COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES										
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TMRC		%RFD	TMRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC		ONCO RISK
			TYPE (UG/KG/DAY)	(UG/KG/DAY)				%RFD		
CROP GROUP TOTALS FOR POME FRUITS:										
	21 COOKED-NFS			0.407590	0.815	0.00000749966	0.01000	0.000000	0.000	0.00000000000
05002AA	CHERRIES-FRESH	3.000	P	0.096526	0.193	0.00000177608	0.01000	0.000074	0.000	0.00000000136
	10 RAW-FRESH OR NFS						0.01000	0.000044	0.000	0.00000000081
	21 COOKED-NFS						0.01000	0.000125	0.000	0.00000000230
	31 COOKED-FRESH OR CANNED						0.01000	0.000078	0.000	0.00000000144
	62 COOKED-FRESH OR FROZEN-BAKED						0.01000	0.000000	0.000	0.00000000000
05002DA	CHERRIES-DRIED	3.000	P	0.000012	0.000	0.00000000022	0.01000	0.000000	0.000	0.00000000000
	00 NOT SPECIFIED (NO CONSUMPTION)						0.01000	0.000047	0.000	0.00000000086
05002JA	CHERRIES-JUICE	3.000	P	0.015336	0.031	0.00000028218	0.01000	0.000004	0.000	0.00000000007
	15 RAW-FRESH OR CANNED						0.01000	0.000000	0.000	0.00000000000
	21 COOKED-NFS						0.01000	0.001005	0.002	0.00000001849
05004AA	PEACHES-FRESH	5.000	P	1.076958	2.154	0.00001981603	0.01000	0.000098	0.000	0.00000000180
	10 RAW-FRESH OR NFS						0.01000	0.000799	0.002	0.00000001470
	21 COOKED-FRESH OR CANNED						0.01000	0.000252	0.001	0.00000000464
	51 COOKED-CANNED						0.01000	0.000000	0.000	0.00000000004
05004DA	PEACHES-DRIED	5.000	P	0.001736	0.003	0.000000003194	0.01000	0.000002	0.000	0.00000000004
	10 RAW-FRESH OR NFS						0.01000	0.000002	0.000	0.00000000004
	21 COOKED-NFS						0.01000	0.002530	0.005	0.00000004655
CROP GROUP TOTALS FOR STONE FRUITS:										
				1.190568	2.381	0.00002190645				
01006AA	RASPBERRIES	1.000	A	0.002866	0.006	0.000000005273	1.00000	0.001725	0.003	0.000000003174
	10 RAW-FRESH OR NFS						1.00000	0.000322	0.001	0.00000000592
	15 RAW-FRESH OR CANNED						1.00000	0.000272	0.001	0.00000000500
	31 COOKED-FRESH OR CANNED						1.00000	0.000282	0.001	0.00000000519
	62 COOKED-FRESH OR FROZEN-BAKED						1.00000	0.000266	0.001	0.00000000489
	70 RAW-FROZEN						1.00000	0.002867	0.006	0.00000005275
CROP GROUP TOTALS FOR SMALL FRUITS AND BERRIES:										
				0.002866	0.006	0.000000005273				
15004AA	CORN/POP	0.050	P	0.000339	0.001	0.000000000624	0.03000	0.000203	0.000	0.000000000374
	21 COOKED-NFS						0.00600	0.000001	0.000	0.00000000002
15005AA	CORN/SWEET	0.100	P	0.023671	0.047	0.000000043555	0.00600	0.001196	0.002	0.00000002201
	10 RAW-FRESH OR NFS						0.00600	0.000224	0.000	0.00000000412
	21 COOKED-NFS						0.00600	0.000000	0.000	0.00000000000
	31 COOKED-FRESH OR CANNED						0.00100	0.000001	0.000	0.00000000002
24002EA	CORN/GRAIN-ENDOSPERM	0.050	P	0.008270	0.017	0.00000015217	0.00100	0.000001	0.000	0.00000000002
	10 RAW-FRESH OR NFS						0.00100	0.000001	0.000	0.00000000002

PAGE: 8

DATE: 06/29/94

PAGE: 8

22

Table 4.

DATE: 06/29/94

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

STATUS

DATA GAPS/COMMENTS

REFERENCE DOSES

EFFECTS

STUDY TYPE

CHEMICAL INFORMATION

Permethrin	2yr feeding- rat NOEL= 5.0000 mg/kg LEL= 100.00 ppm A.I. CODE: 109701 CFR No. 180.378	Increased liver weights.	ADI UF -->100 OPP RfD= 0.050000 EPA RfD= 0.050000 Q*: 0.01840	No data gaps.	HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.
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COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES

COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES									
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TMRC TYPE (UG/KG/DAY)	TMRC	%RFD	TMRC ONCO RISK	ANTICIPATED		
							RESIDUE (PPM)	ARC (UG/KG/DAY)	ARC ONCO RISK
	21 COOKED-NFS						0.05000	0.000002	0.000000000004
	22 COOKED-FRESH-BAKED						0.05000	0.000167	0.000000000307
CROP GROUP TOTALS FOR TREE NUTS:									
			0.000401	0.001	0.000000000738		0.000275	0.001	0.000000000506
08022AA	HORSERADISH	1.000	P	0.000077	0.000	0.000000000142	1.00000	0.000077	0.000000000142
	11 RAW-FRESH-PICKLED,CORNED,OR CURED								
CROP GROUP TOTALS FOR HERBS AND SPICES:									
53001BA	BEEF-MEAT BYPRODUCTS	2.000	P	0.035324	0.071	0.000000064996	0.00030	0.000005	0.000000000009
	21 COOKED-NFS						0.00030	0.000000	0.000000000000
53001BB	BEEF(ORGAN MEATS)-OTHER	2.000	P	0.012069	0.024	0.000000022207	0.00030	0.000002	0.000000000004
	21 COOKED-NFS						0.00030	0.000000	0.000000000000
	51 COOKED-CANNED								
53001DA	BEEF-DRIED	0.250	P	0.000633	0.001	0.000000001165	0.00030	0.000001	0.000000000002
	21 COOKED-NFS								
53001FA	BEEF(BONELESS)-FAT (BEEF TALLOW)	3.000	P	1.116227	2.232	0.00002053858	0.00300	0.000004	0.000000000007
	10 RAW-FRESH OR NFS						0.00300	0.000445	0.000000000819
	21 COOKED-NFS						0.00300	0.000075	0.000000000138
	22 COOKED-FRESH-BAKED						0.00300	0.000100	0.000000000184
	23 COOKED-FRESH-BOILED						0.00300	0.000427	0.000000000786
	24 COOKED-FRESH-BROILED						0.00300	0.000065	0.000000000120
	25 COOKED-FRESH-FRIED								
53001KA	BEEF(ORGAN MEATS)-KIDNEY	2.000	P	0.000960	0.002	0.000000001766	0.00020	0.000000	0.000000000000
	21 COOKED-NFS								
53001LA	BEEF(ORGAN MEATS)-LIVER	2.000	P	0.041396	0.083	0.000000076169	0.00030	0.000006	0.000000000011
	25 COOKED-FRESH-FRIED						0.00030	0.000000	0.000000000000
	31 COOKED-FRESH OR CANNED								
53001MA	BEEF(BONELESS)-LEAN (W/O REMOVEABLE FAT)	0.250	P	0.290498	0.581	0.000000534516	0.00030	0.000000	0.000000000000
	10 RAW-FRESH OR NFS						0.00030	0.000208	0.000000000383
	21 COOKED-NFS						0.00030	0.000014	0.000000000026
	22 COOKED-FRESH-BAKED						0.00030	0.000022	0.000000000040
	23 COOKED-FRESH-BOILED						0.00030	0.000105	0.000000000193
	24 COOKED-FRESH-BROILED								
53002BA	GOAT-MEAT BYPRODUCTS	2.000	P	0.000002	0.000	0.000000000004	0.00030	0.000000	0.000000000000
	00 NOT SPECIFIED (NO CONSUMPTION)								
53002BB	GOAT(ORGAN MEATS)-OTHER	2.000	P	0.000002	0.000	0.000000000004	0.00030	0.000000	0.000000000000
	00 NOT SPECIFIED (NO CONSUMPTION)								
53002FA	GOAT(BONELESS)-FAT	3.000	P	0.000119	0.000	0.000000000219	0.00300	0.000000	0.000000000000
	23 COOKED-FRESH-BOILED								

Table 4.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 06/29/94

PAGE: 10

CHEMICAL INFORMATION		STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Permethrin Caswell #65288 CAS No. 52645-53-1 A.I. CODE: 109701 CFR No. 180.378		2yr feeding- rat NOEL= 5.0000 mg/kg 100.00 ppm LEL= 25.0000 mg/kg 500.00 ppm ONCO: C(q)(HED NOTE)	Increased liver weights. Evidence of carcinogenicity in mice (liver, lung) negative in rat.	ADI UF -->100 OPP RfD= 0.050000 EPA RfD= 0.050000 Q*: 0.01840		No data gaps.		HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.	
COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES									
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TMRC TYPE (UG/KG/DAY)	TMRC %RFD	TMRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD	ARC ONCO RISK
53002KA	25 COOKED-FRESH-FRIED GOAT(ORGAN MEATS)-KIDNEY	2.000	P 0.000002	0.000	0.000000000004	0.00300	0.000000	0.000	0.000000000000
53002LA	00 NOT SPECIFIED (NO CONSUMPTION) GOAT(ORGAN MEATS)-LIVER	2.000	P 0.000002	0.000	0.000000000004	0.00020	0.000000	0.000	0.000000000000
53002MA	00 NOT SPECIFIED (NO CONSUMPTION) GOAT(BONELESS)-LEAN (W/O REMOVEABLE FAT)	0.250	P 0.000047	0.000	0.000000000086	0.00030	0.000000	0.000	0.000000000000
53003AA	23 COOKED-FRESH-BOILED HORSE	3.000	P 0.000003	0.000	0.000000000006	0.00030	0.000000	0.000	0.000000000000
53005BA	00 NOT SPECIFIED (NO CONSUMPTION) SHEEP-MEAT BYPRODUCTS	2.000	P 0.000100	0.000	0.000000000184	0.00030	0.000000	0.000	0.000000000000
53005BB	21 COOKED-NFS SHEEP(ORGAN MEATS)-OTHER	2.000	P 0.000040	0.000	0.000000000074	0.00030	0.000000	0.000	0.000000000000
53005FA	21 COOKED-NFS SHEEP(BONELESS)-FAT	3.000	P 0.012890	0.026	0.000000023718	0.00300	0.000013	0.000	0.000000000024
53005KA	21 COOKED-NFS SHEEP(ORGAN MEATS)-KIDNEY	2.000	P 0.000016	0.000	0.000000000029	0.00020	0.000000	0.000	0.000000000000
53005LA	00 NOT SPECIFIED (NO CONSUMPTION) SHEEP(ORGAN MEATS)-LIVER	2.000	P 0.000002	0.000	0.000000000004	0.00030	0.000000	0.000	0.000000000000
53005MA	00 NOT SPECIFIED (NO CONSUMPTION) SHEEP(BONELESS)-LEAN (W/O REMOVEABLE FAT)	0.250	P 0.003121	0.006	0.000000005743	0.00030	0.000003	0.000	0.000000000006
53006BA	21 COOKED-NFS PORK-MEAT BYPRODUCTS	3.000	P 0.075238	0.150	0.00000138438	0.00030	0.000000	0.000	0.000000000000
53006BB	21 COOKED-NFS PORK(ORGAN MEATS)-OTHER	3.000	P 0.011549	0.023	0.00000021250	0.00030	0.000000	0.000	0.000000000000
53006FA	21 COOKED-NFS PORK(BONELESS)-FAT (INCLUDING LARD)	3.000	P 0.624607	1.249	0.00001149277	0.00030	0.000000	0.000	0.000000000000
53006KA	10 RAW-FRESH OR NFS PORK(ORGAN MEATS)-KIDNEY	3.000	P 0.000032	0.000	0.000000000059	0.00030	0.000005	0.000	0.000000000009
53006LA	21 COOKED-NFS PORK(ORGAN MEATS)-LIVER	3.000	P 0.014458	0.029	0.00000026603	0.00030	0.000001	0.000	0.000000000002
53006MA	25 COOKED-FRESH-FRIED PORK(BONELESS)-LEAN (W/O REMOVEABLE FAT)	0.250	P 0.097812	0.196	0.00000179974	0.00030	0.000000	0.000	0.000000000000
	21 COOKED-NFS					0.00030	0.000054	0.000	0.000000000099

24

Table 4.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 06/29/94

PAGE: 11

STATUS

DATA GAPS/COMMENTS

REFERENCE DOSES

EFFECTS

STUDY TYPE

CHEMICAL INFORMATION

Permethrin	2yr feeding- rat	Increased liver weights.	ADI UF -->100 OPP RfD= 0.050000 EPA RfD= 0.050000	HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.
Caswell #65288	5.0000 mg/kg			
CAS No. 52645-53-1	NOEL= 100.00 ppm			
A.I. CODE: 109701	LEL= 25.0000 mg/kg	Evidence of carcinogenic- ity in mice (liver, lung)		
CFR No. 180.378	500.00 ppm	negative in rat.	q*: 0.01840	
	ONCO: C(g)(HED NOTE)			

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

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TYPE	TMRC (UG/KG/DAY)	%RFD	TMRC ONCO RISK	ANTICIPATED RESIDUE (PPH)	ARC (UG/KG/DAY)	%RFD	ARC ONCO RISK
CROP GROUP TOTALS FOR RED MEAT:										
550088A	TURKEY-BYPRODUCTS	0.150	P	0.000059	0.000	0.000000000109	0.00001	0.000000	0.000	0.000000000000
	21 COOKED-NFS						0.00001	0.000000	0.000	0.000000000000
550088LA	TURKEY-GIBLETS (LIVER)	0.250	P	0.000013	0.000	0.0000000000024	0.00001	0.000000	0.000	0.000000000000
	21 COOKED-NFS						0.00001	0.000000	0.000	0.000000000000
550088MA	TURKEY-FRESH-FRIED	0.050	P	0.000399	0.001	0.0000000000734	0.00001	0.000000	0.000	0.000000000000
	25 COOKED-FRESH-FRIED						0.00001	0.000000	0.000	0.000000000000
	31 COOKED-FRESH OR CANNED						0.00001	0.000000	0.000	0.000000000000
	62 COOKED-FRESH OR FROZEN-BAKED						0.00001	0.000000	0.000	0.000000000000
550088MB	TURKEY-FLESH(+SKIN & W/O BONES)	0.150	P	0.002408	0.005	0.0000000004431	0.00001	0.000000	0.000	0.000000000000
	21 COOKED-NFS						0.00001	0.000000	0.000	0.000000000000
550088MC	TURKEY-FRESH-FRIED	0.050	P	0.000005	0.000	0.0000000000009	0.00001	0.000000	0.000	0.000000000000
	25 COOKED-FRESH-FRIED						0.00001	0.000000	0.000	0.000000000000
550138A	TURKEY-UNSPECIFIED	0.250	P	0.000000	0.000	0.0000000000000	0.00001	0.000000	0.000	0.000000000000
	21 COOKED-NFS						0.00001	0.000000	0.000	0.000000000000
550138LA	POULTRY/OTHER-BYPRODUCTS	0.250	P	0.000000	0.000	0.0000000000000	0.00001	0.000000	0.000	0.000000000000
	00 NOT SPECIFIED (NO CONSUMPTION)						0.00001	0.000000	0.000	0.000000000000
550138LA	POULTRY/OTHER-GIBLETS (LIVER)	0.250	P	0.000058	0.000	0.000000000107	0.00001	0.000000	0.000	0.000000000000
	25 COOKED-FRESH-FRIED						0.00001	0.000000	0.000	0.000000000000
550138MA	POULTRY/OTHER-FLESH (+SKIN & W/O BONES)	0.050	P	0.000269	0.001	0.0000000000495	0.00001	0.000000	0.000	0.000000000000
	21 COOKED-NFS						0.00001	0.000000	0.000	0.000000000000
550158A	CHICKEN-BYPRODUCTS	0.250	P	0.000000	0.000	0.0000000000000	0.00001	0.000000	0.000	0.000000000000
	00 NOT SPECIFIED (NO CONSUMPTION)						0.00001	0.000000	0.000	0.000000000000
550158LA	CHICKEN-GIBLETS(LIVER)	0.250	P	0.001266	0.003	0.0000000002329	0.00001	0.000000	0.000	0.000000000000
	21 COOKED-NFS						0.00001	0.000000	0.000	0.000000000000
550158MA	CHICKEN-FRESH-FRIED	0.050	P	0.003007	0.006	0.0000000005533	0.00001	0.000000	0.000	0.000000000000
	25 COOKED-FRESH-FRIED						0.00001	0.000000	0.000	0.000000000000
	26 COOKED-FRESH-PICKLED, CORNED, OR CURED						0.00001	0.000000	0.000	0.000000000000
	21 COOKED-NFS						0.00001	0.000000	0.000	0.000000000000
550158MA	CHICKEN-FLESH(W/O SKIN & W/O BONES)	0.050	P	0.003007	0.006	0.0000000005533	0.00001	0.000000	0.000	0.000000000000
	22 COOKED-FRESH-BAKED						0.00001	0.000000	0.000	0.000000000000
	25 COOKED-FRESH-FRIED						0.00001	0.000000	0.000	0.000000000000
	31 COOKED-FRESH OR CANNED						0.00001	0.000000	0.000	0.000000000000
	53 COOKED-CANNED-BOILED						0.00001	0.000000	0.000	0.000000000000
550158MB	CHICKEN-FLESH(+SKIN & W/O BONES)	0.050	P	0.018966	0.038	0.0000000034897	0.00001	0.000001	0.000	0.000000000002
	21 COOKED-NFS						0.00001	0.000001	0.000	0.000000000002
	25 COOKED-FRESH-FRIED						0.00001	0.000001	0.000	0.000000000002

25

Table 4.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 06/29/94

PAGE: 12

STATUS

DATA GAPS/COMMENTS

REFERENCE DOSES

EFFECTS

STUDY TYPE

CHEMICAL INFORMATION

Permethrin Caswell #65288 CAS No. 52645-53-1 A.I. CODE: 109701 CFR No. 180.378	2yr feeding- rat NOEL= 5.0000 mg/kg 100.00 ppm LEL= 25.0000 mg/kg 500.00 ppm ONCO: C(g)(HED NOTE)	Increased liver weights. Evidence of carcinogenicity in mice (liver, lung) negative in rat.	ADI UF -->100 OPP RfD= 0.050000 EPA RfD= 0.050000 q*: 0.01840	No data gaps. HED complete 09/12/86 EPA verified 10/28/86 WHO last reviewed 1987; (ADI extended to 25:75 mixture). On IRIS.
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COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TYPE	TMRC (UG/KG/DAY)	TMRC	%RFD	ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD	ONCO RISK
CROP GROUP TOTALS FOR POULTRY:											
50000DB	MILK-NON-FAT SOLIDS 10 RAW-FRESH OR NFS 21 COOKED-NFS 51 COOKED-CANNED	0.250	P	0.225834	0.452	0.00000048668	0.00000415535	0.00100 0.00100 0.00100	0.000724 0.000147 0.000032	0.001 0.000 0.000	0.0000001332 0.0000000270 0.0000000059
50000FA	MILK-FAT SOLIDS 10 RAW-FRESH OR NFS 21 COOKED-NFS	6.250	P	2.685749	5.371	0.00004941778		0.02500 0.02500	0.008457 0.002253	0.017 0.005	0.00000015561 0.00000004146
50000SA	MILK SUGAR (LACTOSE) 21 COOKED-NFS 51 COOKED-CANNED	0.250	P	0.009357	0.019	0.00000017217		0.00100 0.00100	0.000000 0.000037	0.000 0.000	0.00000000000 0.00000000068
55014AA	EGGS-WHOLE 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED 23 COOKED-FRESH-BOILED 25 COOKED-FRESH-FRIED	1.000	P	0.564502	1.129	0.00001038684		0.00001 0.00001 0.00001 0.00001 0.00001	0.000000 0.000003 0.000001 0.000000 0.000000	0.000 0.000 0.000 0.000 0.000	0.00000000000 0.00000000006 0.00000000002 0.00000000000 0.00000000004
55014AB	EGGS-WHITE ONLY 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED 62 COOKED-FRESH OR FROZEN-BAKED 81 COOKED-FROZEN	1.000	P	0.009204	0.018	0.00000016935		0.00001 0.00001 0.00001 0.00001 0.00001	0.000000 0.000000 0.000000 0.000000 0.000000	0.000 0.000 0.000 0.000 0.000	0.00000000000 0.00000000000 0.00000000000 0.00000000000 0.00000000000
55014AC	EGGS-YOLK ONLY 10 RAW-FRESH OR NFS 21 COOKED-NFS 25 COOKED-FRESH-FRIED 31 COOKED-FRESH OR CANNED	1.000	P	0.006632	0.013	0.00000012203		0.00001 0.00001 0.00001 0.00001 0.00001	0.000000 0.000000 0.000000 0.000000 0.000000	0.000 0.000 0.000 0.000 0.000	0.00000000000 0.00000000000 0.00000000000 0.00000000000 0.00000000000
CROP GROUP TOTALS FOR DAIRY PRODUCTS:				3.501278	7.003	0.00006442352		0.011656		0.023	0.00000021447

GRAND TOTALS FOR U.S. POPULATION - 48 STATES

16.987838	33.976	0.00031257622	0.243242	0.486	0.00000447565
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TOLERANCE TYPE: N=NEW; A=PENDING; P=PUBLISHED
 TMRC=THEORETICAL MAXIMUM RESIDUE CONTRIBUTION
 ARC = ANTICIPATED RESIDUE CONTRIBUTION
 RFD = REFERENCE DOSE

Table 5: Permethrin Acute Dietary Analysis

Published tolerances and wheat grain at 0.05 ppm
 NOEL of concern is 25 mg/kg/day.
 RDV = 0.25

1 DETAILED ACUTE ANALYSIS INCLUDING AR'S: ALL STATISTICS BASED ON USERS' DAILY CONSUMPTION 11:33 Thursday, June 16, 1994 57

 *NAME: PERMETHRIN
 *CASWELL NO: 65288 CFR NO: CFR180.378 A 00000.0500 000100.000 000100 Chronic Rat Systemic Minimum
 *CAS NO: 52645-53-1 SHAUGHNESSY NO: 109701 B 00004.0000 008000.000 000100 Terata Rabbit Systemic Blank
 *STATUS CODES: C 00000.7140 000500.000 000100 Chron-onco Mouse Systemic
 *RDV INFO: The LD value used in this analysis is 0.25 MG/KG OF BODY WEIGHT/DAY
 *FILE INFO: No Tolerance Data Are Used--Without User Modifications.
 ***** AR DATA: No User Modifications *****

U.S. POP.--48 STATES

 ESTIMATED % OF POTENTIAL
 MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY
 MG/KG BODY WEIGHT/DAY AS PERCENT OF RDV
 0.000000 0.00
 0.017060 6.82
 PERSON DAYS THAT ARE USER-DAYS
 0.00
 99.77
 ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X= 20
 0 .2 .4 .6 .8 1 1.2 1.4 1.6 1.8 2 3 4 5 10 15 20
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 TOLERANCES: 100 5 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 ANTICIPATED RESIDUES:

Mean MOE = 25/0.017060 = 1465
 High end MOE = 25/(0.6 x 0.25) = 167

INFANTS(<1 YEAR)

 ESTIMATED % OF POTENTIAL
 MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY
 MG/KG BODY WEIGHT/DAY AS PERCENT OF RDV
 0.000000 0.00
 0.033949 13.58
 PERSON DAYS THAT ARE USER-DAYS
 0.00
 93.38
 ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X= 20
 0 .2 .4 .6 .8 1 1.2 1.4 1.6 1.8 2 3 4 5 10 15 20
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 TOLERANCES: 100 22 7 3 1 0 0 0 0 0 0 0 0 0 0 0 0
 ANTICIPATED RESIDUES:

Mean MOE = 25/0.033949 = 736
 High end MOE = 25/(1 x 0.25) = 100

CHILDREN(1-6 YRS)

 ESTIMATED % OF POTENTIAL
 MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY
 MG/KG BODY WEIGHT/DAY AS PERCENT OF RDV
 0.000000 0.00
 0.028181 11.27
 PERSON DAYS THAT ARE USER-DAYS
 0.00
 99.91
 ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X= 20
 0 .2 .4 .6 .8 1 1.2 1.4 1.6 1.8 2 3 4 5 10 15 20
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 TOLERANCES: 100 13 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0
 ANTICIPATED RESIDUES:

Mean MOE = 25/0.028181 = 887
 High end MOE = 25/(0.8 x 0.25) = 125

27

Table 5: Permethrin Acute Dietary Analysis

Published tolerances and wheat grain at 0.05 ppm

FEMALES(13+ YRS)

LES(13+ YRS)													
ESTIMATED % OF POTENTIAL													
MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY													

ESTIMATES BASED ON													
TOLERANCES:													
PERSON DAYS THAT ARE USER-DAYS													
MG/KG BODY WEIGHT/DAY													
AS PERCENT OF RDV													

0.00													
0.000000													
0.00													
99.82													
0.014864													
5.95													
ANTICIPATED RESIDUES:													
ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=													
0													
.2													
.4													
.6													
.8													
1													
1.2													
1.4													
1.6													
1.8													
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5													
10													
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20													

TOLERANCES:													
ANTICIPATED RESIDUES:													
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Mean MOE = 25/0.014864 = 1682
High end MOE = 25/(0.4 x 0.25) = 250

MALES(13+ YRS)

S(13+ YRS)		ESTIMATED % OF POTENTIAL										MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Mean MOE = 25/0.014319 = 1746
High end MOE = 25/(0.4 x 0.25) = 250

11:33 Thursday, June 16, 1994 2

***** DETAILED ACUTE ANALYSIS INCLUDING AR'S: ALL STATISTICS BASED ON USERS' DAILY CONSUMPTION *****

***** NAME: PERMETHRIN *****

CASWELL NO: 65288 CFR NO: CFR180.378 A 00000.0500 000100.000 000100 Chronic Rat Systemic Eff. Lev. CORE GRADE DOC. NO. *

CAS NO: 52645-53-1 SHAUGHNESSY NO: 109701 B 00004.0000 008000.000 000100 Terata Rabbit Systemic Minimum *

*STATUS CODES: C 00000.7140 000500.000 000100 Chron-onco Mouse Systemic Blank *

*RDV INFO: The LD value used in this analysis is 0.25 MG/KG of BODY WEIGHT/DAY

*FILE INFO: No Tolerance Data Are Used--Without User Modifications.

***** AR DATA: No User Modifications *****

***** LISTING OF RELEVANT FOODS & FOOD FORMS, ORDERED BY MENU CATEGORY. MENU PATTERN = I *****

***** CHEMICAL IS ASSUMED TO BE UNIFORMLY DISTRIBUTED (WATER:OIL) *****

***** POPULATION = U.S. POP.--48 STATES *****

POPULATION = U.S. POP.--48 STATES									
FOOD CODE	FOOD AND FOOD FORM DESCRIPTION	MENU CATEGORY	NUMBER OF CONSUMER : DAYS AS PERCENT OF : POTENTIAL PERSON DAYS	TOLERANCE DATA		AR DATA		DAILY	
				VALUE	TYPE	VALUE	REF.	MAXIMUM RESIDUE (EXCL. AR)	ANTICIPATED RESIDUE (INCL. AR)
MENU CATEGORY 1: MEATS									
53001BA	BEEF-MEAT BYPRODUCTS								
21	COOKED-NFS		7.68			2.0000			0.427892
26	COOKED-FRESH-PICKLED, CORNED, OR CURED		0.88			2.0000			0.290240
53001BB	BEEF(ORGAN MEATS)-OTHER								
21	COOKED-NFS		7.72			2.0000			0.133236
51	COOKED-CANNED		0.22			2.0000			0.816694
53001DA	BEEF-DRIED								
21	COOKED-NFS		0.25			0.2500			0.241861
53001FA	BEEF(BONELESS)-FAT (BEEF TALLOW)								
10	RAW-FRESH OR NFS		27.74			3.0000			0.015763
21	COOKED-NFS		86.58			3.0000			0.515923
22	COOKED-FRESH-BAKED		52.96			3.0000			0.143947
23	COOKED-FRESH-BOILED		11.38			3.0000			0.875961
24	COOKED-FRESH-BROILED		18.46			3.0000			2.314064
25	COOKED-FRESH-FRIED		40.70			3.0000			0.160771
53001KA	BEEF(ORGAN MEATS)-KIDNEY								
21	COOKED-NFS		0.02			2.0000			5.425422
53001LA	BEEF(ORGAN MEATS)-LIVER								
25	COOKED-FRESH-FRIED		1.00			2.0000			4.086162
31	COOKED-FRESH OR CANNED		0.00			2.0000			12.499256
53001MA	BEEF(BONELESS)-LEAN (W/O REMOVEABLE FAT)								
10	RAW-FRESH OR NFS		0.00			0.2500			0.295850
21	COOKED-NFS		55.27			0.2500			0.314844
22	COOKED-FRESH-BAKED		4.67			0.2500			0.260013
23	COOKED-FRESH-BOILED		9.15			0.2500			0.198637
24	COOKED-FRESH-BROILED		18.46			0.2500			0.472122
53002BA	GOAT-MEAT BYPRODUCTS								
00	NOT SPECIFIED (NO CONSUMPTION)		0.00			2.0000			0.000000
53002BB	GOAT(ORGAN MEATS)-OTHER								
00	NOT SPECIFIED (NO CONSUMPTION)		0.00			2.0000			0.000000
53002FA	GOAT(BONELESS)-FAT								
23	COOKED-FRESH-BOILED		0.01			3.0000			0.941510
25	COOKED-FRESH-FRIED		0.00			3.0000			0.470459
53002KA	GOAT(ORGAN MEATS)-KIDNEY								
00	NOT SPECIFIED (NO CONSUMPTION)		0.00			2.0000			0.000000
53002LA	GOAT(ORGAN MEATS)-LIVER								
00	NOT SPECIFIED (NO CONSUMPTION)		0.00			2.0000			0.000000
53002MA	GOAT(BONELESS)-LEAN (W/O REMOVEABLE FAT)								
23	COOKED-FRESH-BOILED		0.01			0.2500			0.375062
25	COOKED-FRESH-FRIED		0.00			0.2500			0.180388
53003AA	HORSE								
00	NOT SPECIFIED (NO CONSUMPTION)		0.00			3.0000			0.000000
53005BA	SHEEP-MEAT BYPRODUCTS								
21	COOKED-NFS		0.00			2.0000			2.523664
53005BB	SHEEP(ORGAN MEATS)-OTHER								
21	COOKED-NFS		0.00			2.0000			3.162769

53005FA SHEEP(BONELESS)-FAT	0.61	3.0000	2.078826
21 COOKED-NFS			
53005KA SHEEP(ORGAN MEATS)-KIDNEY	0.00	2.0000	1.147423
21 COOKED-NFS			
53005LA SHEEP(ORGAN MEATS)-LIVER	0.00	2.0000	0.000000
00 NOT SPECIFIED (NO CONSUMPTION)			
53005MA SHEEP(BONELESS)-LEAN (W/O REMOVEABLE FAT)	0.62	0.2500	0.443826
21 COOKED-NFS	0.04	0.2500	0.675842
31 COOKED-FRESH OR CANNED			
53006BA PORK-MEAT BYPRODUCTS	8.60	3.0000	0.883115
21 COOKED-NFS			
53006BB PORK(ORGAN MEATS)-OTHER			
21 COOKED-NFS	6.68	3.0000	0.159104
26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0.88	3.0000	0.084272
53006FA PORK(BONELESS)-FAT (INCLUDING LARD)			
10 RAW-FRESH OR NFS	27.80	3.0000	0.018701
21 COOKED-NFS	92.99	3.0000	0.313721
23 COOKED-FRESH-BOILED	11.36	3.0000	0.609292
25 COOKED-FRESH-FRIED	40.60	3.0000	0.179359
26 COOKED-FRESH-PICKLED, CORNED, OR CURED	24.16	3.0000	0.765001
53006KA PORK(ORGAN MEATS)-KIDNEY			
21 COOKED-NFS	0.00	3.0000	4.405286
53006LA PORK(ORGAN MEATS)-LIVER			
21 COOKED-NFS	0.91	3.0000	1.445704
25 COOKED-FRESH-FRIED	0.03	3.0000	4.702047
53006MA PORK(BONELESS)-LEAN (W/O REMOVEABLE FAT)			
21 COOKED-NFS	33.75	0.2500	0.134439
25 COOKED-FRESH-FRIED	3.16	0.2500	0.378033
26 COOKED-FRESH-PICKLED, CORNED, OR CURED	24.22	0.2500	0.167011
55008BA TURKEY-BYPRODUCTS			
21 COOKED-NFS	0.01	0.2500	0.058504
26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0.19	0.2500	0.028041
55008LA TURKEY-GIBLETS (LIVER)			
21 COOKED-NFS	0.00	0.2500	0.358153
25 COOKED-FRESH-FRIED	0.00	0.2500	0.156686
55008MA TURKEY-FLESH(W/O SKIN, W/O BONES)			
21 COOKED-NFS	0.25	0.0500	0.096148
31 COOKED-FRESH OR CANNED	0.07	0.0500	0.129619
62 COOKED-FRESH OR FROZEN-BAKED	0.09	0.0500	0.060583
55008MB TURKEY-FLESH(+SKIN, W/O BONES)			
21 COOKED-NFS	2.41	0.0500	0.094672
25 COOKED-FRESH-FRIED	0.08	0.0500	0.189271
55008MC TURKEY-UNSPECIFIED			
21 COOKED-NFS	0.01	0.0500	0.041885
55013BA POULTRY, OTHER-BYPRODUCTS			
00 NOT SPECIFIED (NO CONSUMPTION)	0.00	0.2500	0.000000
55013LA POULTRY, OTHER-GIBLETS(LIVER)			
25 COOKED-FRESH-FRIED	0.03	0.2500	0.210043
55013MA POULTRY, OTHER-FLESH (+SKIN, W/O BONES)			
21 COOKED-NFS	0.20	0.0500	0.140532
55015BA CHICKEN-BYPRODUCTS			
00 NOT SPECIFIED (NO CONSUMPTION)	0.00	0.2500	0.000000
55015LA CHICKEN-GIBLETS(LIVER)			
21 COOKED-NFS	0.03	0.2500	0.138212
25 COOKED-FRESH-FRIED	0.27	0.2500	0.421802
26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0.31	0.2500	0.031372
55015MA CHICKEN-FLESH(W/O SKIN, W/O BONES)			
21 COOKED-NFS	2.34	0.0500	0.080541
22 COOKED-FRESH-BAKED	0.55	0.0500	0.048361
25 COOKED-FRESH-FRIED	0.19	0.0500	0.062543
31 COOKED-FRESH OR CANNED	0.76	0.0500	0.060538
53 COOKED-CANNED-BOILED	0.73	0.0500	0.030851
55015MB CHICKEN-FLESH(+SKIN, W/O BONES)			
21 COOKED-NFS	11.23	0.0500	0.091888
25 COOKED-FRESH-FRIED	7.31	0.0500	0.117715

MENU CATEGORY 3: EGGS

55014AA EGGS-WHOLE			
10 RAW-FRESH OR NFS	3.98	1.0000	0.110054
21 COOKED-NFS	70.00	1.0000	0.445768
22 COOKED-FRESH-BAKED	39.86	1.0000	0.152260
23 COOKED-FRESH-BOILED	16.19	1.0000	0.153204
25 COOKED-FRESH-FRIED	17.83	1.0000	0.917441
55014AB EGGS-WHITE ONLY			
10 RAW-FRESH OR NFS	0.31	1.0000	0.035479
21 COOKED-NFS	1.30	1.0000	0.055980
22 COOKED-FRESH-BAKED	6.21	1.0000	0.103903
62 COOKED-FRESH OR FROZEN-BAKED	0.27	1.0000	0.219745
81 COOKED-FROZEN	0.15	1.0000	0.934000
55014AC EGGS-YOLK ONLY			
10 RAW-FRESH OR NFS	0.38	1.0000	0.213454
21 COOKED-NFS	7.79	1.0000	0.025277
25 COOKED-FRESH-FRIED	5.56	1.0000	0.045743
31 COOKED-FRESH OR CANNED	0.46	1.0000	0.295566

MENU CATEGORY 4: MILK: NON-FAT SOLIDS

50000DB MILK-NON-FAT SOLIDS			
10 RAW-FRESH OR NFS	78.77	0.2500 C	0.232497
21 COOKED-NFS	90.38	0.2500 C	0.041042
51 COOKED-CANNED	3.51	0.2500 C	0.234136
50000SA MILK SUGAR (LACTOSE)			
21 COOKED-NFS	0.01	0.2500	0.026014
51 COOKED-CANNED	0.56	0.2500	1.728510

MENU CATEGORY 5: MILK: FAT SOLIDS

50000FA MILK-FAT SOLIDS			
10 RAW-FRESH OR NFS	81.63	6.2500 C	2.612997
21 COOKED-NFS	90.30	6.2500 C	0.631612
51 COOKED-CANNED	3.51	6.2500 C	0.233000

MENU CATEGORY 6: GRAINS(EXCL. RICE), SOYBEANS, VEG. OILS

15004AA CORN, POP			
21 COOKED-NFS	2.35	0.0500	0.014728
24002EA CORN, GRAIN-ENDOSPERM			
10 RAW-FRESH OR NFS	0.17	0.0500	0.018589
21 COOKED-NFS	20.63	0.0500	0.005315
22 COOKED-FRESH-BAKED	20.54	0.0500	0.029980
23 COOKED-FRESH-BOILED	2.99	0.0500	0.033931
24002HA CORN, GRAIN-BRAN			
00 NOT SPECIFIED (NO CONSUMPTION)	0.00	0.0500	0.000000
24007AA WHEAT-ROUGH			
10 RAW-FRESH OR NFS	0.00	0.0500	0.022238
21 COOKED-NFS	2.34	0.0500	0.019631
22 COOKED-FRESH-BAKED	16.06	0.0500	0.026700
23 COOKED-FRESH-BOILED	5.92	0.0500	0.039029
24007GA WHEAT-GERM			
10 RAW-FRESH OR NFS	0.00	0.0500	0.005225
22 COOKED-FRESH-BAKED	1.70	0.0500	0.002353
24007HA WHEAT-BRAN			
10 RAW-FRESH OR NFS	0.08	0.0500	0.004729
21 COOKED-NFS	0.30	0.0500	0.002679
22 COOKED-FRESH-BAKED	4.64	0.0500	0.012954
24007NA WHEAT-FLOUR			
10 RAW-FRESH OR NFS	0.21	0.0500	0.008237
21 COOKED-NFS	76.91	0.0500	0.045996
22 COOKED-FRESH-BAKED	64.96	0.0500	0.035868
25 COOKED-FRESH-FRIED	24.25	0.0500	0.019244
270020A CORN, GRAIN-OIL			
18 PROCESSED OIL	96.73	0.0500	0.001186

270030A COTTONSEED-OIL	96.70	0.5000	0.010594
18 PROCESSED OIL			
27003WA COTTONSEED-MEAL	1.13	0.5000	0.005184
18 PROCESSED OIL			
270100A SOYBEANS-OIL	97.39	0.0500	0.016645
18 PROCESSED OIL			
28023AA SOYBEANS-UNSPECIFIED	0.56	0.0500	0.004560
21 COOKED-NFS			
28023AB SOYBEANS-MATURE SEEDS DRY	0.14	0.0500	0.010218
10 RAW-FRESH OR NFS	0.02	0.0500	0.034002
21 COOKED-NFS	0.02	0.0500	0.023726
23 COOKED-FRESH-BOILED	0.22	0.0500	0.005814
25 COOKED-FRESH-FRIED	0.04	0.0500	0.015325
31 COOKED-FRESH OR CANNED			
28023WA SOYBEANS-FLOUR, FULL FAT	1.65	0.0500	0.002844
21 COOKED-NFS	2.11	0.0500	0.003443
22 COOKED-FRESH-BAKED	4.70	0.0500	0.000633
31 COOKED-FRESH OR CANNED			
28023WB SOYBEANS-FLOUR, LOW FAT	0.94	0.0500	0.005251
21 COOKED-NFS			
28023WC SOYBEANS-FLOUR, DEFATTED	0.31	0.0500	0.010607
10 RAW-FRESH OR NFS	1.85	0.0500	0.002162
21 COOKED-NFS	3.69	0.0500	0.007224
22 COOKED-FRESH-BAKED	0.22	0.0500	0.069907
51 COOKED-CANNED	3.73	0.0500	0.003568
53 COOKED-CANNED-BOILED			

MENU CATEGORY 7: STARCHY VEG., INCL. RICE, SWEETPOTATO

14013AA POTATOES(WHITE)-WHOLE	1.59	0.0500	0.141780
10 RAW-FRESH OR NFS	7.99	0.0500	0.093948
21 COOKED-NFS	4.93	0.0500	0.147118
22 COOKED-FRESH-BAKED			
14013AB POTATOES(WHITE)-UNSPECIFIED	0.63	0.0500	0.000672
22 COOKED-FRESH-BAKED			
14013AC POTATOES(WHITE)-PEELED	17.81	0.0500	0.020253
21 COOKED-NFS	2.40	0.0500	0.091201
22 COOKED-FRESH-BAKED	15.31	0.0500	0.141860
23 COOKED-FRESH-BOILED	15.32	0.0500	0.076910
25 COOKED-FRESH-FRIED			
14013DA POTATOES(WHITE)-DRY	0.07	0.0500	0.270456
10 RAW-FRESH OR NFS	0.44	0.0500	0.056184
31 COOKED-FRESH OR CANNED			
14013HA POTATOES(WHITE)-PEEL ONLY	0.00	0.0500	0.028640
22 COOKED-FRESH-BAKED			
14019AA TURNIPS-ROOTS	0.04	1.0000	1.388924
10 RAW-FRESH OR NFS	0.39	1.0000	1.878977
21 COOKED-NFS			

MENU CATEGORY 8: TOMATOES

11005AA TOMATOES-WHOLE	24.82	2.0000	2.019073
10 RAW-FRESH OR NFS	12.52	2.0000	3.147109
21 COOKED-NFS	7.28	2.0000	1.319912
31 COOKED-FRESH OR CANNED			

MENU CATEGORY 9: OTHER VEGETABLES, INCL. BRASSICA

10010AA CUCUMBERS	3.84	3.0000	3.042060
10 RAW-FRESH OR NFS	4.24	3.0000	2.234826
11 RAW-FRESH-PICKLED,CORNED,OR CURED	3.90	3.0000	0.180560
21 COOKED-NFS			
10011AA PUMPKIN	0.01	3.0000	7.801534
21 COOKED-NFS	0.22	3.0000	0.789366
22 COOKED-FRESH-BAKED	0.43	3.0000	2.411659
62 COOKED-FRESH OR FROZEN-BAKED			
10013AA SQUASH-SUMMER			

10 RAW-FRESH OR NFS	0.07	3.0000	6.208505
21 COOKED-NFS	1.39	3.0000	6.403085
10014AA SQUASH-WINTER			
10 RAW-FRESH OR NFS	0.00	3.0000	5.640913
21 COOKED-NFS	1.00	3.0000	8.463731
31 COOKED-FRESH OR CANNED	0.07	3.0000	17.990602
10017AA BITTER MELON			
21 COOKED-NFS	0.00	3.0000	3.531824
10020AA TONELGOURD			
00 NOT SPECIFIED (NO CONSUMPTION)	0.00	3.0000	0.000000
11001AA EGGPLANT			
10 RAW-FRESH OR NFS	0.00	1.0000	0.734214
21 COOKED-NFS	0.31	1.0000	1.775549
25 COOKED-FRESH-FRIED	0.04	1.0000	1.582662
11003AA PEPPERS, SWEET, GARDEN			
10 RAW-FRESH OR NFS	2.31	1.0000	0.296709
21 COOKED-NFS	8.57	1.0000	0.173772
13002AA CELERY			
10 RAW-FRESH OR NFS	20.18	5.0000	1.184686
21 COOKED-NFS	4.94	5.0000	1.329097
13003AA CHICORY (FRENCH OR BELGIAN ENDIVE)			
10 RAW-FRESH OR NFS	0.24	20.0000	5.564583
13005AA BROCCOLI			
21 COOKED-NFS	0.41	1.0000	0.871573
31 COOKED-FRESH OR CANNED	2.05	1.0000	2.004654
63 COOKED-FRESH OR FROZEN-BOILED	0.24	1.0000	2.265643
13006AA BRUSSEL SPROUTS			
21 COOKED-NFS	0.07	1.0000	1.751860
23 COOKED-FRESH-BOILED	0.32	1.0000	1.855017
13007AA CABBAGE-GREEN AND RED			
10 RAW-FRESH OR NFS	4.09	6.0000	5.701807
11 RAW-FRESH-PICKLED, CORNED, OR CURED	0.81	6.0000	8.751134
21 COOKED-NFS	1.94	6.0000	13.583687
13008AA CAULIFLOWER			
10 RAW-FRESH OR NFS	0.07	1.0000	1.376612
21 COOKED-NFS	0.94	1.0000	1.577508
13009AA COLLARDS			
51 COOKED-CANNED	0.01	20.0000	37.507630
63 COOKED-FRESH OR FROZEN-BOILED	0.60	20.0000	61.243803
13010AA CABBAGE-CHINESE/CELERY, INC. BOK CHOY			
10 RAW-FRESH OR NFS	0.02	6.0000	6.638998
21 COOKED-NFS	0.35	6.0000	7.436292
13013AA LETTUCE-LEAFY VARIETIES			
10 RAW-FRESH OR NFS	1.02	20.0000	8.562070
13014AA DANDELION			
63 COOKED-FRESH OR FROZEN-BOILED	0.02	20.0000	43.697717
13015AA ENDIVE, CURLY AND ESCAROLE			
10 RAW-FRESH OR NFS	0.24	20.0000	5.564583
21 COOKED-NFS	0.06	20.0000	16.936710
13016AA FENNEL			
00 NOT SPECIFIED (NO CONSUMPTION)	0.00	5.0000	0.000000
13017AA CRESS, GARDEN, FIELD			
00 NOT SPECIFIED (NO CONSUMPTION)	0.00	20.0000	0.000000
13018AA ARTICHOKE-GLOBE			
21 COOKED-NFS	0.13	10.0000	23.437049
13020AA LETTUCE-UNSPECIFIED			
10 RAW-FRESH OR NFS	3.42	20.0000	5.377914
13022AA PARSLEY			
10 RAW-FRESH OR NFS	3.02	20.0000	0.803163
21 COOKED-NFS	4.66	20.0000	0.990859
53 COOKED-CANNED-BOILED	0.70	20.0000	0.625231
13023AA RHUBARB			
10 RAW-FRESH OR NFS	0.02	20.0000	40.362459
21 COOKED-NFS	0.01	20.0000	29.640021
31 COOKED-FRESH OR CANNED	0.09	20.0000	44.146887
62 COOKED-FRESH OR FROZEN-BAKED	0.12	20.0000	22.725882
13024AA SPINACH			

10 RAW-FRESH OR NFS	0.45	20.0000	33.118536
21 COOKED-NFS	2.18	20.0000	6.105316
31 COOKED-FRESH OR CANNED	1.24	20.0000	46.412455
13025AA SWISS CHARD			
10 RAW-FRESH OR NFS	0.01	20.0000	32.708426
31 COOKED-FRESH OR CANNED	0.08	20.0000	35.805742
63 COOKED-FRESH OR FROZEN-BOILED	0.00	20.0000	43.651298
13026AA TURNIPS-TOPS			
10 RAW-FRESH OR NFS	0.19	20.0000	45.965658
21 COOKED-NFS	0.19	20.0000	35.378544
31 COOKED-FRESH OR CANNED	0.30	20.0000	45.569793
13027AA WATERCRESS			
10 RAW-FRESH OR NFS	0.04	5.0000	3.123454
21 COOKED-NFS	0.00	5.0000	10.822431
13039AA CRESS,UPLAND			
00 NOT SPECIFIED (NO CONSUMPTION)	0.00	20.0000	0.000000
13045AA LETTUCE-HEAD VARIETIES			
10 RAW-FRESH OR NFS	29.14	20.0000	14.268664
21 COOKED-NFS	3.36	20.0000	2.409104
14007AA GARLIC			
10 RAW-FRESH OR NFS	0.42	0.1000	0.000728
21 COOKED-NFS	5.62	0.1000	0.000859
32 COOKED-FRESH OR CANNED-BAKED	3.73	0.1000	0.000698
14011AA ONIONS-DRY-BULB (CIPOLLINI)			
10 RAW-FRESH OR NFS	6.40	0.1000	0.028961
21 COOKED-NFS	33.88	0.1000	0.020975
22 COOKED-FRESH-BAKED	5.23	0.1000	0.020049
31 COOKED-FRESH OR CANNED	7.78	0.1000	0.008354
15005AA CORN, SWEET			
10 RAW-FRESH OR NFS	0.03	0.1000	0.034713
21 COOKED-NFS	11.48	0.1000	0.175410
31 COOKED-FRESH OR CANNED	1.67	0.1000	0.227972
15029AA SOYBEANS-SPROUTED SEEDS			
00 NOT SPECIFIED (NO CONSUMPTION)	0.00	0.0500	0.000000
16002AA ASPARAGUS			
21 COOKED-NFS	0.67	1.0000	1.768418
23 COOKED-FRESH-BOILED	0.09	1.0000	1.647499
16003AA MUSHROOMS			
10 RAW-FRESH OR NFS	0.15	6.0000	3.668642
21 COOKED-NFS	2.70	6.0000	3.389642
31 COOKED-FRESH OR CANNED	0.90	6.0000	2.564495
53 COOKED-CANNED-BOILED	0.69	6.0000	1.307878
MENU CATEGORY 10: FRUITS			
04001AA APPLES-FRESH			
10 RAW-FRESH OR NFS	9.58	0.0500	0.161178
21 COOKED-NFS	0.86	0.0500	0.039979
31 COOKED-FRESH OR CANNED	4.21	0.0500	0.144933
62 COOKED-FRESH OR FROZEN-BAKED	2.24	0.0500	0.053562
04001DA APPLES-DRIED			
10 RAW-FRESH OR NFS	0.02	0.0500	0.186444
22 COOKED-FRESH-BAKED	0.01	0.0500	0.175180
62 COOKED-FRESH OR FROZEN-BAKED	0.05	0.0500	0.049838
04001JA APPLES-JUICE			
15 RAW-FRESH OR CANNED	2.32	0.0500	0.552518
31 COOKED-FRESH OR CANNED	15.91	0.0500	0.023382
04003AA PEARS-FRESH			
10 RAW-FRESH OR NFS	1.66	3.0000	9.607410
31 COOKED-FRESH OR CANNED	3.45	3.0000	4.104407
51 COOKED-CANNED	0.24	3.0000	28.605052
62 COOKED-FRESH OR FROZEN-BAKED	0.02	3.0000	4.053318
04003DA PEARS-DRIED			
10 RAW-FRESH OR NFS	0.01	3.0000	6.647387
21 COOKED-NFS	0.00	3.0000	7.919604
05002AA CHERRIES-FRESH			
10 RAW-FRESH OR NFS	0.32	3.0000	6.427147

21 COOKED-NFS	0.68	3.0000	2.003863
31 COOKED-FRESH OR CANNED	6.51	3.0000	0.591578
62 COOKED-FRESH OR FROZEN-BAKED	0.60	3.0000	3.808446
05002DA CHERRIES-DRIED			
00 NOT SPECIFIED (NO CONSUMPTION)	0.00	3.0000	0.000000
15 RAW-FRESH OR CANNED			
21 COOKED-NFS	0.05	3.0000	28.475429
10 RAW-FRESH OR NFS	0.18	3.0000	0.755919
21 COOKED-NFS			
05004AA PEACHES-FRESH	3.81	5.0000	13.038116
10 RAW-FRESH OR NFS	12.14	5.0000	0.408324
21 COOKED-NFS	4.70	5.0000	8.652896
31 COOKED-FRESH OR CANNED	0.23	5.0000	56.747780
51 COOKED-CANNED			
05004DA PEACHES-DRIED	0.00	5.0000	57.425995
10 RAW-FRESH OR NFS	0.01	5.0000	16.463402
21 COOKED-NFS			
06001AA AVOCADOS	0.79	1.0000	1.470017
10 RAW-FRESH OR NFS			
06010AA PAPAYAS-UNSPECIFIED	0.00	1.0000	0.000000
00 NOT SPECIFIED (NO CONSUMPTION)			
06010AB PAPAYAS-PULP	0.05	1.0000	2.509893
10 RAW-FRESH OR NFS	0.00	1.0000	1.068399
51 COOKED-CANNED			
06010DA PAPAYAS-DRIED	3.69	1.0000	0.047303
10 RAW-FRESH OR NFS			
06010JA PAPAYAS-JUICE	0.05	1.0000	8.551508
10 RAW-FRESH OR NFS			
06018AA KIWI	0.00	2.0000	3.318647
10 RAW-FRESH OR NFS			
10002AA CANTALOUPE-UNSPECIFIED	0.00	3.0000	0.000000
00 NOT SPECIFIED (NO CONSUMPTION)			
10002AB CANTALOUPE-PULP	1.45	3.0000	9.235860
10 RAW-FRESH OR NFS	0.01	3.0000	9.631765
21 COOKED-NFS			
10003AA CASABAS	0.02	3.0000	10.402608
10 RAW-FRESH OR NFS			
10004AA CRENSHAW	0.00	3.0000	0.000000
00 NOT SPECIFIED (NO CONSUMPTION)			
10005AA HONEYDEW MELONS	0.38	3.0000	14.875697
10 RAW-FRESH OR NFS			
10007AA PERSTON MELONS	0.00	3.0000	0.000000
00 NOT SPECIFIED (NO CONSUMPTION)			
10008AA WATERMELON	1.06	3.0000	21.711673
10 RAW-FRESH OR NFS	0.10	3.0000	0.275551
21 COOKED-NFS			
MENU CATEGORY 11: NUTS AND SEEDS			
03001AA ALMONDS			
10 RAW-FRESH OR NFS	0.56	0.0500	0.012000
21 COOKED-NFS	0.29	0.0500	0.016738
22 COOKED-FRESH-BAKED	1.22	0.0500	0.002267
03005AA FILBERTS, HAZELNUTS			
10 RAW-FRESH OR NFS	0.37	0.0500	0.004847
21 COOKED-NFS	0.02	0.0500	0.006827
22 COOKED-FRESH-BAKED	0.07	0.0500	0.001507
03009AA WALNUTS			
10 RAW-FRESH OR NFS	0.80	0.0500	0.009184
21 COOKED-NFS	0.04	0.0500	0.004893
22 COOKED-FRESH-BAKED	7.39	0.0500	0.002315
03011AA PISTACHIO NUTS			
10 RAW-FRESH OR NFS	0.03	0.1000	0.083337

MENU CATEGORY 12: SUGARS

24002SA	CORN SUGAR				
10	RAW-FRESH OR NFS	5.04	0.0500		0.005744
21	COOKED-NFS	49.09	0.0500		0.012947
22	COOKED-FRESH-BAKED	16.27	0.0500		0.004248

MENU CATEGORY 13: MISCELLANEOUS FOODS

08022AA	HORSERADISH				
11	RAW-FRESH-PICKLED, CORNED, OR CURED	0.11	1.0000		0.069900