Food Contact Sanitizing Solutions Model (FCSSM)
For Estimating Indirect Dietary Exposure
To Components of Sanitizing Solutions Used in Commercial Settings

User Guide

(Version 1 - April 2017)

Contents

The Agency notes the following:
This manual contains materials directly taken from *Estimating Indirect Dietary Exposure From The Use Of Food Contact Sanitizing Solutions In Commercial Settings*, June 14, 2016, as prepared by the American Chemistry Council Biocides Panel, herein referred to as the Panel.

Introduction

Effective sanitization of food-contact surfaces and equipment in commercial food processing facilities is critical to the prevention of the spread of food-borne pathogens. In these types of facilities, there is a high potential for indirect exposure to residues of sanitizing solutions when food is prepared or processed on surfaces that have been sanitized. The solutions are not applied directly to any food item but are applied to surfaces on which food is prepared or processed. The resulting residues which may be in or on food need to be evaluated by the United States Environmental Protection Agency (EPA) to assess its safety for human health and the environment.

The purpose of this User Guide is to provide background information on the Food Contact Sanitizing Solution Model (FCSSM) and to familiarize users with the inputs that are required to run the model. The model consists of Microsoft Excel spreadsheets that automatically calculate exposure and risk estimates based on data entered by the user.

Brief Overview of Use Scenarios

EPA regulates food contact surface sanitizers (FCSS) under the Federal Food, Drug, and Cosmetic Act (FFDCA) Section 408 by way of three different use scenarios, which differ in the extent of permissible use. Antimicrobial active ingredients may be listed for use in antimicrobial formulations (food contact surface sanitizing solutions) under three "Use Scenarios" associated with 40CFR180.940(a), 40CFR180.940(b), and 40CFR180.940(c). The use scenarios are not tiered but rather represent different use areas, with each more limited than the previous. It is possible, however, that a product or compound that exceeds the level of concern for a broader use scenario (40CFR180.940 (a)) could limit product usage to a more restricted use scenario (40CFR180.940 (b-c)).

- **Use Scenario 1:** consists of substances listed under 40CFR180.940(a) for application in an antimicrobial formulation to food contact surfaces in public eating places, dairy processing equipment, and food processing equipment and utensils.

The methodology for evaluating indirect dietary exposures from uses under Use Scenario 1 remains unchanged from the Food and Drug Administration's (FDA's) and EPA/OPP's established methodology.

- **Use Scenario 2:** consists of substances listed under 40CFR180.940(b) for application in an antimicrobial formulation to dairy processing equipment, and food processing equipment and utensils.
- **Use Scenario 3:** consists of substances listed under 40CFR180.940(c) for application in an antimicrobial formulation to food processing equipment and utensils (excluding dairy).

The FCSSM has been developed to evaluate indirect dietary exposures resulting from substances associated with Use Scenarios 2 and 3 that are listed under 40CFR180.940(b) and 40CFR180.940(c), respectively. The FCSSM updates FDA models used to establish tolerance regulations for food contact surface sanitizers (FCSS) and provide greater specificity and transparency.

The FCSSM incorporates food consumption data (in mg/kg-body weight/day) from the 2011-2012 cycles of the U.S. Department of Agriculture's (USDA's) National Health and Nutrition Examination Survey, What We Eat in America (NHANES/WWEIA). The FCSSM also updates the factors and assumptions underlying the use scenario estimates but does not otherwise change the basic approach taken by FDA. The FCSSM should only be used for aforementioned Use Scenarios 2 and 3 (40CFR180.940 (b-c) for food contact surfaces sanitizers. The FCSSM should not be used to evaluate indirect dietary exposures resulting from antimicrobial use on food-contact surfaces in public eating places (40CFR180.940 (a)).

Brief Overview of FCSSM

The FCSSM allows determination of both acute and chronic exposure estimates for Use Scenarios 2 and 3. The calculated exposures for the use scenario are compared to the chemical-specific population-adjusted dose (PAD) to determine whether the exposure and risk estimates are below the chemical-specific level of concern (i.e. < 100% PAD). The FCSSM is generic in nature in that it does not rely on chemical-specific residue data or chemical-specific assumptions. General assumptions included in the FCSSM include:

- A food weight factor (FWF) is used to represent the weight of food per unit surface area of the equipment, with the surface area of typical CIP systems provided by the relevant industry groups.
- It is assumed, following FDA guidance, that 1 mg/cm² of product residue is present on the surfaces and that all residue (100%) transfers to the food being processed.
- Daily intake of each of the relevant individual food items was determined for each population subgroup. Summary consumption statistics for food categories and U.S. subpopulations were developed by risksciences.net and Sielken & Associates using the consumption data in NHANES
    - Specific intake amounts for each population subgroup can be seen on the corresponding use scenario tabs in the Excel spreadsheet
- The model assumes that an individual consumes every single item in the food category. Summary consumption statistics were developed for each available category within each subpopulation.

Use Scenario 2: ***All food processing equipment and utensils, including dairy***. This use scenario estimates dietary exposure in food processing areas, on food processing equipment, and on utensils based on the worst-case scenario of Clean-In-Place (CIP) uses of food contact sanitizing solutions.

Use Scenario 3: ***All food processing equipment and utensils, excluding dairy***. This use scenario is identical to Use Scenario 2 except that main categories of dairy items were removed from the analysis.

Subpopulations of Interest

FCSS estimates acute (95th percentile) and chronic indirect dietary exposures for the U.S. population as a whole and eight subpopulations, grouped by age. The populations of interest are:

- General U.S. population
- All Infants (<1 year old)
- Children 1-2 years old
- Children 3-5 years old
- Children 6-12 years old
- Youth 13-19 years old
- Adults 20-49 years old
- Adults 50-99 years old
- Females 13-49 years old

Summary consumption statistics for food categories and U.S. subpopulations were developed by risksciences.net and Sielken & Associates using the consumption data in NHANES. Summary consumptions statistics were developed for each available category within each subpopulation. The summary statistics of interest are the mean and 95th percentile of consumption over all consuming person-days (i.e., for those person-days in which some consumption of a category food occurred).

Food Ingredient Classification

The FCSSM relies on previously established categories of food by FDA identified in 21 CFR 170.3(n). From the 43 possible food categories in 21 CFR 170.3(n), FDA selected 19 which, in their professional judgment, were "foods processed in a manner where CIP sanitizing might be employed." The same categories have been maintained in FCSSM. The categories are:

- beverages, alcoholic
- beverages, nonalcoholic
- cheeses, processed
- cheeses, cottage cheese

- condiments
- egg products
- salad dressings including mayonnaise
- frozen dairy desserts
- gelatins, puddings
- jams, jellies
- milk
- fruits, canned
- fruit juices not fresh
- vegetables, juices
- cream-style corn
- candy
- soups, tomato based
- soups, creamed
- soups, other, canned

The 7619 foods identified in NHANES/WWEIA[1] (main food description table) were then placed into the appropriate categories listed above for Use Scenarios 2 and 3 for which CIP sanitization is likely to be performed.

Foods that did not fit into one of the above 19 groupings were excluded. It should be noted that CIP is not relevant to foods eaten raw or that are considered to be raw agricultural commodities (RACs), nor to foods that are 'processed' in a home setting (e.g., salsa prepared at home would be excluded, salsa commercially prepared or not identified as to where it was prepared was included).

In general, entire groupings in the NHANES/WWEIA database were included or excluded, based on the first 3-4 digits of the 8-digit food coding scheme in NHANES/WWEIA, unless there was a clear basis for not doing so. For example, in the category "milk and milk products", subgroup "milk and milk drinks" (codes starting 11), 'milk, human' (code 110) was excluded because human milk would not come in contact with a food contact sanitizing solution in a dairy process facility. All other foods within the milk and milk

[1] U.S. Department of Agriculture, Agricultural Research Service. 2014. *USDA Food and Nutrient Database for Dietary Studies 2011-2012*. Food Surveys Research Group Home Page, http://www.ars.usda.gov/ba/bhnrc/fsrg. Also see documentation for all foods as http://www.ars.usda.gov/SP2UserFiles/Place/80400530/pdf/fndds/fndds_2011_2012_doc.pdf (viewed on 6/13/2016)

products grouping were included, regardless of whether these may or may not be processed in equipment where CIP with FCSS is used.

FCSSM Estimated Daily Dietary Intakes/Exposure Calculations

Using all of the information above, two separate Microsoft Excel spreadsheets have been developed for Use Scenario 2: one for acute dietary intake and a separate one for chronic intake that allow the dietary exposure estimates to be calculated by entering the appropriate at-use concentration of the FCSS component (in µg/cm^2) into the highlighted cells in the spreadsheet.

The calculation for the estimated dietary intake (EDI) for this use scenario for the FCSS residue is:

$$EDI\left(\frac{\mu g}{kg\ BW}/_{day}\right) = \left(\frac{\left(1\frac{mg}{cm^2}\right)\left(FCSS\ Use\ Conc.\left(\frac{\mu g}{1000\ mg}\right)\right)}{\frac{mass\ food\ (g)}{surface\ area\ (cm^2)}}\right)\left(Food\ Intake\left(\frac{g}{kg\ BW}/_{day}\right)\right) = FCSS\ Intake\left(\frac{\mu g}{kg\ BW}/_{day}\right)$$

The EDI's for each food group within an age category are summed to give the total estimated dietary consumption of residues of chemical X for that age group.

For Use Scenario 3, the dietary exposure calculations are identical to that for Use Scenario 2 except that dairy and dairy products are excluded. Similar to Use Scenario 2, two separate spreadsheets are provided for acute and chronic exposure estimates under Use Scenario 3.

The average and 95% consumption data of each category and population subgroup for which CIP is relevant are shown in Appendix 1.

Getting Started – Performing an Assessment

This assessment requires minimal input on the part of the user. The following information is needed to complete an assessment on an active ingredient using FCSSM:

- The in-use active ingredient concentration (from the label); and
- The acute and chronic population adjusted doses (aPAD[2], cPAD).

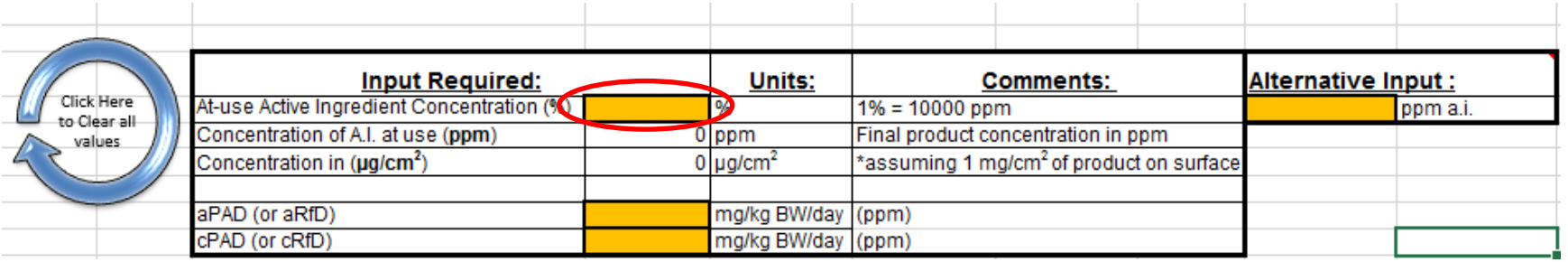
[2] In some cases, there may be different aPADs for the general U.S. population and females 13-49 years of age. Different PADs can be used for all population subgroups If no acute endpoint has been identified, only a chronic assessment should be performed.

The same approach can be used for other active ingredients within the product, if needed.

Before you begin, press the button labeled "Click here to clear all values"

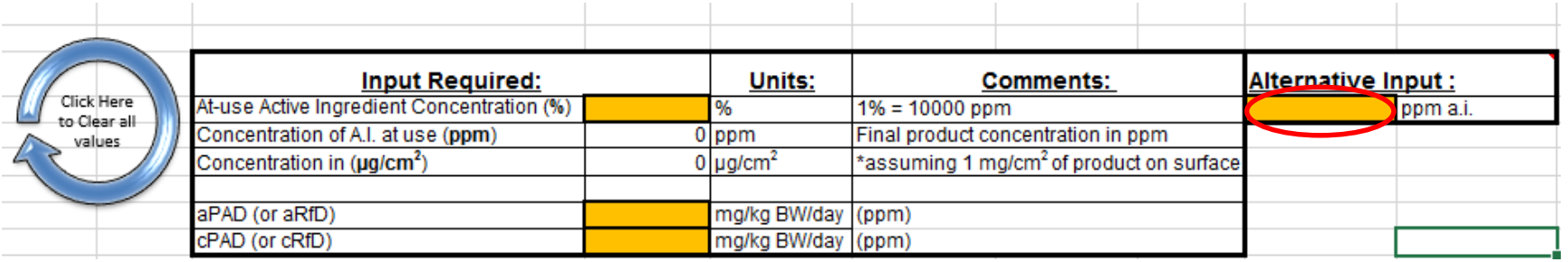
Step 1. Determine the at-use concentration of the compound of interest

The label identifies the at-use concentration of the active ingredient (a.i). Usually this concentration is listed on the label as a percentage. Input this percentage in the corresponding cell. If there is any dilution for the product, determine the concentration for the product to be applied after dilution. Enter the final concentration (%) into the orange cell labeled "At-use Active Ingredient Concentration (**%**)."



Input Required:		Units:	Comments:	Alternative Input :	
At-use Active Ingredient Concentration (%)		%	1% = 10000 ppm		ppm a.i.
Concentration of A.I. at use (**ppm**)	0	ppm	Final product concentration in ppm		
Concentration in (**µg/cm²**)	0	µg/cm²	*assuming 1 mg/cm² of product on surface		
aPAD (or aRfD)		mg/kg BW/day	(ppm)		
cPAD (or cRfD)		mg/kg BW/day	(ppm)		

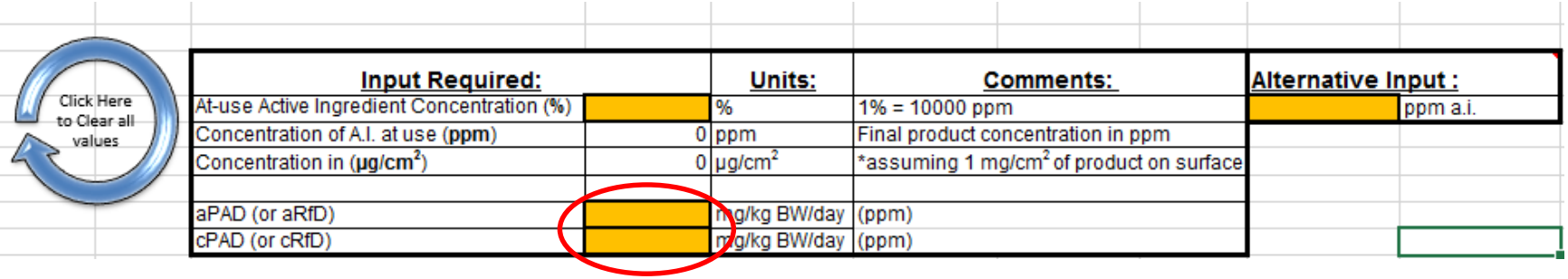
If the label gives a concentration in ppm, use the calculations box on the right labeled "Alternative Input".



Input Required:		Units:	Comments:	Alternative Input :	
At-use Active Ingredient Concentration (%)		%	1% = 10000 ppm		ppm a.i.
Concentration of A.I. at use (**ppm**)	0	ppm	Final product concentration in ppm		
Concentration in (**µg/cm²**)	0	µg/cm²	*assuming 1 mg/cm² of product on surface		
aPAD (or aRfD)		mg/kg BW/day	(ppm)		
cPAD (or cRfD)		mg/kg BW/day	(ppm)		

Step 2: Enter the aPAD and cPAD (or corresponding reference doses)

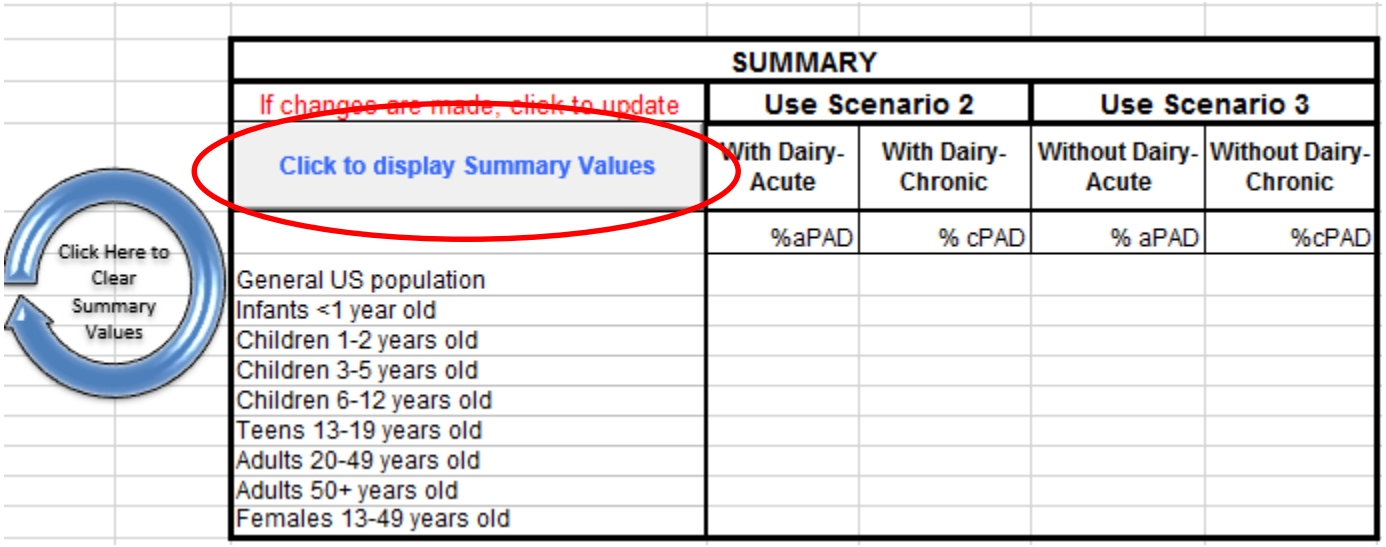
In the orange cells labeled “aPAD” and “cPAD” input the corresponding aPAD and cPAD in mg/kg BW/day (BW=Body Weight).



Input Required:		Units:	Comments:	Alternative Input :	
At-use Active Ingredient Concentration (%)		%	1% = 10000 ppm		ppm a.i.
Concentration of A.I. at use (**ppm**)	0	ppm	Final product concentration in ppm		
Concentration in (**µg/cm²**)	0	µg/cm²	*assuming 1 mg/cm² of product on surface		
aPAD (or aRfD)		mg/kg BW/day	(ppm)		
cPAD (or cRfD)		mg/kg BW/day	(ppm)		

Step 3: Display Values for % aPAD and % cPAD for all scenarios

To see the final summary values, click the button that is labeled “Click to display Summary Values.” This action will calculate % aPAD and % cPAD for Scenario 1 (food processing **including** dairy processing) and Scenario 2 (food processing **excluding** dairy processing).



SUMMARY				
If changes are made, click to update	Use Scenario 2		Use Scenario 3	
Click to display Summary Values	With Dairy-Acute	With Dairy-Chronic	Without Dairy-Acute	Without Dairy-Chronic
	%aPAD	% cPAD	% aPAD	%cPAD
General US population				
Infants <1 year old				
Children 1-2 years old				
Children 3-5 years old				
Children 6-12 years old				
Teens 13-19 years old				
Adults 20-49 years old				
Adults 50+ years old				
Females 13-49 years old				

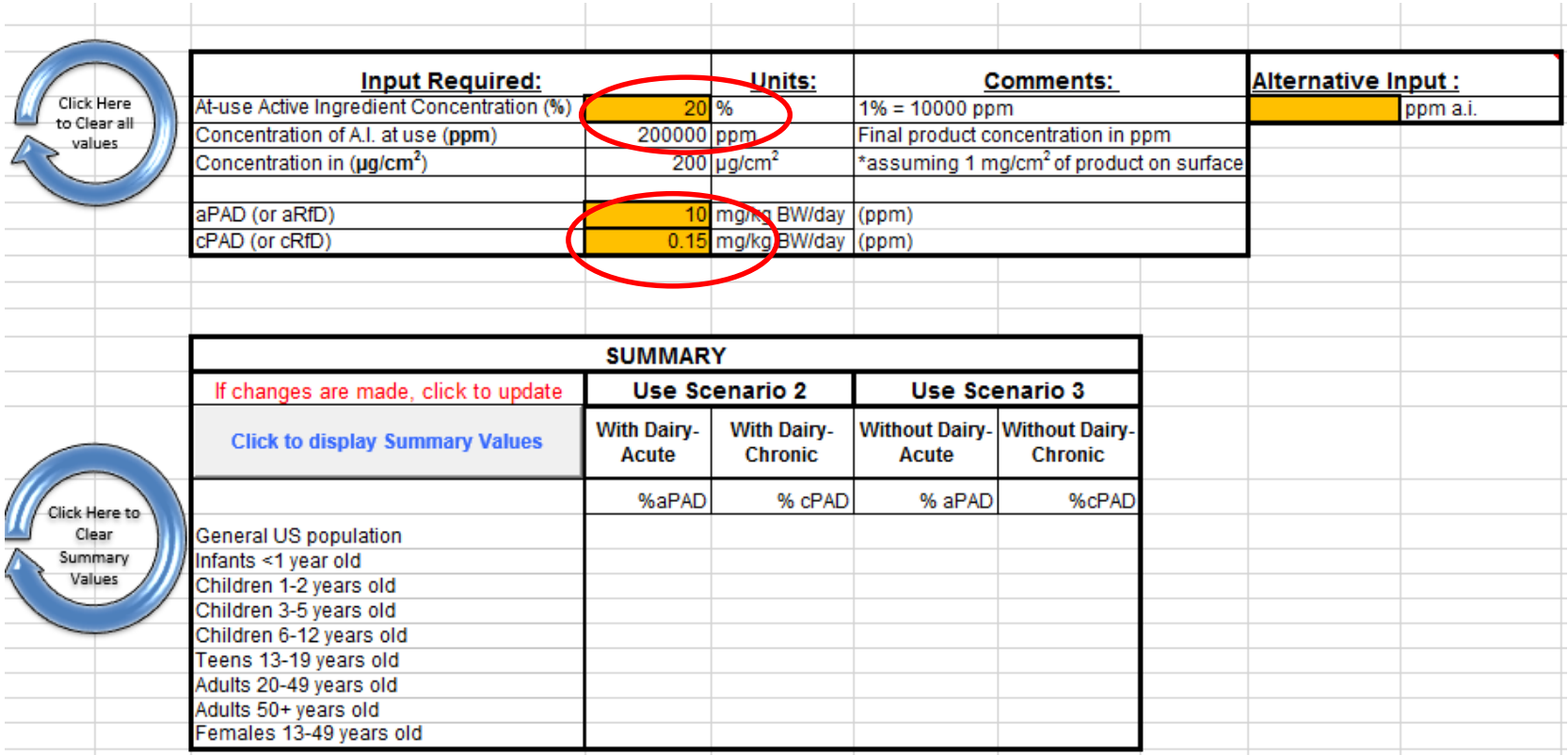
If additional, more in-depth information is needed, refer to the appropriate tabs in the spreadsheet labeled: WithDairyAcute, WithDairyChronic, WithoutDairyAcute, WithoutDairyChronic.

Note: If any changes are made to the inputs, you will need to click the button to display summary values again to refresh the calculations.

Example:
Given a product with:

- 20% a.i.
- A.I aPAD = 10 mg/kg/day
- A.I. cPAD = 0.15 mg/kg/day

Step 1and Step 2. **Input the information in the appropriate boxes as shown below.**



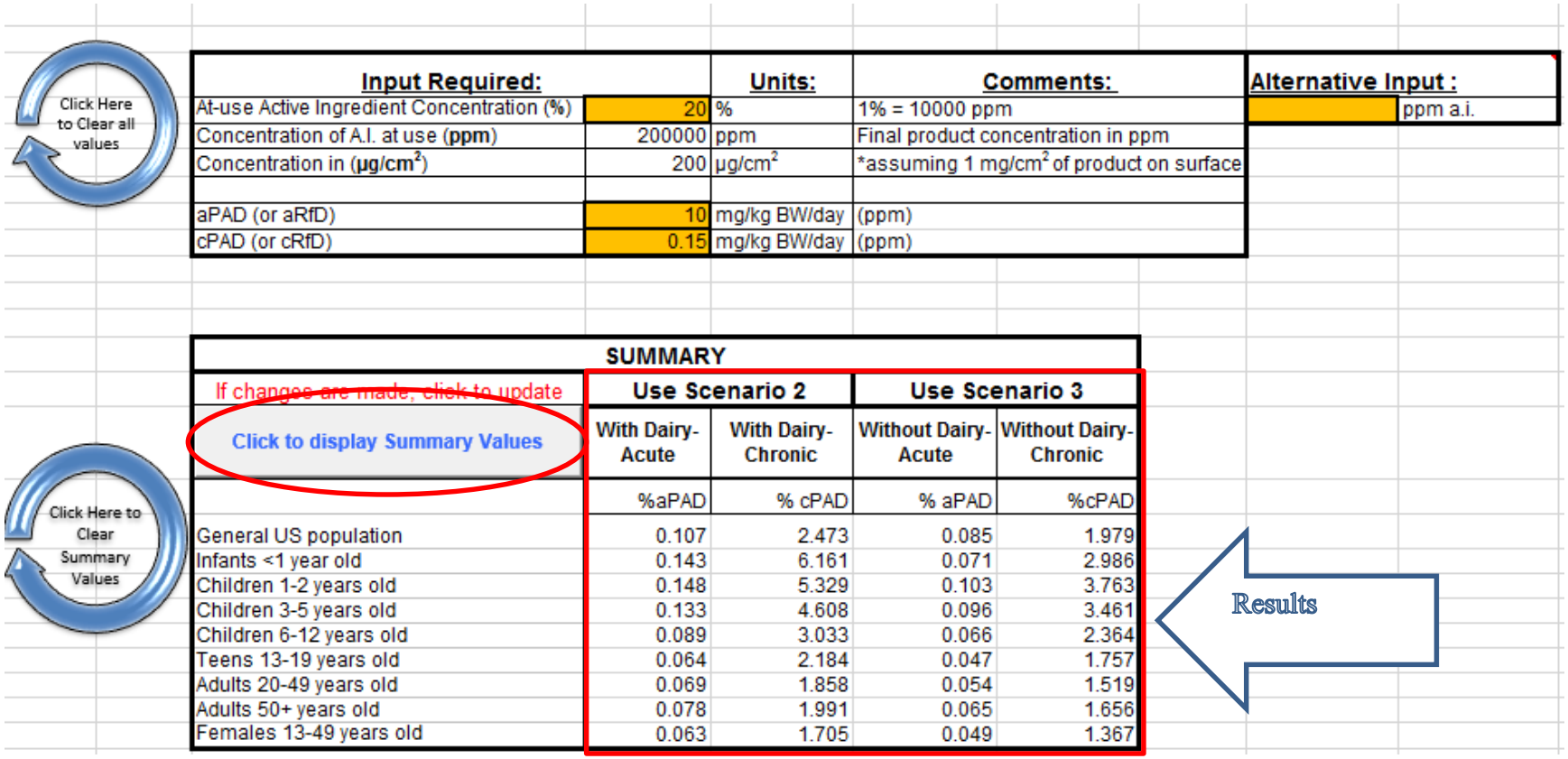
Click Here to Clear all values

Input Required:		Units:	Comments:	Alternative Input :	
At-use Active Ingredient Concentration (%)	20	%	1% = 10000 ppm		ppm a.i.
Concentration of A.I. at use (**ppm**)	200000	ppm	Final product concentration in ppm		
Concentration in (**µg/cm²**)	200	µg/cm²	*assuming 1 mg/cm² of product on surface		
aPAD (or aRfD)	10	mg/kg BW/day	(ppm)		
cPAD (or cRfD)	0.15	mg/kg BW/day	(ppm)		

Click Here to Clear Summary Values

SUMMARY				
If changes are made, click to update	Use Scenario 2		Use Scenario 3	
Click to display Summary Values	With Dairy-Acute	With Dairy-Chronic	Without Dairy-Acute	Without Dairy-Chronic
	%aPAD	% cPAD	% aPAD	%cPAD
General US population				
Infants <1 year old				
Children 1-2 years old				
Children 3-5 years old				
Children 6-12 years old				
Teens 13-19 years old				
Adults 20-49 years old				
Adults 50+ years old				
Females 13-49 years old				

Step 3. **Then click the button labeled "Click to display Summary Values" to see the results.**



Appendix 1

The average and 95% consumption data for each category and population subgroup for which CIP is relevant.

Table 1. Mean and 95th Percentile Consumption Values

Subpopulation Name	Biocide Panel Food Category Name	Mean Consumption (g/kg BW/day) (AM)	95th Percentile Consumption (g/kg BW/day) (P95)
Infants <1 year old	beverages, nonalcoholic	18.51	65.11
Infants <1 year old	cheeses, processed	2.50	5.25
Infants <1 year old	cheeses, cottage cheese	11.05	Not Calculated
Infants <1 year old	condiments	0.75	1.53
Infants <1 year old	salad dressings incl mayo	0.29	0.88
Infants <1 year old	frozen dairy desserts	3.28	8.86
Infants <1 year old	gelatins, puddings	9.97	13.03
Infants <1 year old	jams, jellies	0.59	1.06
Infants <1 year old	milk	109.90	214.59
Infants <1 year old	fruits, canned	13.30	31.86
Infants <1 year old	fruit juices not fresh	14.37	36.76
Infants <1 year old	vegetables, juices	4.44	Not Calculated
Infants <1 year old	cream-style corn	8.21	Not Calculated
Infants <1 year old	candy	0.76	1.92
Infants <1 year old	soups, tomato based	4.19	7.46
Children 1-2 years old	beverages, nonalcoholic	24.10	78.00
Children 1-2 years old	cheeses, processed	1.76	4.38
Children 1-2 years old	cheeses, cottage cheese	5.44	6.97
Children 1-2 years old	condiments	1.08	2.40
Children 1-2 years old	salad dressings incl mayo	0.74	2.00
Children 1-2 years old	frozen dairy desserts	4.91	9.49
Children 1-2 years old	gelatins, puddings	7.94	18.12
Children 1-2 years old	jams, jellies	1.19	3.42
Children 1-2 years old	milk	38.16	83.88
Children 1-2 years old	fruits, canned	9.16	20.94
Children 1-2 years old	fruit juices not fresh	22.33	62.28

Table 1. Mean and 95th Percentile Consumption Values			
Subpopulation Name	**Biocide Panel Food Category Name**	**Mean Consumption (g/kg BW/day) (AM)**	**95th Percentile Consumption (g/kg BW/day) (P95)**
Children 1-2 years old	vegetables, juices	10.18	27.16
Children 1-2 years old	cream-style corn	7.92	9.28
Children 1-2 years old	candy	1.91	4.90
Children 1-2 years old	soups, tomato based	13.48	21.22
Children 1-2 years old	soups, creamed	3.94	Not Calculated
Children 3-5 years old	beverages, nonalcoholic	16.98	44.15
Children 3-5 years old	cheeses, processed	1.75	6.94
Children 3-5 years old	cheeses, cottage cheese	3.24	5.41
Children 3-5 years old	condiments	0.78	2.56
Children 3-5 years old	salad dressings incl mayo	0.83	2.94
Children 3-5 years old	frozen dairy desserts	4.50	8.25
Children 3-5 years old	gelatins, puddings	8.93	25.40
Children 3-5 years old	jams, jellies	0.80	1.63
Children 3-5 years old	milk	25.29	54.54
Children 3-5 years old	fruits, canned	6.50	14.58
Children 3-5 years old	fruit juices not fresh	16.34	40.84
Children 3-5 years old	vegetables, juices	6.83	13.52
Children 3-5 years old	cream-style corn	7.41	9.67
Children 3-5 years old	candy	1.69	7.59
Children 3-5 years old	soups, tomato based	12.46	16.14
Children 3-5 years old	soups, creamed	4.89	Not Calculated
Children 6-12 years old	beverages, alcoholic	0.14	Not Calculated
Children 6-12 years old	beverages, nonalcoholic	14.16	35.90
Children 6-12 years old	cheeses, processed	0.79	1.95
Children 6-12 years old	cheeses, cottage cheese	1.70	4.65
Children 6-12 years old	condiments	0.71	2.32
Children 6-12 years old	egg products	1.97	2.33
Children 6-12 years old	salad dressings incl mayo	0.47	1.57
Children 6-12 years old	frozen dairy desserts	3.60	7.47
Children 6-12 years old	gelatins, puddings	5.42	14.24

Table 1. Mean and 95th Percentile Consumption Values			
Subpopulation Name	**Biocide Panel Food Category Name**	**Mean Consumption (g/kg BW/day) (AM)**	**95th Percentile Consumption (g/kg BW/day) (P95)**
Children 6-12 years old	jams, jellies	0.70	1.98
Children 6-12 years old	milk	12.48	30.01
Children 6-12 years old	fruits, canned	4.22	9.42
Children 6-12 years old	fruit juices not fresh	8.65	21.58
Children 6-12 years old	vegetables, juices	7.79	16.59
Children 6-12 years old	candy	0.97	2.93
Children 6-12 years old	soups, tomato based	6.37	15.05
Children 6-12 years old	soups, creamed	5.40	Not Calculated
Children 6-12 years old	soups, other, canned	3.82	4.92
Youth 13-19 years old	beverages, alcoholic	10.34	24.52
Youth 13-19 years old	beverages, nonalcoholic	11.81	27.98
Youth 13-19 years old	cheeses, processed	0.55	1.71
Youth 13-19 years old	cheeses, cottage cheese	1.14	4.13
Youth 13-19 years old	condiments	0.45	1.62
Youth 13-19 years old	egg products	1.21	2.56
Youth 13-19 years old	salad dressings incl mayo	0.47	1.54
Youth 13-19 years old	frozen dairy desserts	2.50	5.77
Youth 13-19 years old	gelatins, puddings	2.24	5.67
Youth 13-19 years old	jams, jellies	0.40	1.06
Youth 13-19 years old	milk	6.63	16.13
Youth 13-19 years old	fruits, canned	3.12	4.85
Youth 13-19 years old	fruit juices not fresh	5.49	13.48
Youth 13-19 years old	vegetables, juices	4.23	13.87
Youth 13-19 years old	candy	0.60	1.91
Youth 13-19 years old	soups, tomato based	3.86	5.53
Youth 13-19 years old	soups, creamed	3.05	6.12
Youth 13-19 years old	soups, other, canned	6.40	6.42
Adults 20-49 years old	beverages, alcoholic	10.42	30.51
Adults 20-49 years old	beverages, nonalcoholic	12.86	32.02
Adults 20-49 years old	cheeses, processed	0.47	1.38

Table 1. Mean and 95th Percentile Consumption Values			
Subpopulation Name	**Biocide Panel Food Category Name**	**Mean Consumption (g/kg BW/day) (AM)**	**95th Percentile Consumption (g/kg BW/day) (P95)**
Adults 20-49 years old	cheeses, cottage cheese	1.51	4.66
Adults 20-49 years old	condiments	0.43	1.70
Adults 20-49 years old	egg products	1.44	2.29
Adults 20-49 years old	salad dressings incl mayo	0.35	1.17
Adults 20-49 years old	frozen dairy desserts	1.74	4.47
Adults 20-49 years old	gelatins, puddings	1.99	5.96
Adults 20-49 years old	jams, jellies	0.30	0.88
Adults 20-49 years old	milk	3.67	10.96
Adults 20-49 years old	fruits, canned	1.43	3.05
Adults 20-49 years old	fruit juices not fresh	4.78	12.14
Adults 20-49 years old	vegetables, juices	3.85	7.56
Adults 20-49 years old	cream-style corn	1.62	5.02
Adults 20-49 years old	candy	0.47	1.19
Adults 20-49 years old	soups, tomato based	3.88	8.45
Adults 20-49 years old	soups, creamed	3.80	10.78
Adults 20-49 years old	soups, other, canned	2.86	3.12
Adults 50+ years old	beverages, alcoholic	8.29	25.17
Adults 50+ years old	beverages, nonalcoholic	12.60	30.89
Adults 50+ years old	cheeses, processed	0.40	1.04
Adults 50+ years old	cheeses, cottage cheese	1.56	3.20
Adults 50+ years old	condiments	0.31	1.21
Adults 50+ years old	egg products	1.47	3.79
Adults 50+ years old	salad dressings incl mayo	0.33	0.97
Adults 50+ years old	frozen dairy desserts	1.79	4.54
Adults 50+ years old	gelatins, puddings	2.23	5.75
Adults 50+ years old	jams, jellies	0.24	0.61
Adults 50+ years old	milk	3.26	9.92
Adults 50+ years old	fruits, canned	1.62	3.92
Adults 50+ years old	fruit juices not fresh	3.51	8.86
Adults 50+ years old	vegetables, juices	5.64	10.60

Table 1. Mean and 95th Percentile Consumption Values			
Subpopulation Name	**Biocide Panel Food Category Name**	**Mean Consumption (g/kg BW/day) (AM)**	**95th Percentile Consumption (g/kg BW/day) (P95)**
Adults 50+ years old	cream-style corn	1.74	4.66
Adults 50+ years old	candy	0.45	1.33
Adults 50+ years old	soups, tomato based	5.17	10.55
Adults 50+ years old	soups, creamed	3.64	11.52
Adults 50+ years old	soups, other, canned	3.34	9.91
Females 13-49 years old	beverages, alcoholic	8.15	24.12
Females 13-49 years old	beverages, nonalcoholic	12.40	32.16
Females 13-49 years old	cheeses, processed	0.46	1.37
Females 13-49 years old	cheeses, cottage cheese	1.25	4.13
Females 13-49 years old	condiments	0.38	1.40
Females 13-49 years old	egg products	0.70	1.22
Females 13-49 years old	salad dressings incl mayo	0.37	1.25
Females 13-49 years old	frozen dairy desserts	1.94	4.80
Females 13-49 years old	gelatins, puddings	2.05	5.11
Females 13-49 years old	jams, jellies	0.26	0.80
Females 13-49 years old	milk	3.87	11.66
Females 13-49 years old	fruits, canned	1.78	4.66
Females 13-49 years old	fruit juices not fresh	5.02	12.31
Females 13-49 years old	vegetables, juices	3.73	10.31
Females 13-49 years old	cream-style corn	1.84	5.02
Females 13-49 years old	candy	0.50	1.34
Females 13-49 years old	soups, tomato based	3.21	4.01
Females 13-49 years old	soups, creamed	2.14	7.91
Females 13-49 years old	soups, other, canned	3.45	6.42
General US population	beverages, alcoholic	9.41	29.55
General US population	beverages, nonalcoholic	13.02	32.36
General US population	cheeses, processed	0.58	1.74
General US population	cheeses, cottage cheese	1.69	4.66
General US population	condiments	0.45	1.70
General US population	egg products	1.46	2.44

Table 1. Mean and 95th Percentile Consumption Values			
Subpopulation Name	**Biocide Panel Food Category Name**	**Mean Consumption (g/kg BW/day) (AM)**	**95th Percentile Consumption (g/kg BW/day) (P95)**
General US population	salad dressings incl mayo	0.38	1.19
General US population	frozen dairy desserts	2.28	5.80
General US population	gelatins, puddings	3.12	8.68
General US population	jams, jellies	0.42	1.35
General US population	milk	8.96	33.05
General US population	fruits, canned	3.77	12.70
General US population	fruit juices not fresh	7.02	21.68
General US population	vegetables, juices	5.39	13.41
General US population	cream-style corn	2.21	8.21
General US population	candy	0.66	2.05
General US population	soups, tomato based	4.96	11.40
General US population	soups, creamed	3.74	10.78
General US population	soups, other, canned	3.43	9.91