

Release History:

- June 1, 2012: DEEM Version 3.14 and Calendex Version 9.13 are available for download at <http://www.epa.gov/pesticides/science/deem/>
- June 20, 2012: DEEM Version 3.16 is available internally
- September 17, 2012: DEEM Version 3.17 is available internally
- October 23, 2012 DEEM Version 3.18 is available internally
- March 19, 2013 DEEM Version 3.18 and Calendex Version 9.14 available on the web
- September 30, 2014 DEEM Version 4.02 and Calendex Version 10.00 available on the web.

Dietary Exposure Evaluation Model (DEEM) Errata List (March 19, 2013, Updated September 30, 2014)

#	Issue	Does (Did) It Impact Exposure?	Is it Resolved?	
			DEEM/Calendex v. 3.18/9.14 (released 19 March 2013)	DEEM/Calendex v. 4.02/10.00 (released 30 September 2014)
DEEM				
1	The evaluation version of DEEM was on the web for a period of time after the release of the final public version of DEEM, and users may have inadvertently downloaded the evaluation version.	Yes. The most recent version of DEEM available for download on the OPP website is version 3.18. The evaluation version has been taken down. It is easy to tell the difference between the two versions because the evaluation version of DEEM does not include the 2007-2008 data.	Yes. The evaluation version has been taken down. User should verify that they have the version which includes the 2007-2008 NHANES/WWEIA consumption data.	Not relevant to Version 4.02.

#	Issue	Does (Did) It Impact Exposure?	Is it Resolved?	
			DEEM/Calendex v. 3.18/9.14 (released 19 March 2013)	DEEM/Calendex v. 4.02/10.00 (released 30 September 2014)
2	Eating occasion ½ life calculations are not correct when residues are held steady (DEEM versions 3.14 and 3.16).	No. These issues have been resolved in DEEM version 3.17 and subsequent versions. Users running ½ life calculations in versions 3.14 and 3.16 may experience difficulties with large data files ^a .	Yes. Version 3.17 (and subsequent versions) has resolved this issue.	Yes.
3	The batch file analyses give the same results for different residue files. (DEEM versions 3.14 and 3.16).	Yes. If using very large RDF files (greater than 32,000 total residues in all of the files) then the algorithm that pre-processes the residue amounts was different than the one used to process smaller files. This was corrected in DEEM version 3.18 ^a .	Yes. DEEM version 3.18 corrects this issue.	Yes.
4	The following commodities do not print out in the chronic critical commodity contribution report: soybean seed, soy milk, soy milk babyfood, soybean oil, soybean oil babyfood, vegetable soybean, eggplant, okra, nonbell pepper, nonbell pepper babyfood, dried nonbell pepper. (DEEM versions 3.14-3.18).	No. The residues for these commodities <u>are</u> included in the exposure estimate even if they are not included in the contribution report.	No. Users should be aware that they cannot obtain estimates of contributions by these commodities in DEEM's CEC report. EPA is further investigating getting this corrected in a future version of DEEM since this feature is helpful in	Yes. This issue has been resolved in Version 4.02.

#	Issue	Does (Did) It Impact Exposure?	Is it Resolved?	
			DEEM/Calendex v. 3.18/9.14 (released 19 March 2013)	DEEM/Calendex v. 4.02/10.00 (released 30 September 2014)
			refining exposure assessments.	
5	When users try to expand a row with no food forms ("0"), a "Sorry" box pops up that says there are no more food forms available for this commodity in NFCS 94-98. (DEEM versions 3.14-3.18).	No. Although the sorry box says NFCS 94-98, the consumption data is from WWEIA 2003-2008. The "0" indicates that none of the food consumption diaries used by DEEM (2003-2008, 2Day) consumed that RAC; therefore, that commodity does not contribute to dietary exposure.	No. EPA will attempt to correct this in a future version of DEEM.	No. The current version has the same message.
6	Goji berry is in crop group 11 in DEEM when it should be in crop group 8. (DEEM versions 3.14-3.18).	No. There is no food consumption for goji berries in the FCID 2003-2008 database (See item #5).	No. EPA will attempt to correct this in a future version of DEEM.	Yes. Goji berry is in crop group 8.
7	<i>Tomato, tree</i> is named incorrectly. It should be <i>tree tomato</i> . (DEEM versions 3.14-3.18).	No. There is no food consumption for tree tomato (See item #5).	No. EPA will attempt to correct this in a future version of DEEM.	Yes. This commodity is labeled "Tree, Tomato".
8	Coconut, oil-babyfood is in the wrong crop group. It should be included in "Other" along with the other coconut commodities. (DEEM versions 3.14-3.18).	Yes. If a residue is included for coconut, oil-babyfood, it will not be included in the analysis since DEEM did not map consumption to that mislabeled RAC.	No. EPA will attempt to correct this in a future version of DEEM.	Yes. This commodity is listed with other coconut commodities.

#	Issue	Does (Did) It Impact Exposure?	Is it Resolved?	
			DEEM/Calendex v. 3.18/9.14 (released 19 March 2013)	DEEM/Calendex v. 4.02/10.00 (released 30 September 2014)
9	Soybean, flour is included in crop subgroup 6C instead of just crop group 6. (DEEM versions 3.14-3.18).	No. If a residue is included for soybean, flour, it will be included in the analysis even though it is listed in crop subgroup 6C instead of 6.	No. EPA will attempt to correct this in a future version of DEEM.	Yes. EPA decided not to assign Soybean flour in Crop Group 6C.
10	Grape, leaves and Grape, raisin are included in "Other" instead of crop group 13D with the other grape commodities. (DEEM versions 3.14-3.18).	No. If residues are included for grape leaves and raisins, they will be included in the analysis even though they are in the incorrect crop group.	No. EPA will attempt to correct this in a future version of DEEM.	Yes. EPA decided to keep "Grape Leaves" separate from other Grape commodities.
11	The residue file translator converts the residue in the R98 file for <i>shallot</i> to <i>shallot, fresh leaves</i> in the R08 file and <i>shallot, bulb</i> is left blank. (DEEM versions 3.14-3.18).	Yes. After using the file convertor, if there are residues for shallot in the R98 file, the user should go into the Residue File Editor in DEEM versions 3.14-3.18 and manually add the residue for shallot, bulb. If the residue is not manually added for shallot bulb, it will not be included in the analysis. There is no food consumption for "shallot, fresh leaves" (See item #5).	No. EPA will attempt to correct this in a future version of DEEM.	Yes. This utility appears to work properly in Version 4.02. While this utility helps reduce work for users to update dietary risk assessments, DEEM users are responsible for checking that residue assignments properly reflect current registered uses for that chemical. For example, residue assignments are not be made for new Food Forms.

#	Issue	Does (Did) It Impact Exposure?	Is it Resolved?	
			DEEM/Calendex v. 3.18/9.14 (released 19 March 2013)	DEEM/Calendex v. 4.02/10.00 (released 30 September 2014)
12	Residue and equivalent are misspelled as "residiue" and "equivilent" (DEEM versions 3.14 in ConvertResFl08.exe output).	No. This has been updated in version 3.16 and subsequent versions.	Yes. The spellings are corrected.	Yes.
13	CSFII is mentioned in some places when it should say WWEIA (i.e., Calendex "CSFII Stat Weights" should be "WWEIA Stat Weights"). (DEEM versions 3.14-3.18).	No. The consumption data in DEEM versions 3.14-3.18 is from WWEIA.	No. EPA will change "CSFII" to "WWEIA" in a future version of DEEM.	Yes.
14	The version numbers for the cover page, acute, and chronic assessments do not match (DEEM version 3.14).	No. This has been corrected in version 3.16.	Yes. The version numbers now match. Future releases will need to ensure that the version numbers all match.	Yes.
15	DEEM version 3.14 contains references to RDFgen, which is an Exponent program.	No. This has been corrected in version 3.16 and subsequent versions.	Yes. RDFgen was a utility that created RDF files from PDP data; this utility has been removed.	Yes.
16	Assumes that RDFdoc3.exe is in the same directory as the DEEMFCID program. If it is located there, the RDFdoc button in the top menu bar is active and will run RDFdoc3 if clicked (DEEM version 3.16.) RDFdoc3 is a program that summarizes input residue distribution files.	No.	No.	Yes. This utility provides information regarding RDF files; it has been disabled.
17	In DEEM version 3.14, the error note directed users to contact Exponent. The contact person should be David Hrdy at EPA.	No. This has been resolved in version 3.16 and subsequent versions.	Yes. The contact person is listed as David Hrdy at US EPA (hrdy.david@epa.gov).	Yes.

#	Issue	Does (Did) It Impact Exposure?	Is it Resolved?	
			DEEM/Calendex v. 3.18/9.14 (released 19 March 2013)	DEEM/Calendex v. 4.02/10.00 (released 30 September 2014)
18	In DEEM version 3.14, the company name was not being saved. Additionally, the setup form referenced RDFgen.	No. This has been resolved in version 3.16 and subsequent versions.	Yes. The user-entered company name is now saved at first use, if entered. It need not be entered during second and subsequent uses of DEEM.	Yes.
19	In DEEM version 3.14, if the residue path\filename is longer than 50 characters, the heading at the top of the residue file form only showed part of the name.	No. Version 3.16 was modified to show a longer filename.	Yes. File names longer than 50 characters are now fully displayed.	Yes.
20	In version 3.14, the help dialog in the DEEMFCID program included a reference to "licensing" the RDFdoc program.	No. This has been corrected in version 3.16 and subsequent versions.	Yes. There is no longer a requirement to "license" the RDFdoc program.	Yes.
Calendex				
21	The Calendex output for WWEIA does not indicate what version of Calendex was used to generate the results. (Calendex version 9.13)	No. The version now appears in the header. (Calendex version 9.14)	Yes.	Yes. The updated (proper) version of Calendex appears.

#	Issue	Does (Did) It Impact Exposure?	Is it Resolved?	
			DEEM/Calendex v. 3.18/9.14 (released 19 March 2013)	DEEM/Calendex v. 4.02/10.00 (released 30 September 2014)
22	Calendex Version 9.13 contained some programming code errors that affected both exposure computations and reporting. Calendex Version 9.14 can treat Drinking Water the same as DEEM. When the R08 file specifies DW concentrations for Direct-All Sources and Indirect-All Sources in the R08 file and a PE (PRZM-EXAMS) distribution is used, Calendex will select and apply a residue to all DW intake, including bottled water.	Yes. The programming errors were fixed, and Calendex Version 9.14 (12/23/2012) now provides correct results.	Yes.	Yes.
23	Calendex MOE Output is labeled as "Average daily exposure (mg/kgBodyWt/day) over 3 week(s) starting:" These data may reflect either %RfD (=Exposure/RfD)x100, or MOE (=NOEL/Exposure) depending upon whether the user specified a RfD or NOEL as the basis for those calculations.	No. Dietary exposure assessors should be aware of this mislabeling issue in the Calendex output.	No. EPA will attempt to correct this in a future version of Calendex.	Yes.
24	For Calendex, it would be helpful for risk assessors to be able to pull out the peak value from the 3 week rolling averages, and Calendex does not permit this.	No. For now, users can use the MOE (*.csv) output file to find the day and exposure (Sort.)	Possibly. EPA is further evaluating Calendex to see if this is able to be done.	No. Users can save and sort the CSV file by Date to find day having highest exposure and verify with TXT file. If no residential scenarios, then a Null file can be used to output/plot total exposures.

#	Issue	Does (Did) It Impact Exposure?	Is it Resolved?	
			DEEM/Calendex v. 3.18/9.14 (released 19 March 2013)	DEEM/Calendex v. 4.02/10.00 (released 30 September 2014)
25	DMFgen2.exe is not accessible through Calendex version 9.14 (Calx914.exe); however, it is accessible by double clicking DMFgen2.exe directly.	No.	No, but the program can be accessed directly through the folder and used.	No. There is not a DMFgen for Calendex v. 10.00.
26	The recipes for 3 food items specified "Water, indirect, tap" (FCID_Code=8602100000); it should have specified Water, indirect, all sources (FCID_CODE=8602000000) since we do not know the source of water used for cooking. As a result, those records (N=9) might not be included in the DW assessment. The 3 food items are: WRAP SNDWCH W/CHICK STRIPS (BROILED),CHS,LETTUCE & SPRD (food_code=27540300, mod_code=0); CHICKEN & NOODLES W/ VEG, DESSERT (FROZEN MEAL (food_code=28140320, mod_code=0); TURNIP, PICKLED (food_code=75534030, mod_code=0).	Yes. These data affected the FCID consumption tables (Commodity_intake). Those miscoded records may have at most a nominal effect upon DEEM DW estimates unless we recode those recipes.	No. EPA will attempt to correct this in a future version of Calendex.	Yes. Those recipes have been corrected.
Additional Information				
	The following commodities have been added to DEEM: soybean, vegetable; goji berry; chive, dried leaves; agave; atemoya; and teff, flour. Since the commodities are new to DEEM, the R98 file will not include these commodities and the file translator will leave the residues blank. If	Yes. If residues for these commodities are not manually added, they will not be included in the analysis.	--	Caution still applies for DEEM Version 4.02. In addition, version 4.02 contains several new commodities: flax seed, pomegranate juice,

#	Issue	Does (Did) It Impact Exposure?	Is it Resolved?	
			DEEM/Calendex v. 3.18/9.14 (released 19 March 2013)	DEEM/Calendex v. 4.02/10.00 (released 30 September 2014)
	tolerances exist for these commodities, they will need to be manually added to the R08 file using the Residue File Editor in DEEM versions 3.14-3.18.			dragon fruit, prickly pear fruit and bee pollen.

^a If using very large RDF files (greater than 32,000 total residues in all of the files) then the algorithm that preprocesses the residue amounts was different than the one used to process smaller files because the temporary array used to store these numbers cannot be dimensioned to hold more than 32,000 residues. For large RDF files it used an alternative method, which is to store the residues in a temporary random access file and retrieve them one at a time as they are needed. But in the batch mode it was reading these residue numbers back from the wrong file, and both analyses were reading back from the same wrong file. The wrong file was created when the two analyses were run separately, so it was correct for one of the two analyses (the one that had been created in the last single run), but not for the other one. This was corrected in DEEM version 3.18.