

FACET FCM Manual

"Instructions and Exercises for FACET software"

JRC

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Author	:	Creme Global Ltd info@cremeglobal.com
		Creme Global 4 th Floor, The Tower Trinity Enterprise and Technology Campus Grand Canal Quay Dublin 2 IRELAND <u>http://www.cremeglobal.com</u>
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Client	:	JRC
Contributors	: [[[Dr. Seamus Kelly Mr. Cian O'Mahony Dr. Peter Oldring

2 Objectives

2.1 Introduction

This manual sets out to provide detailed instructions to explain the functioning of the Flavourings, Additives, and food Contact materials, Exposure Task (FACET) software. This software was the end result of the 7th Framework EU funded FACET project which involved the creation of a food chemical exposure surveillance system, which covers representative regions of the EU, to meet the needs of the EU regulatory authorities in the protection of consumer health.

The manual provides step by step instructions, using screenshots from the software, for each of the assessment types available in FACET. The manual also serves to highlight the capabilities of FACET

2.2 Outline Structure of this Manual

Each subsection of Section 3 considers a particular Assessment Type and provides instructions, aided by screenshots form the software, to complete the assessment. Also, each subsection finishes with exercises appropriate to the content of that subsection.

3 Programme Details

This section provides instructions, using screenshots from the FACET software, to aid the user in the execution of the various assessment types available in FACET.

3.1 Running a Basic Packaging Assessment

To run a basic packaging assessment requires the user to initially select the "Create New Assessment" option. This is described in Figure 3-1 below.

FACET					
<u>F</u> ile <u>N</u> ew	<u>H</u> elp				
• ۴					
🟠 Home	🚞 Assessments	🚍 FACET Data	🚞 My Data		
		<	facet		
	Flavouri	ngs, Additives and	Food Contact Mater	rials Exposure Task	
FACET i	s a food chemical exposure su	veillance system to mee	t the needs of EU regulato	ry authorities in the protection of consumer health.	
	European Commission 7th Framework Programme, 2008-2012				
	Create New Assessment				
		e Go	To FACET Data		
		🧰 Go	To My Data		
				≯ Creme	

Figure 3-1: Create New Assessment

The user now has the option to select the particular assessment type they are interested in. In our case, we would like to run a Packaging Assessment and for this reason, we select the "Packaging Assessment" option, as shown in Figure 3-2 below.



Figure 3-2: Selection of Assessment Type

Once the user selects the "Packaging Assessment" type, and clicked the "Next" button", the next step requires them to select a migrant/substance the user would like to calculate an exposure to from different foods and pack types.

There are two options at this stage – the first option allows the user to avail of pre-installed concentration data for the substance while the second option allows the user to enter their own concentration data. For this run, we choose the "Use pre-installed FACET data" option and then select the substance BPA (FACET ID = 1084) as shown in Figure 3-3.

		Select Migrant		
Select Assessment Type Select Migrant	Ose pre-installed FACET d Search	ata.	FACET ID	▼ C <u>l</u> ear
Select Pack Types	EACET IF CAS Numb	er Chemical Name	Alternative Name	Molecular Fr Mo
Select Supreur	● 1084 0000080-05 ● ● ● ● ● ● ● ● ●	5-7 2,2-Bis(4-hydroxyphenyl)prop	pane Bisphenol A	C15H16O2 228
Assessment Options Assessment Summary	1334 0000100-42	2-5 Styrene	Vinylbenzene	C8H8 104
	<	III		
		z-bis(4-nydroxyphenyi)propane		
	Use my concentration dat Select Concentration T	able		
	Use my concentration dat Select Concentration T My Data My Additive I My Flavourin My Migration My Packagin	a able Data g Data g Data g Data	Date Created	Date Accessed
	 Use my concentration dat Select Concentration T My Data My Additive I My Flavourin My Migration My Packagin Use in combination v 	a able Data g Data g Data t Data g Data t Data g Data t Data g Data t Data	Date Created	Date Accessed

Figure 3-3: Selection of Substance

Once the substance is selected, and the "Next" button" is clicked, the user selects the "Pack Types" of interest. This step is described in Figure 3-4.

New Assessment Wizard			- • ×
		Select Pack Types	
 ✓ Select Assessment Type ✓ Select Migrant 	Search	All	Clear
💠 Select Pack Types	Code		
Select Food Categories	+ V	Main	
Select Surveys		Closure	
Assessment Options		Outer	
Assessment Summary		Insert	
	55 visible	pack types selected. 55 pack types selected.	
	55 VISIDIE		
Cancel		<u>P</u> reviou	ıs <u>N</u> ext

Figure 3-4: Selection of Pack Types

As well as the selection of pack types, the user also has the option to choose particular foods for the exposure assessment. This is illustrated in Figure 3-5. As with the previous steps it is required to click the "Next" button to advance to the next step.

New Assessment Wizard			
		Select Food Categories	
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Search	Category Name Dairy products and analogues Milk, cream, dairy drinks and soy equivalents Liquid milk Flavoured milk drinks Drinking yoghurt Sour milk drinks Soy beverages Condensed/ Evaporated milk Powdered milk Cream	Clear
		Cheese Fats and oils and fat emulsions Fruits, nuts and seeds Vegetables, starchy roots, legumes and seaweeds <u>Chocolate products and confectionery</u> gories selected. 251 food categories selected.	-
Cancel		<u>P</u> revio	us <u>N</u> ext

Figure 3-5: Selection of Foods

There are fifteen consumer surveys available to use in FACET. By selecting a particular survey, the software returns the exposure to the chosen substance for the population represented in the survey. In this case we select the "UK NDNS 2000 19-64" survey, as shown in Figure 3-6. This survey concentrates on people in the age group 19-64 in the UK.

New Assessment Wizard		
	Select Surveys	
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Search ■ Select <u>A</u> II ■ ■ ₩ UK ■ ■ ₩ UK ■ ■ ₩ UK ■ ■ ₩ UK NDNS 1992 1-4 ■ ■ ₩ UK NDNS 1997 4-18 ■ ■ ₩ UK NDNS 1997 4-18 ■ ■ ₩ UK NDNS 1995 Over 65 ₩ ■ ■ Hungary ■ ■ ■	Clear
	Image: Trance Image: Trance	
Cancel		evious <u>N</u> ext

Figure 3-6: Selection of Survey

After the user has clicked "Next", the user is now presented with various "Assessment Options", as illustrated in Figure 3-7Figure 3-7 These include the option to name the assessment, whether to assess using "consumer loyalty", and the option to exclude homegrown or restaurant foods. These options are explained as part of this example.

There are other options to "Use SetOff" and more advanced options. These will be described and used at a later stage in the training.

New Assessment Wizard		-		
			Assessment Options	
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Assessment location: Description: Assess using: Exclude homegrown/hu Exclude restaurant/cant I Advanced Options	/Assessments/M	y Assessments/New Assessment ○ With consumer loyalty ③ Without consumer loyalty □ Use SetOff ☑ ☑	Choose
Cancel			Previou:	s <u>N</u> ext

Figure 3-7: Selecting Options

One of the options mentioned above is giving a name to the assessment. When the user has completed many assessments, it is useful to have an assessment name that highlights the important information encoded in the assessment. To name an assessment requires the user to click the "Choose" button shown in Figure 3-7. This opens a window, as shown in Figure 3-8, where the user enters the appropriate assessment name and then clicks "Save". In this instance, name the assessment "Substance: 1084 – Survey: UK_19-64"

Save As					
$\langle \phi \phi \phi \phi \rangle$					
My Assessments	Name				
Filename: Substance: 1084 - Survey:	UK_19-64				
Create Folder	<u>S</u> ave <u>C</u> ancel				

Figure 3-8: Naming the Assessment

One a name has been given to the assessment, the name will be shown in the "Assessment Options" window, as illustrated in Figure 3-9. Also, select "Without consumer loyalty" and tick the "Exclude homegrown/homemade foods" and "Exclude restaurant/ canteen foods" boxes. Again, the user needs to click the "Next" button.

New Assessment Wizard				
			Assessment Options	
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Assessment location: Description: Assess using: Exclude homegrown/he Exclude restaurant/cant I Advanced Options	/Assessments/My	 Assessments/Substance: 1084 - Survey: UK_19-64 With consumer loyalty With consumer loyalty Without consumer loyalt Use SetOff ✓ 	y
Cancel			Previou	ıs <u>N</u> ext

Figure 3-9: Checking Assessment Name

At this stage an "Assessment Summary" is provided. This is shown in Figure 3-10. If the user is happy with the details of the summary, the "Run" button is selected. This produces a window telling the user, as shown in Figure 3-11, that the assessment has been submitted. Click "OK".

New Assessment Wizard			x
		Assessment Summary	
 ✓ Select Assessment Type ✓ Select Migrant ✓ Select Pack Types ✓ Select Food Categories 	Type: Substance code: Substance name: Concentration data:	Migrant 1084 2,2-Bis(4-hydroxyphenyl)propane Use pre-installed FACET data	*
 Select Surveys Assessment Options Assessment Summary 	Food categories:	Code Category Name P.1 Dairy products and analogues P.1.1 Milk, cream, dairy drinks and soy equivalents P.1.1.1 Liquid milk P.1.2 Flavoured milk drinks P.1.3 Drinking voghurt	III
	Survey(s): Population filter: Name: Description: Accommon Location: I understand that runnin and 20 minutes per surv computer's processing is population size.)	UK NDNS 2000 19-64 Gender: Male, Female Age: between 0 and 110 Substance: 1084 - Survey: UK_19-64 (Accessment: (Mar. Accessment: rey. (This calculation time depends on several factors, including the ability, the number of food categories selected and the simulated	Ŧ
<u>C</u> ancel		Previous Run	



New Assessment Wizard	
	Your assessment has been submitted.



The user should at this stage select "Assessments" and then "My Assessments" as is shown in Figure 3-12. Once the "Initialising" stage has finished, the assessment moves into the "Progress" stage. A progress bar is illustrated to inform the user of the percentage completion of the assessment. This is illustrated in Figure 3-13.

FACET					
<u>File E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp					
₹ -					
🟠 Home 🚞 Assessments	FACET Data	🚍 My Data			
🗆 🚞 Assessments	Name	(Progress	• ID	•
My Assessments	🐻 Substance: 1084 -	Survey: UK_19-64	Initializing	453	
	<	m	View All Results	View Graphs (► View Report
		Assessn	nent Summary		Â
	ID:	453			E
	Name:	Substance: 1084 - Surv	ey: UK_19-64		
	Description:				
	Туре:	Migrant			
4	Substance:	1084 - 2,2-Bis(4-hydrox	yphenyl)propane		-

Figure 3-12: Assessment Initialising

FACET						- • ×
<u>F</u> ile <u>G</u> o <u>N</u> ew <u>H</u> elp						
4 - 4						
🟠 Home 🚞 Assessments	🚍 FACET Data	🚍 My Data				
🖃 🚞 Assessments	Name		Progr	ess (ID	•
My Assessments	📑 Substance: 1084 -	Survey: UK_19-64		63 %	453	
	•	m				4
4 Þ		Ν	lo files se	elected.		

Figure 3-13: Assessment in Progress

Once the assessment completes, the user is informed of this with Progress set to "Complete". This is shown in Figure 3-14.

FACET					
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp					
4 - 4 -	_				
🟠 Home 🚞 Assessments	🚍 FACET Data	🚍 My Data			
🖃 🚞 Assessments	Name	•	Progress	• ID	•
My Assessments	📓 Substance: 1084	- Survey: UK_19-64	Complete	453	
	<	III	View All Results	View Graphs	► View Report
		Assess	nent Summary		<u></u>
	ID:	453			=
	Name:	Substance: 1084 - Surv	ey: UK_19-64		
	Description:				
	Туре:	Migrant			
4	Substance:	1084 - 2,2-Bis(4-hydro»	(yphenyl)propane		-

Figure 3-14: Assessment Complete

Once the assessment completes, the user can now access the results of the assessment. Before viewing the results (in Section 3.2), another useful option in the software can be explained. That is, the renaming of a table. To rename a table, the user initially selects the table, and then right clicks the mouse as illustrated in Figure 3-15. This gives the option to "Rename" or indeed "Delete" an assessment. To rename the assessment, select the "Rename" option. This has the effect of opening a pop-up window as shown in Figure 3-16.

FACET					
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp					
₹ - ♦ ♦					
🟠 Home 🚞 Assessments	FACET Data	🚞 My Data			
🖃 🚞 Assessments	Name	(Progress	• ID	•
My Assessments	😨 Substance: 1084	Open	Complete	453	
		<u>open</u>			
		E <u>R</u> ename			
		× Delete			
	•	III			Þ.
			View All Results	View Graphs	View Report
		Access	ment Summany		
		73553	incirc Summary		
	ID:	453			E
	Name:	Substance: 1084 - Sun	vey: UK_19-64		
	Description:				
	Туре:	Migrant			
4 III >	Substance:	1084 - 2,2-Bis(4-hydro	xyphenyl)propane		-

Figure 3-15: Rename Table



Figure 3-16: Renaming Table

FACET	
<u>File Go N</u> ew <u>H</u> elp	
4 - 4 - 4	
📅 Home 🚍 Assessments	🚍 FACET Data 🗮 My Data
🖃 🚞 Assessments	Name Progress ID
my Assessments	Substance: 1084 - Survey: UK_19-64 - All Foods Complete 453
	 III No files selected.
4	

At this stage the user can view the table and confirm its new name. This is shown in Figure 3-17.



3.1.1 Exercises

Exercises for Basic Packaging Assessment

- (i) Run a Packaging Assessment satisfying the following criteria
 - a. Substance: 1084
 - b. Pack Types: All Pack Types
 - c. Foods: P.15 Alcoholic Beverages and P.18 Composite Foods
 - d. Survey: UK 19-64
 - e. Select Males between the ages of 20 and 25
 - f. Assessment Name: Substance: 1084 Survey: UK_19-64 Packs: [P.15, P.18] Foods: All – Loyal: Yes
 - g. Select "With consumer loyalty"

- (ii) Run a Packaging Assessment satisfying the following criteria
 - a. Substance: 1334
 - b. Pack Types: Main = Plastic Tray/ Pot/ Tub/ Cup Closure = Sealed Lidding/ membrane, Plastic snap on lidding Exclude Outer and Insert components
 - c. Foods: P.17.1.1 Spoonable yoghurt
 - d. Survey: UK 19-64
 - e. Males and Females between 0 and 110
 - f. Assessment Name: Substance: 1334 Survey: UK_19-64 Packs: [Main, Closure] Foods: P.17.1.1 – Loyal: No
 - g. Select "Without consumer loyalty"

3.2 Examining Results

Once the assessment has completed, the user can access the results of the assessment. This can be done in two ways: "View Graphs" and "View Report" as shown in Figure 3-18.

FACET			_		
<u>File Edit Go N</u> ew <u>H</u> elp					
🌱 🗝 🗇 🔶					
🟠 Home 🚞 Assessments	FACET Data	🚞 My Data			
🗆 🚞 Assessments	Name		Progress	• ID	
My Assessments	📆 Substance: 1084 -	Survey: UK_19-64 - All Foo	ods Complete	453	
	<	111	View All Results	View Graphs	► View Report
		Assessme	ent Summary		*
	ID:	453			=
	Name:	Substance: 1084 - Survey	: UK_19-64 - All Foods		
	Description:				
	Туре:	Migrant			
۰ III ا	Substance:	1084 - 2,2-Bis(4-hydroxyr	phenyl)propane		-

Figure 3-18: Viewing Results

If the user selects the "View Report" option then a report Is displayed. For this example, the report is shown in Figure 3-19 and Figure 3-20.

Karley Assessment Report - Substance: 1084 - Surve	ey: UK_19-64 - All Foods		
Export			
		facet	
	Assess	ment Report	
WARNIN	G: Reconstituted foods are	excluded from food packaging asse	ssments
	Assessment ID:	453	
	Name:	Substance: 1084 - Survey: UK_19-64	
	Survey:	UK NDNS 2000 19-64	
	Description:		
	Time Taken (mins):	12	
	Туре:	Migrant	
	Concentration Type:	CUSTOM	
	Consumer Loyalty:	No Consumer Loyalty Chosen	
	Substance Code:	1084	
	Substance Name:	2,2-Bis(4-hydroxyphenyl)propane	
	SetOff:	Without	
	Simulated Population Size:	1631	
	Gender Filter:	Males and females	
	Age Filter:	Between 0 and 110	
	Submitted:	2 Sep 2013 15:41	
	Software Version:	2.0.0	+
٠			Þ

Figure 3-19: Assessment Report (Inputs)

Assessment Report - Substance: 1084 - Survey: UK_19-64 - All Foods

- • ×

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	1-1
	1
100	
- E 1	vnort
	spore

Food Category	Count*	Mean	P90	P95
P.11 - Sweeteners and honey	1631	5.284e-6 ± 9.25e-7	0 ± 0	0.00001318 ± 4.415e-6
P.12 - Salt, spices, herbs, sauces and soups	1631	0.0007093 ± 0.00005179	0.002255 ± 0.0002317	0.00413 ± 0.0002657
P.3 - Fruits, nuts and seeds	1631	0.0002468 ± 0.00003093	0.0003959 ± 0.00004906	0.001168 ± 0.0001488
P.4 - Vegetables, starchy roots, legumes and seaweeds	1631	0.0007235 ± 0.00004303	0.002111 ± 0.000148	0.003436 ± 0.0002091
P.10 - Eggs and egg products	1631	0 ± 0	0 ± 0	0 ± 0
P.6 - Cereals and cereal products	1631	0 ± 0	0 ± 0	0 ± 0
P.5 - Chocolate products and confectionery	1631	0 ± 0	0 ± 0	0 ± 0
P.13 - Nutritional foodstuffs	1631	0 ± 0	0 ± 0	0 ± 0
P.8 - Meat and meat products	1631	0.00008011 ± 0.00001327	0 ± 0	0.0002916 ± 0.00008437
P.14 - Non-alcoholic beverages (except dairy beverages)	1631	0.001704 ± 0.0001067	0.005382 ± 0.0006895	0.01004 ± 0.0008584
P.16 - Ready-to-eat savouries	1631	0 ± 0	0 ± 0	0 ± 0

Figure 3-20: Assessment Report (Statistics)

The report itself can be exported to a .csv file by clicking the "Export" button at the top left of the report as shown in Figure 3-21.

🕼 Assessment Report - Substance: 1084 - Survey: UK_19-64 - All Foods								
Export								
	Ē							
	Assess	ment Report						
WARNING	: Reconstituted foods are o	excluded from food packaging asses	ssments					
	Assessment ID:	453						
1	Name:	Substance: 1084 - Survey: UK_19-64						
	Survey:	UK NDNS 2000 19-64						
1	Description:							
1	Time Taken (mins):	12						
1	Туре:	Migrant						
	Concentration Type:	CUSTOM						
	Consumer Loyalty:	No Consumer Loyalty Chosen						
	Substance Code:	1084						
	Substance Name:	2,2-Bis(4-hydroxyphenyl)propane						
<u>.</u>	SetOff:	Without						
<u>.</u>	Simulated Population Size:	1631						
	Gender Filter:	Males and females						
	Age Filter:	Between 0 and 110						
9	Submitted:	2 Sep 2013 15:41						
	Software Version:	2.0.0	-					
< [Þ					

Figure 3-21: Exporting the Report

As well as viewing the numerical data outputted from the assessment, another option is to view graphs arising from the data. This is possible by clicking the "View Graphs" button as illustrated in Figure 3-22.

FACET					
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp					
🌱 - 🗢 🔶					
🟠 Home 🧰 Assessments	🚍 FACET Data	🚞 My Data			
🖃 🚞 Assessments	Name		 Progress 	• ID	
My Assessments	🛐 Substance: 1084	- Survey: UK_19-64 - All Foo	ods Complete	453	
	•	III			•
			View All Results	View Graphs	View Report
		Assessme	ent Summary		
	ID:	453			=
	Name:	Substance: 1084 - Survey:	UK_19-64 - All Foods		
	Description:				
	Туре:	Migrant			
4	Substance:	1084 - 2,2-Bis(4-hydroxyp	henyl)propane		-

Figure 3-22: View Graphs

The graphs can be viewed "By Pack Type" or "By Food Category". Initially the "By Pack Type" option will be described.

Selecting the "By Pack Type" option displays two bar charts as well as the numerical statistical data arising from the assessment. This is shown in Figure 3-23. The first bar chart illustrates the mean chemical exposure to the chosen substance (i.e. BPA) for "Total Population" while the second bar chart shows the chemical exposure to BPA for "Food Consumers".

There are further options to filter the data placed under the bar charts. For example, instead of displaying the data for the "Per unit body weight" Intake Type, the user can select "Absolute". This has the effect of changing the data to match the appropriate Intake Type (i.e. Absolute) as well as regraphing the bar charts to match the updated data. This is shown in Figure 3-24.



Figure 3-23: Graphs (By Pack Type), Column charts





As well as viewing data using bar charts, a second option is to use pie charts. This option is possible by clicking the coloured disk/pie at the top of the window illustrated in Figure 3-25.

FA	°FT										x	
File	lie Changes New Help											
4												
×			ران (د. <u>چ</u> ین د									
⊡ H	me	Assessments	FACEI Data My L	Data 👘 Kesi	ults - Substa 🥹						_	
		All - Per unit body	weight - Total Populatio	on - Mean								
			All Pack Types PT8: M: Bever	:: All Pack Types (50.) age Can (31,80%)	00%)							
			PT21: M: Food	d Can, C: Easy Open ((13.45%)							
			PT20: M: Food PT41: M: Class	I Can, C: Classic (3.7)	5%)							
			PT35: M: Glass	s Bottle, C: Metal Twi	st/ Lever (0.06%)							
			PT3: M: Aeros	ol can, C: Plastic Oth	er (0.01%)							
			PT19: M: Food	d Can (0.01%)								
				. ,								
					1						_	
	♥ Survey ●	Pack Type / Food	Pack Type Description	 Intake Type 	Consumer T	FACET Category Co	FACET Category Na	♥ Statistic ●	Value 4	Units 4		
2489	UK NDNS 2000	PT41	M: Glass Jar, C: Metal Twist/ L	ev Per unit body weigh	Total Population	All	All Foods	Mean	2.0818e-0	mg/kg b	7 ^	
2756	UK NDNS 2000	PT35	M: Glass Bottle, C: Metal Twis	t/ Per unit body weigh	Total Population	All	All Foods	Mean	1.35131e	mg/kg b	1 ≡	
2924	UK NDNS 2000	РТЗ	M: Aerosol can, C: Plastic Oth	er Per unit body weigh	Total Population	All	All Foods	Mean	2.3641e-0	mg/kg b	1	
3760	UK NDNS 2000	PT20	M: Food Can, C: Classic	Per unit body weigh	Total Population	All	All Foods	Mean	8.59922e	mg/kg b	6	
3843	UK NDNS 2000	PT21	M: Food Can, C: Easy Open	Per unit body weigh	Total Population	All	All Foods	Mean	3.07664e	mg/kg b	1 -	
	•									,	P	

Figure 3-25: View Graphs (By Pack Type), Pie Chart

Also, the user has the option to filter the outputs of the assessment. For example, the Intake type can be change from "Per unit body weight" to "Absolute" as earlier. This will have the effect of updating the numerical statistical data as well as the associated graph (i.e. pie chart in this case). This shown in Figure 3-26.

SACE	ET										x
<u>F</u> ile C	Changes <u>N</u> ev	v <u>H</u> elp									
۴ -	代 👻 🚳 🔜 👕 🤪 🛅 🗽 By Food Category By Pack Type										
🔂 Hom	ne	Assessments	🖿 FACET Data 🛛 🚞 My I	ata 📑 Res	ults - Substa 🔞						
Ţ,		All - Absolute -	Total Population - Mear All Pack Types: All FT8: M: Beverage Ca PT21: M: Food Can, (PT21: M: Food Can, (PT21: M: Glass Bottle PT3: M: Aerosol Can, (PT1: M: Aerosol Can (PT19: M: Food Can ()	Pack Types (50.00 (32.27%) : Easy Open (13.049 : Classic (3.7%) : Metal Twist/ Lever : C Metal Twist/ Lev C : Plastic Other (0.01 0.01%) 0.01%)	%) 6) (0.87%) er (0.06%) %6)						
	🛛 Survey 4	✓ Pack Type / Food 4	Pack Type Description	 Intake Type 	V Consumer T 4	✓ FACET Category Co	V FACET Category Na •	🛛 Statistic 🖣	Value 4	Units 4	
2467 U	JK NDNS 2000	PT41	M: Glass Jar, C: Metal Twist/ L	ev Absolute	Total Population	All	All Foods	Mean	0.000153	mg	5 ^
2754 U	JK NDNS 2000	PT35	M: Glass Bottle, C: Metal Twis	t/ Absolute	Total Population	All	All Foods	Mean	1.00811e	mg	1
2921 U	JK NDNS 2000	РТЗ	M: Aerosol can, C: Plastic Oth	er Absolute	Total Population	All	All Foods	Mean	1.83946e	mg	1 [≡]
3757 U	JK NDNS 2000	PT20	M: Food Can, C: Classic	Absolute	Total Population	All	All Foods	Mean	0.0006584	mg	4
3841 U	JK NDNS 2000	PT21	M: Food Can, C: Easy Open	Absolute	Total Population	All	All Foods	Mean	0.0022994	mg	S
4677 U	JK NDNS 2000	PT19	M: Food Can	Absolute	Total Population	All	All Foods	Mean	1.03796e	mg	4 _
<	(,	•

Figure 3-26: Filtering the Data

Instead of examining the assessment outputs "By Pack Type" the user can alternatively view the results "By Food Category". This is made possible by clicking the "By Food Category" button as shown in Figure 3-27.



Figure 3-27: View Graphs (By Food Category), Column Charts

As with the option "By Pack Type" the user can also view the "By Food Category" data using pie charts. This option is illustrated in Figure 3-28.



Figure 3-28: View Graphs (By Food Category), Pie Chart

The statistical data can be viewed without the use of graphs also. To do this, click the spreadsheet button at the top of the window in Figure 3-29.

FACET										X
<u>F</u> ile Cha	nges <u>N</u> ew <u>H</u>	lelp								
ج 🕶		🗟 🔲 🛄 🔩 🏑								
💮 Home		Assessments 🔄 FA	CET Data 📃 My Data	🕫 Results - :	Substa 🕴					
	✓ Survey 4	Pack Type / Food	Pack Type Description	✓ Intake Type 4	√ Consumer T	▼ FACET Category Co ●	▼ FACET Category Na ●		Value 4	Units
1	UK NDNS 2000	PT33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogues	Count	1631	*
2	UK NDNS 2000	PT33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogue	Percentage Consu	100	%
3	UK NDNS 2000	PT33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogues	Mean	0	mg
4	UK NDNS 2000	PT33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogues	Standard Deviatio	0	mg
5	UK NDNS 2000	PT33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogues	Minimum	0	mg
6	UK NDNS 2000	PT33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogues	Maximum	0	mg
7	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogues	P25	0	mg
8	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogues	P90	0	mg
9	UK NDNS 2000	PT33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogues	P95	0	mg
10	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogues	CDF	Distribut	i mg
11	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Total Population	P.1	Dairy products and analogue	PDF	Distribut	i mg
12	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Food Consumers	P.1	Dairy products and analogues	Count	1609	
13	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Food Consumers	P.1	Dairy products and analogues	Percentage Consu	98.6511	%
14	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Food Consumers	P.1	Dairy products and analogues	Mean	0	mg
15	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Food Consumers	P.1	Dairy products and analogues	Standard Deviatio	0	mg
16	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Food Consumers	P.1	Dairy products and analogues	Minimum	0	mg
17	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Food Consumers	P.1	Dairy products and analogues	Maximum	0	mg
18	UK NDNS 2000	РТ33	M: Glass Bottle, C: Crimped alu	Absolute	Food Consumers	P.1	Dairy products and analogue	P25	0	mg 🛫
	•									P.

Figure 3-29: Data Only

Finally, the user can export the graphs to a .png image to be used, for example, in a report. To do this the user chooses the "Export graph to local file" option. This is the button at the bottom left of the graph to be exported. This is shown in Figure 3-30. To export the data, the user selects "File" followed by "Export Data" as seen in the top left corner of Figure 3-30.



Figure 3-30: Export Graph to PNG image

3.2.1 Exercises: Examining Results

- In the first exercise of Section 3.1.1 the assessment "Substance: 1084 Survey: UK_19-64 Packs: [P.15, P.18] – Foods: All – Loyal: Yes" was created. Using the outputs from this assessment complete the following tasks.
 - a. Download the bar chart broken down "By Food Category" described as follows: "Per unit body weight" for "Total Population"
 - b. Download the bar chart broken down "By Food Category" described as follows: "Per unit body weight" for "Food Consumers"
 - c. Download the data broken down "By Food Category"
 - d. Download the pie chart broken down "By Food Category" described as follows: "Per unit body weight" for "Total Population"
 - e. Download the bar chart broken down "By Pack Type" described as follows: "Per unit body weight" for "Total Population"
 - f. Download the Report summarising the assessment outputs.

3.3 Entering extraction/migration data

Sometimes the user needs to run specific assessments based on the results of a survey. Another requirement may be to enter a new substance and run an exposure assessment for the substance under particular conditions. These types of assessments are possible using the "New Packaging Wizard".

3.3.1 Using the New Packaging Wizard for a Substance in a Metal Pack Type

The "New Packaging Wizard" is made available for use by selecting this option as shown in Figure 3-31.

	CET											
<u>F</u> ile	<u>N</u> ew <u>H</u> elp											
《 & н	 New Assessment New Packaging Wizard Pre-Population Wizard New Table 	FACET Data										
	Flavourings, Additives and Food Contact Materials Exposure Task											
	FACET is a food chemical exposure surveillance system to meet the needs of EU regulatory authorities in the protection of consumer health. European Commission 7th Framework Programme, 2008–2012											
		Create New Assessment										
		Go To FACET Data										
		Go To My Data										
		Creme										

Figure 3-31: Select New Packaging Wizard

At this point, the user has two options. They can consider a substance in a pack type which is "Non-Metal" or "Metal". For our example, we will select "New Metal Pack Type" as illustrated in Figure 3-32.

New Packaging Wizard			_ 🗆 🗙
	Sele	ct Packaging Wizard	
 Select Packaging Wizard Select Substance Specify Coating Select Food Categories Table Options 	New Pack Type	New Metal Pack Typ	e
<u>C</u> ancel			Next

Figure 3-32: Select New Metal Pack Type

There is another choice at the next stage of the assessment. The user can select a "New Substance" or an "Existing Substance". For this example, we select an "Existing Substance" called Styrene as shown in Figure 3-33.

New Packaging Wizard		x
	Select Substance	
 Select Packaging Wizard Select Substance Specify Coating Select Food Categories Table Options 	 New Substance Substance name: Log(P): 0.00 the model Molecular Weight: 0.00 the model Resting Substance Search 1334 FACET Id CAS Number Chemical Name Alternative Name Molecular Formula Molecular Formul	ar Jlai
<u>C</u> ancel	Previous Next	

Figure 3-33: Select Existing Substance

At the next stage, the user can describe the details of the pack by selecting the Surface to Volume ratio, Pack Type, and Material Code. This process is illustrated in Figure 3-34 to Figure 3-39. In Figure 3-34 the Surface to Volume (ratio) is chosen. In our example, we use a Surface to Volume Ratio of $0.6 \text{ (cm}^2/\text{g})$.

New Packaging Wizard				
			Add	Layers
 Select Packaging Wizard Select Substance Specify Coating 	Search Material Co	ode Description	Clear	Main Closure Outer Include set-off:
Select Food Categories		Not Known Metal		Surface / Volume: 0.60 + cm²/g
Table Options	 M.3 M.4 M.5 M.6 M.7 M.8 M.9 M.10 M.11 M.12 M.13 M.14 M.15 	Paper/ Board RCF Other non-plastic PE EVOH Ionomer OPP unspecified Other PP Polyamide PC OPET Other PET PS	E	Type: Component not present
Cancel	L			Previous <u>N</u> ext

Figure 3-34: Select Surface/Volume

Next the (Pack) Type is selected. This is shown in Figure 3-35 where Beverage Can is the "Type" chosen.

New Packaging Wizard					
 Select Packaging Wizard Select Substance Select Food Categories Table Options 	Search Material Code M.30 M.31 M.32 M.33 M.34 M.35 M.36 M.37 M.37.1 M.37.2 M.37.3 M.37.4 M.37.5 M.38 M.39 M.40	Cl Description Outer organic coating Colorants and additi Unspecified organic Inorganic coating Metallisation Adhesive Wax All other adhesives CAN COATINGS Epoxy PVC Polyester Acrylic Other CAN SEALANTS METAL CLOSURE CO	ear E	•	Add Layers Main Closure Outer Include set-off: . Surface / Volume: 0.60 \$ cm²/g Type: Beverage Can * Number Code Name Concentration (mg/kg) 0 - Food -
Cancel					Previous Next

Figure 3-35: Select Pack Type

At this stage the user selects the materials/layers of the Pack Type. This is carried out by selecting the appropriate material. This step is shown in Figure 3-36 to Figure 3-39 where the material "M.37.1.4.1" is chosen. Initially, in Figure 3-36, an attempt is made to locate the required "Material Code". This brings us to the "Material Code" M.37.1. The user will observe at this point that the "Material Code" is not fully visible. To resolve this, the user need to widen the "Material Code" field. This is done by clicking on the bar between "Material Code" and "Description" and moving the mouse to the right while the mouse remains clicked.

New Packaging Wizard					
 Select Packaging Wizard Select Substance Specify Coating Select Food Categories Table Options 	Search Material Code ▼ 141.29 M.30 M.31 M.32 ■ M.33 ■ M.34 M.35 M.36 ■ M.37 ■ M.37.1 ■ M.3 ■ M.3	Cl Description Other organic coaung Colorants and additiv Unspecified organic Inorganic coating Metallisation Adhesive Wax All other adhesives CAN COATINGS Epoxy Phenolic Anhydride Amino Acrylate Other PVC D. I	E	*	Add Layers Main Closure Include set-off: . Surface / Volume: 0.60 cm²/g Type: Beverage Can . Number Code Name Concentration (mg/kg) 0 - Food -
					<u>Previous</u> <u>N</u> ext



Figure 3-37: Accessing Full Material Code
New Packaging Wizard			
 New Packaging Wizard Select Packaging Wizard Select Substance Specify Coating Select Food Categories Table Options 	Search Material Code M.30 M.31 M.32 M.33 M.34 M.35 M.36 M.37 M.37 M.37.1 M.37.1.1 M.37.1.2 M.37.1.3 □ M.37.1.4 M.37.1.4.1 M.37.1.4.2 M.37.1.4.	Clear Description Colorants a Unspecifie Inorganic c Metallisation Adhesive Wax All other ad CAN COAT Epoxy Phenolic Anhydride Amino Acrylate Bev Acrylate Fo	\$ Add Layers Main Closure Outer Include set-off: . Surface / Volume: 0.60 ; cm²/g Type: Beverage Can . Number Code Name Concentration (mg/kg) 0 - Food -
Cancel			Previous Next



Once the user has found the correct "Material Code", and highlighted it (as in Figure 3-38), the next step is to click the blue arrow. This has the effect of displaying this material as illustrated in Figure 3-39.

New Packaging Wizard				x
Select Packaging Wizard Select Substance Specify Coating	Search Material Code I Micer M 30	Clear Description outer orga ^	Add Layers	
Select Food Categories	M.31 M.32 ⊮ M.33	Unspecifie Inorganic c Metallisation	Type: Beverage Can Number Code Name Concentration (mg/kg) Thickness (microns)	
	 M.34 M.35 M.36 M.37 	Adhesive Wax All other ad CAN COAT	0 - rood -	
	 M.37.1 M.37.1.1 M.37.1.2 M.37.1.3 M.37.1.4 	Epoxy Phenolic Anhydride Amino Acrylate		
	M.37.1.4.1 M.37.1.4.2	Acrylate Bev Acrylate Fo	•	
Cancel			Previous Next	

Figure 3-39: Selection of Material Code

The user is asked to enter the initial concentration of the chosen substance in the material as well as the thickness of the material. This step is illustrated in Figure 3-40.

ew Packaging Wizard								-
					Add	Layers		
 Select Packaging Wizard 	Search	Clear		Main	Closure Out	ter		
Select Substance	Material Code	Description 🔺		Include	set-off:			
Specify Coating	■ IVI.29	Colorante e		C. C		co	27	
Select Food Categories	101.50	Colorants a		Surrace	/ volume: 0.	60 - cm	/g	
Table Options	101.51	Unspecifie		Type: E	Beverage Can	•		
	M.32	Inorganic c		Numbe	r Code	Name	Concentration (mg/kg) Thickness (micro	nc)
	± M.33	Metallisation		0	-	Food		115)
	± M.34	Adhesive						
	M.35	Wax	~	1	M.37.1.4.1	Acrylate Bev	0.001 5	
	M.36	All other ad	~					
	■ M.37	CAN COAT						
	■ M.37.1	Epoxy						
	M.37.1.1	Phenolic						
	M.37.1.2	Anhydride						
		Amino						
	■ M.37.1.4	Acrylate						
	M.37.1.4.1	Acrylate Bev						
	M.37.1.4.2	Acrylate Fo						
	14074 F							
ancel							Previous	Nex

Figure 3-40: Filling in Concentration and Thickness values

Now the user selects the Food Categories of interest. In this example, Beer is selected as illustrated in Figure 3-41.

New Packaging Wizard			
		Add Food Categories	
🛩 Select Packaging Wizard	Search		Clear
 Select Substance 	Food Code	Description	*
 Specify Coating 	± P.3	Fruits, nuts and seeds	
Select Food Categories		Vegetables, starchy roots, legumes and seaweeds	
Table Options		Chocolate products and confectionery	
		Cereals and cereal products	
		Bread and bakery wares	
	. ₽.8 E	Meat and meat products	
	± P.9	Fish and fish products, molluscs, crustaceans and echinoderms.	E
		Eggs and egg products	Create
		Sweeteners and honey	
		Salt, spices, herbs, sauces and soups	
		Nutritional foodstuffs	
		Non-alcoholic beverages (except dairy beverages)	
	□ P.15	Alcoholic beverages	
	□ P.15.1	Beers, Ciders, Lagers and Flavoured Alcoholic Beverages	
		Beer	
		Cider	-
<u>C</u> ancel		Previ	ous <u>N</u> ext

Figure 3-41: Selection of appropriate Food Categories

A "Pack Size" and "Substance Migration Rate" are required as part of the assessment. This is illustrated in Figure 3-42 and Figure 3-43.

New Packaging Wizard					- • ×
		Add Food Co	ategor	ies	
🖋 Select Packaging Wizard	Search		Clear	P.15.1.1 - Beer	× Remove
 Select Substance 	Food Code	Description	*		
 Specify Coating 	⊕ P.3	Fruits, nuts and seeds		Market share: 100.00 + %	
🔶 Select Food Categories	. ₽.4	Vegetables, starchy roots, legumes and seaweeds		Pack size: 0.00 + g	
Table Options	. ₽.5	Chocolate products and confectionery		Substance migration rates [ma (dm ²
	± P.6	Cereals and cereal products			mg/um
		Bread and bakery wares			
	⊞ P.8	Meat and meat products			
	⊞ P.9	Fish and fish products, molluscs, crustaceans and echinoderms.	E		
		Eggs and egg products			
	⊕ P.11	Sweeteners and honey			
		Salt, spices, herbs, sauces and soups			
		Nutritional foodstuffs			
		Non-alcoholic beverages (except dairy beverages)			
	■ P.15	Alcoholic beverages			
	□ P.15.1	Beers, Ciders, Lagers and Flavoured Alcoholic Beverages			
		🛩 Beer			
		Cider	-		
Cancel				Previous	<u>N</u> ext

Figure 3-42: Pack Size and Migration Rate

New Packaging Wizard						- D X
		Add Food C	ategori	es		
🛩 Select Packaging Wizard	Search		Clear	P.15.1.1	- Beer	X Remove
🛩 Select Substance	Food Code	Description	*			
 Specify Coating 		Fruits, nuts and seeds		Market share:	100.00 🗘 %	
+ Select Food Categories		Vegetables, starchy roots, legumes and seaweeds		Pack size:	400.00 🗘 g	
Table Options	. ₽.5	Chocolate products and confectionery		Culture and and in other	0.001	
		Cereals and cereal products		Substance migration rate:	0.001	mg/am
	. ₽.7	Bread and bakery wares				
		Meat and meat products				
	± P.9	Fish and fish products, molluscs, crustaceans and echinoderms.	Ξ			
		Eggs and egg products				
		Sweeteners and honey				
		Salt, spices, herbs, sauces and soups				
		Nutritional foodstuffs				
		Non-alcoholic beverages (except dairy beverages)				
	■ P.15	Alcoholic beverages				
	⊟ P.15.1	Beers, Ciders, Lagers and Flavoured Alcoholic Beverages				
		✓ Beer				
		Cider	-			
Cancel					Previous	Next

Figure 3-43: Entering Pack Size and Substance Migration Rate

As in other assessments, it is preferable to choose an appropriate name for the assessment. This step is illustrated in Figure 3-44 and Figure 3-45.

New Packaging Wizard			X
		Table Options	
 Select Packaging Wizard Select Substance Specify Coating Select Food Categories Table Options 	Output file: //Data/ Packaging type: Substance type: Substance code: Substance name: Layers: Food categories:	My Data/My Migration Data/New Migration Data Table NewMetalPackType Existing Substance 1334 Styrene Component Type Layers Main Beverage Can 1 Food Code Description P.15.1.1 Beer	Choose
Cancel		<u>P</u> revious	Run

Figure 3-44: Name File

\$ \$ ₽	
🖃 🚞 My Data	Name 4
🚞 My Additive Data	
📄 My Flavouring Data	
🚞 My Migration Data	
🚞 My Packaging Data	
My Pre-Population Data	
Filename: Substance: 1334 - Metal: Ye	es - Food: Been
Create Folder	Save Cancel

Figure 3-45: Naming File

A summary of the assessment is provided and the user selects "Run" to run the assessment. This is illustrated in Figure 3-46 and Figure 3-47.

New Packaging Wizard			_ D _ X
		Table Options	
 Select Packaging Wizard Select Substance Specify Coating Select Food Categories Table Options 	utput file: //Data/N Packaging type: Substance type: Substance orde: Substance name: Supers: Food categories:	Vy Data/My Migration Data/Substance: 1334 - Metal: Yes - Food: Beer NewMetalPackType Existing Substance 1334 Styrene Component Type Layers Main Beverage Can 1 Food Code Description P15.1.1 Beer	Choose
Cancel		Previous	Run

Summary of Assessment

Figure 3-46: Summary of Assessment

New Packaging Wizard		
	Your table has been created.	
	OK	

Figure 3-47: Table Created

Upon completion of the assessment, the software informs the user as shown in Figure 3-48.

🚍 FACET Data	🚞 My Data		
Name	Progress	 Type 	 Row Count
🗊 Substance: 1334	- N Complete	New Pack Type	
•	m		4
		View Stru	view Pack Table
		view stre	
	Assessn	nent Summary	
ID:	474		
			=
Туре:	Packaging		
Substance:	1334 - Styrene		
	 FACET Data Name Substance: 1334 ID: Type: Substance: 	FACET Data My Data Name Progress Substance: 1334 - N Complete Assessm ID: 474 Type: Packaging Substance: 1334 - Styrene	FACET Data My Data Name Progress Type Substance: 1334 - N Complete New Pack Type View Structure View Structure ID: 474 Type: Packaging Substance: 1334 - Styrene D: 474

Figure 3-48: Assessment Complete

The full name of the table can be viewed by extending the "Name" field until the full name is visible. This is illustrated in Figure 3-49.

FACET					_ D X
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp					
🌱 🗝 🧇 🔶					
🟠 Home 🚞 Assessments 🕴	FACET Data	🚞 My Data			
🖃 🚞 My Data	Name	(Progress	 Type 	
🚞 My Additive Data	💼 Substance: 1334 -	Metal: Yes - Food: Beer	Complete	New Pa	ack Type
🚞 My Flavouring Data					
🚞 My Migration Data					
🚞 My Packaging Data					
My Pre-Population Data					
	4				•
					r
				View Structure Table	View Pack Table
		Assessm	ent Summar	у	<u>^</u>
	ID:	474			
					E
	Туре:	Packaging			
	Substance:	1334 - Styrene			
4		2.0 2012.12.21			

Figure 3-49: Viewing Full Table Name

The software does not allow the user to view the concentration data which is a result of the assessment. However, the concentration data is available to be used in a Packaging Assessment and is described visually in Figure 3-53 to Figure 3-70. It is possible however to view the "Structure Table" and "Pack Table" which are associated with the assessment above. This is possible by clicking the "View Structure Table" or "View Pack Table" options shown in Figure 3-50. Both options are illustrated in Figure 3-51 and Figure 3-52 respectively.

FACET					- • ×
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp					
4 - 4 + 4					
🟠 Home 📄 Assessments 🚺	FACET Data	🚞 My Data			
🖃 🚞 My Data	Name	•	Progress	• Туре	
🚞 My Additive Data	💼 Substance: 1334 -	Metal: Yes - Food: Beer	Complete	New P	ack Type
🚞 My Flavouring Data					
🚞 My Migration Data					
🚞 My Packaging Data					
🚞 My Pre-Population Data					
	•	m			4
				View Structure Table	View Dack Table
				view structure rable	VIEW Pack Table
		Assessm	nent Summar	у	<u>^</u>
	ID:	474			
					=
	Туре:	Packaging			
	Substance:	1334 - Styrene			
< >	D				-

Figure 3-50: View Structure Table

	CET				
<u>F</u> ile	Changes <u>N</u> ev	v <u>H</u> elp			
۴	- 🏥 🛋				
🔂 Ho	ome	Assessments	🚍 FACET Data	🚍 My Data 📑 structure	8
	FACET C 4	FACET Description	Set Off Used 4	Food Contact Layer Original Concentration	Outer Most Layer Original Cor
1	P.15.1.1	Beer	No	0.001	0.001
					=
					···· *
	<				Þ

Figure 3-51: Viewing Structure Table

	CET							
<u>F</u> ile	Changes	<u>N</u> ew <u>H</u> elp						
۴	- 🟥 🛙	e 🔶 🔍						
🔂 Ho	ome	Assess	ments 📄 FACET	Data 📄 N	1y Data	9 pack	8	
	FacetId 4	FACET C 4	FACET Description	PackTypeC 4	PackTypeString 4	Market Share (%)		
1	1334	P.15.1.1	Beer	PT8	M: Beverage Can	100.0		
								Ξ
								-
	•				m		4	

Figure 3-52: Viewing Pack Table

The user can now run an exposure assessment on the resulting table (i.e. Substance: 1334 – Metal: Yes – Food: Beer). This option is illustrated in Figure 3-53.

	ACET		
<u>F</u> ile	<u>N</u> ew <u>H</u> elp		
ا	New Assessment		
🟠 Н	New Packaging Wizard	🚍 FACET Data 🚞 My Data	
	Pre-Population Wizard New Table		
		<pre>%facet</pre>	
	Flavouri FACET is a food chemical exposure su	ngs, Additives and Food Contact Materials Exposure Task rveillance system to meet the needs of EU regulatory authorities in the prot European Commission 7th Framework Programme, 2008-2012	tection of consumer health.
		Create New Assessment	
		i Go To FACET Data	
		🧰 Go To My Data	
			≯ Creme



Next, the user selects "Packaging Assessment" as shown in Figure 3-54.



Figure 3-54: Select Packaging Assessment

At the next step, the user selects "My Concentration Data" as illustrated in Figure 3-55.

New Assessment Wizard			
		Select Migrant	
✓ Select Assessment Type	Use pre-installed FACET data.		
🕂 Select Migrant	Search	FACET ID	▼ C <u>l</u> ear
Select Pack Types			
Select Food Categories	FACET IE CAS Number	Chemical Name	Alternative Name
Select Surveys	1084 0000080-05-7	2,2-Bis(4-hydroxyphenyl)propane	Bisphenol A
Assessment Options	0000100-42-5	Styrene	Vinylbenzene
Assessment Summary	0031570-04-4	Phosphorous acid, tris(2,4-di-tert-butylphenyl)ester	tris(2,4-ditert-butylphe
	1976 0000077-90-7	Tri-n-butyl acetyl citrate	Acetyl tributyl citrate
	٠		Þ
	No substances selected.		
	Use and set of the		
	Ose my concentration data		
	Select Concentration Table		
	🖃 🚞 My Data	 Name Date Created 	Date Accessed
	🚞 My Additive Data		
	🚞 My Flavouring Data	≡	
	🚞 My Migration Data		
	My Packaging Data		
		 ✓ ✓ 	4
	Use in combination with pre-	installed FACET data	
<u>C</u> ancel		P	revious <u>N</u> ext

Figure 3-55: Use my concentration data

The table of interest is "Substance: 1334 – Metal: Yes – Food: Beer". This is located in the "My Migration Data" folder as shown in Figure 3-56 and Figure 3-57.

New Assessment Wizard	
	Select Migrant
 Select Assessment Type Select Migrant 	Use pre-installed FACET data. Search FACET ID V Clear
Select Pack Types Select Food Categories	FACET IE CAS Number Chemical Name Alternative Name 1084 0000090.05.7 2.2.Bir/d. hydrogynhenythropape Birphagel A
Select Surveys Assessment Options	1004 0000000-05-7 2,2-bis(4-rivaloxypitely)proparie bispitelot A 1334 0000100-42-5 Styrene Vinylbenzene 1617 0031570-04-4 Phosphorous acid tris(2 4-di-tert-butylphenyl)ester tris(2 4-di-tert-butylphenyl)ester
Assessment Summary	 1976 0000077-90-7 Tri-n-butyl acetyl citrate Acetyl tributyl citrate
	No substances selected.
	Select Concentration Table
	 My Data My Additive Data My Flavouring Data My Migration Data My Packaging Data
	Use in combination with pre-installed FACET data
<u>C</u> ancel	Previous Next

Figure 3-56: Selection of Appropriate Folder

New Assessment Wizard	
	Select Migrant
Select Assessment Type Select Migrant Select Pack Types	Use pre-installed FACET data. Search FACET ID Clear
Select Food Categories Select Surveys Assessment Options Assessment Summary	Instantion Internative Name 1084 0000080-05-7 1334 0000100-42-5 Styrene Vinylbenzene 1617 0031570-04-4 Phosphorous acid, tris(2,4-di-tert-butylphenyl)ester tris(2,4-ditert-butylphenyl)ester
	No substances selected. Use my concentration data
	Select Concentration Table My Data My Additive Data My Flavouring Data My Packaging Data Use in combination with pre-installed FACET data
Cancel	Previous Next

Figure 3-57: Selection of Appropriate Table

At this stage, the user selects the pack types and food categories that are of interest. In this example, we consider "All" pack types and the food category "P.15.1.1 Beer". This is shown in Figure 3-58 and Figure 3-59.

New Assessment Wizard			_ D X
		Select Pack Types	
✓ Select Assessment Type	Search		Clear
🛩 Select Migrant	V Sele	ct <u>A</u> ll	
🔶 Select Pack Types	Code	Category Name	
Select Food Categories	+ 🗸	Main	
Select Surveys	+ 🗸	Closure	
Assessment Options	+ 🗸	Outer	
Assessment Summary	± 🗸	Insert	
	55 visib	e pack types selected. 55 pack types selected.	
Const			
Cancel		Previous	Next

Figure 3-58: Select Pack Types

New Assessment Wizard	_		
		Select Food Categories	
 Select Assessment Type Select Migrant 	Search		Clear
Select Pack Types Select Food Categories	Code	Category Name Vegetables, starchy roots, legumes and seaweeds	A
Select Surveys		Chocolate products and confectionery	
Assessment Options	± 🔲 P.6	Cereals and cereal products	
Assessment Summary	± 🔲 P.7	Bread and bakery wares	
	. ■ P.8	Meat and meat products	
	±	Fish and fish products, molluscs, crustaceans and echinoderms.	
	🗄 📃 P.10	Eggs and egg products	≡
	🗄 🔲 P.11	Sweeteners and honey	
	🗄 📃 P.12	Salt, spices, herbs, sauces and soups	
	🗄 📃 P.13	Nutritional foodstuffs	
	🗄 📃 P.14	Non-alcoholic beverages (except dairy beverages)	
	🖃 🔳 P.15	Alcoholic beverages	
	🖃 🔳 P.15.1	Beers, Ciders, Lagers and Flavoured Alcoholic Beverages	
	☑ P.15.1	1 Beer	
	P.15.1	2 Cider	Ψ
	3 visible food catego	ories selected. 3 food categories selected.	
Cancel			Previous Next

Figure 3-59: Select Food Categories

The appropriate survey is chosen (as shown in Figure 3-60).

New Assessment Wizard		
	Select Surveys	
🖋 Select Assessment Type	Search	Clear
🛩 Select Migrant	Select <u>A</u> ll	
 Select Pack Types 		
 Select Food Categories 	T UK NDNS 1992 1-4	
✓ Select Surveys	T VK NDNS 1997 4-18	
Assessment Options	V IV NDNS 2000 19-64	
Assessment Summary	🔲 🍞 UK NDNS 1995 Over 65	
	🗄 🥅 🗖 Hungary	
	🕀 🥅 💵 France	
	🗉 🥅 🛶 Poland	
	🗉 🥅 🛨 Finland	
	🕀 🥅 🛙 Ireland	
	🐵 🥅 💶 Portugal	
	Gender:	
	Filtered Population Size: 1631	
<u>C</u> ancel	Previo	us <u>N</u> ext

Figure 3-60: Select Survey

The user then has the opportunity to select various Assessment Options. This step is illustrated in Figure 3-61 to Figure 3-63.

New Assessment Wizard					_ D X
			Assessment Optic	ons	
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Assessment location: Description: Assess using: Exclude homegrown/ł Exclude restaurant/car 🖻 Advanced Options	/Assessments/My	Assessment Optio Assessments/New Assessment With consumer loyalty Use SetOff V	ent Without consumer loyalty	Choose
⊆ancel				Previous	Next

Figure 3-61: Assessment Options

In the advanced options, the user can select to "Include lower tier results" as well as adding to the default list of percentiles used. For our example, we leave the "Include lower tier results" box unticked and deselect the P25 percentile.

New Assessment Wizard						
			Asse	essment Options		
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Assessment location: Description: Assess using:	/Assessments/N	/ly Assessment	nts/Substance: 1334 - Surv	rey: UK_19-64 - Ma	etal: Yes - Foor Choose
	Exclude homegrown/h Exclude restaurant/can Advanced Options Include lowest tier res	omemade foods teen foods: 	Use Se	E011		Â
	Exposure statistics: Other percentiles:	population size:	✓ Mean ₽25 ✓ ₽95	Standard Deviation F50 P97.5	 Minimum P75 P99 	 ✓ Maximum ✓ P90 ✓ P99.9
<u>C</u> ancel					Pre	vious <u>N</u> ext

Figure 3-62: Name Assessment

New Assessment Wizard								x
			Ass	essment C	Options			
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys 	Assessment location: Description:	/Assessments/N	1y Assessme	nts/Substan	ce: 1334 - Surv	rey: UK_19-64 - Mi	etal: Yes - Food Cho	ose
Assessment Summary	Assess using: Exclude homegrown/h Exclude restaurant/can	omemade foods: iteen foods:	© With c □ Use Se ☑	onsumer loy tOff	valty 💿 Wit	hout consumer lo	oyalty	
	Include lowest tier res Minimum simulated Exposure statistics: Other percentiles:	ults: population size:	■ 1000 ✓ Mean P25 ✓ P95	 Standa P50 P97.5 	rd Deviation	 Minimum P75 P99 	 Maximum P90 P99.9 	• III •
<u>C</u> ancel						<u>P</u> re	vious <u>N</u> ext	

Figure 3-63: Advanced Options

At this stage, the Assessment is summarised and ready to be Run. This is illustrated in Figure 3-64 and Figure 3-65.

New Assessment Wizard		
		Assessment Summary
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Type: Substance code: Substance name: Concentration data: Food categories:	Migrant 1334 Use my concentration data //Data/My Data/My Migration Data/Substance: 1334 - Metal: Yes - Food: Bee Code Category Name P.15 Alcoholic beverages P.15.1 Beers, Ciders, Lagers and Flavoured Alcoholic Beverages P.15.1.1 Beer
	Survey(s): Population filter: Name: I understand that runni and 20 minutes per sur computer's processing population size.)	UK NDNS 2000 19-64 Gender: Male, Female Age: between 0 and 110 Substance: 1334 - Survey: UK_19-64 - Metal: Yes - Foods: Beer - SetOff : No III ing this assessment means that my computer will be busy for between 5 vey. (This calculation time depends on several factors, including the ability, the number of food categories selected and the simulated
Cancel		Previous Run

Figure 3-64: Assessment Summary



Figure 3-65: Assessment Submission Confirmation

Once the assessment is submitted, it begins by "Initialising" before moving into the "Progress" stage. At the end, the user is informed that the assessment has completed (i.e. "Complete"). This is illustrated in Figure 3-66 to Figure 3-68.

K FACET		
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp		
≪ -		
🟠 Home 🚞 Assessments	🚍 FACET Data 📄 My Data	
🗆 🚞 Assessments	Name	Progress
My Assessments	🔙 1617 - UK - All Foods	Complete
	🔯 1976 - UK - All Foods	Complete
	🔄 1976 - UK - All Foods - SetOff	Complete
	📓 Substance: 1334 - Survey: UK_19-64 - Met	al: Yes - Foods: Beer - SetOff : No Initializing
	< <u>ا</u>	View All Results View Graphs View Report
	Assessn	nent Summary
	ID: 481	E
	Name: Substance: 1334 - Surve	ey: UK_19-64 - Metal: Yes - Foods: Beer - SetOff : No
	Description:	
	Type: Migrant	
4	Substance: 1334 -	•

Figure 3-66: Assessment Initialising

FACET							x
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp							
4 - 4							
🟠 Home 🚞 Assessments	FACET Data	🚞 My Data					
🗆 🚞 Assessments	Name			١	Progress	•	ID
My Assessments	🔯 1617 - UK - All Fo	ods			Complete		440
	词 1976 - UK - All Fo	ods			Complete		444
	词 1976 - UK - All Fo	ods - SetOff			Complete		467
	📓 Substance: 1334 -	Survey: UK_19-64 - Met	al: Yes - Foods: Beer	- SetOff : No	Complete		481
	4						•
				View All Result	View Graphs	View Re	eport
		A	ssessment Summar	y			_
	ID:	481					=
	Name:	Substance: 1334 - Surv	ey: UK_19-64 - Metal:	Yes - Foods: Be	eer - SetOff : No		
	Description:						
	Туре:	Migrant					
۰	Substance:	1334 -					

Figure 3-67: Assessment Complete

Following completion, the user has the option to view the results of the assessment. A similar approach to viewing the data is taken as in earlier parts of the manual. This is illustrated in Figure 3-68 to Figure 3-70.

FACET					x
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp					
🌱 🗝 🗢 🛧					
📅 Home 🧰 Assessments	🚍 FACET Data	🚍 My Data			
🖃 🚞 Assessments	Name		• F	Progress • 1	ID
My Assessments	🔯 1617 - UK - All Fo	oods		Complete	440
	🔯 1976 - UK - All Fo	oods		Complete	444
	🔯 1976 - UK - All Fo	oods - SetOff		Complete	467
	🔯 Substance: 1334	- Survey: UK_19-64 - Metal: Y	es - Foods: Beer - SetOff : No	Complete	481
	۲	III			4
			View All Results	View Graphs View Rep	port
		Asses	sment Summary		^
	ID:	481			=
	Name:	Substance: 1334 - Survey: U	IK_19-64 - Metal: Yes - Foods: Bee	er - SetOff : No	
	Description:				
	Туре:	Migrant			
4 III >	Substance:	1334 -			-

Figure 3-68: View Graphs



Figure 3-69: Graphs, by Pack Type



Figure 3-70: Graphs by Food Category

3.3.2 Using the New Packaging Wizard for a Substance in a Non-Metal Pack Type

As in the case of a substance in a metal pack, described in Section 3.3.1, a similar approach can be taken for substance in non-metal pack types. We consider the substance styrene (Facet Id = 1334) in this example. The earlier steps in the assessment are illustrated in Figure 3-71 to Figure 3-76.



Figure 3-71: Select New Packaging Wizard

New Packaging Wizard		
	Select P	ackaging Wizard
Select Packaging Wizard Select Substance Specify Layers Select Food Categories Table Options	New Pack Type	New Metal Pack Type
<u>C</u> ancel		<u>N</u> ext

Figure 3-72: Select New Pack Type

New Packaging Wizard	
	Select Substance
 Select Packaging Wizard Select Substance Specify Layers Select Food Categories Table Options 	 New Substance Substance name: Log(P): 0.00 the model of t
Cancel	Previous Next

Figure 3-73: Select Substance

 Select Packaging Wizard Select Substance Material Cod M.2 Select Food Categories Table Options M.4 M.5 M.6 M.7 M.8 M.9 M.10 M.11 M.13 M.14 M.15 M.15 M.15 	C Description Metal Paper/ Board RCF Other non-plastic PE EVOH Jonomer OPP unspecified Other PP Polyamide OPET Other PET PS Non-expanded PS EPS PV/C	Add Layers
Cancel		Previous Next

Figure 3-74: Select S/V ratio and Material Code



Figure 3-75: Select Concentration and Thickness

New Packaging Wizard		1.000	
		Add Food Categories	
 Select Packaging Wizard 	Search		Clear
 Select Substance 	Food Code	Description	
 Specify Layers 	⊕ P.6	Cereals and cereal products	
Select Food Categories	. ₽.7	Bread and bakery wares	
Table Options	. ₽.8 E	Meat and meat products	
	. ₽.9 €	Fish and fish products, molluscs, crustaceans and echinoderms.	
		Eggs and egg products	
	⊕ P.11	Sweeteners and honey	
	⊕ P.12	Salt, spices, herbs, sauces and soups	
	⊕ P.13	Nutritional foodstuffs	Create
		Non-alcoholic beverages (except dairy beverages)	=
	⊞ P.15	Alcoholic beverages	
	⊞ P.16	Ready-to-eat savouries	
	🖻 P.17	Desserts (except bakery and fruit desserts)	
	□ P.17.1	Yoghurt & Desserts	
		Spoonable yoghurt	
		Chilled & shelf stable desserts	
		Fromage frais & quark	-
Cancel		<u> </u>	revious <u>N</u> ext

Figure 3-76: Select Food Categories

Once the Pack Types and Food Categories have been selected, the user needs to select the "Pack size" as well as the Time and Temperature regimes of interest. This is shown in Figure 3-77.

New Packaging Wizard	
	Add Food Categories
< Select Packaging Wizard	search Clear P.17.1.1 - Spoonable yoghurt KRemove
 Select Substance 	Food Code Description
 Specify Layers 	B P.6 Cereals and cereal products Market share: 100.00 ↓ %
💠 Select Food Categories	■ P.7 Bread and bakery wares Pack size: 250.00 ¹ / ₂ g
Table Options	P.8 Meat and meat products
	🗄 P.9 Fish and fish products, molluscs, crustacea 📔 1 🗘 weeks 💌 ≤ Time 🖆 1 🗘 months 💌
	$ \mathbb{H} P.10 \text{Eggs and egg products} 1 2 \stackrel{\bullet}{\downarrow} \leq \text{Temperature} \leq 10 \stackrel{\bullet}{\downarrow} \circ C - \stackrel{\bullet}{\bullet} +$
	P.11 Sweeteners and honey
	P.12 Salt, spices, herbs, sauces and soups
	P.13 Nutritional foodstuffs
	P.14 Non-alcoholic beverages (except dairy beve
	P.15 Alcoholic beverages
	P.16 Ready-to-eat savouries
	P.17 Desserts (except bakery and fruit desserts)
	P.17.1 Yoghurt & Desserts
	🖋 Spoonable yoghurt
	Chilled & shelf stable desserts
	Fromage frais & quark 👻
Cancel	Previous Next

Figure 3-77: Selecting Time/temperature Regimes

The assessment is now ready to run. Before that a Table Name is given to the assessment as a reference to the details of the assessment and for easier access later. This is shown in Figure 3-78 and Figure 3-79.

New Packaging Wizard			
		Table Options	
Select Packaging Wizard Outpu Select Substance Specify Layers Select Food Categories Subs Subs	kaging type: NewPackTyy stance type: Existing Sub stance code: 1334 stance name: Styrene ers: Component Main d categories: Food Code P.17.1.1	Migration Data/New Migration Data Table	Choose
Cancel		Previo	us <u>R</u> un

Figure 3-78: Table Options

< Save As	
\$ \$ ₽	
 My Data My Additive Data My Flavouring Data My Migration Data My Packaging Data My Pre-Population Data 	Name • Substance: 1334 - Metal: Yes - Food: Beer
Filename: Substance: 1334 - Metal: N	o - Food: Yoghurt
Create Folder	<u>Save</u> <u>Cancel</u>

Figure 3-79: Naming Assessment

Now the assessment can be run as shown in Figure 3-80.

New Packaging Wizard			- • ×
		Table Options	
 Select Packaging Wizard Select Substance 	Output file: /Data/	My Data/My Migration Data/Substance: 1334 - Metal: No - Food: Yoghurt	Choose
 Specify Layers Select Food Categories Table Options 	Packaging type: Substance type: Substance code: Substance name:	NewPackType Existing Substance 1334 Styrene	
	Layers:	Component Type Layers Main Plastic Tray/ Pot/ Tub/ Cup 1	
	Food categories:	Food Code Description P.17.1.1 Spoonable yoghurt	
<u>C</u> ancel		Previou	; <u>R</u> un

Figure 3-80: Table Options

Upon completion the user is informed that the assessment has come to an end. This is shown in Figure 3-81.

FACET				_ _ X
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp				
4 - 4				
🟠 Home 🚍 Assessm	nents 📄 FACET Data	🖮 My Data	🖲 Results - Substa	8
🖃 🚞 My Data	Name		Progress	 Type
🚞 My Additive Data	🗊 Substance: 1334	- Metal: Yes - Food: Beer	r Complete	New Pack T
🚞 My Flavouring Data	💼 Substance: 1334	- Metal: No - Food: Yogl	hurt Complete	New Pack T
🚞 My Migration Data				
🚞 My Packaging Data				
🚞 My Pre-Population Data				
	•	III		4
			View Structure Table	View Pack Table
			The structure rubic	
		Assessment	Summary	<u>^</u>
	ID:	485		
				=
	Туре:	Packaging		
	Substance:	1334 - Styrene		
<				•

Figure 3-81: Assessment Complete

Now the user can run an assessment on the table created in the previous assessment. This calculation is illustrated in Figure 3-82 to Figure 3-92.

	CET						
<u>F</u> ile	Ne	w <u>H</u> elp					
R	D	New Assessment					
ŵн		New Packaging Wizard Pre-Population Wizard		FACET Data	🚍 My Data	🖲 Results - Substa	8
		New <u>T</u> able					
				≪fac	cet		
FACE	[is a	Flavouring:	s, Add	litives and Food (Contact Materials	Exposure Task	n of consumer health.
		Eur	opean (Commission 7th Fram	nework Programme, 200)8-2012	
				Create Nev	v Assessment		
				Go To FAC	ET Data		
				🚞 Go To My I	Data		
						> (Creme

Figure 3-82: Run Assessment



Figure 3-83: Packaging Assessment

New Assessment Wizard			
		Select Migrant	
🖋 Select Assessment Type	O Use pre-installed FACET data.		
💠 Select Migrant	Search	FACET ID	Clear
Select Pack Types			
Select Food Categories	FACET IE CAS Number	Chemical Name	Alternative Name
Select Surveys	1084 0000080-05-7	2,2-Bis(4-hydroxyphenyl)propane	Bisphenol A
Assessment Options	0000100-42-5	Styrene	Vinylbenzene
Assessment Summary	1617 0031570-04-4	Phosphorous acid, tris(2,4-di-tert-butylphenyl)ester	tris(2,4-ditert-butylphe
-	1976 0000077-90-7	Tri-n-butyl acetyl citrate	Acetyl tributyl citrate
	< [•
	No substances selected.		
	Use my concentration data		
	Select Concentration Table		
	🕞 🧮 My Data	A Name	Date Created
		Substance: 1334 - Metal: Yes - Food: Beer	3 Sep 2013 13:31
		Substance: 1334 - Metal: No - Food: Yoghurt	3 Sep 2013 14:15
	My Playouting Data		
	My Migration Data		
	My Packaging Data	▼ <	•
	Use in combination with pre-i	nstalled FACET data	
Cancel		P	revious <u>N</u> ext

Figure 3-84: Select Table

New Assessment Wizard		
	Select Pack Types	
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Search Select All Code Category Name Image: Select All Image: Select All <	Clear
Cancel	<u>P</u> revious	Next

Figure 3-85: Select Pack Types

New Assessment Wizard				×
		Select Food Categories		
 Select Assessment Type Select Migrant 	Search		Clea	ar
Select Pack Types	Code	Category Name		*
Select Food Categories	± 0.9 0.7	Cereais and cereai products		
Select Surveys		Bread and bakery wares		
Assessment Options		Meat and meat products		
Assessment Summary		Fish and fish products, molluses, crustaceans and echinoderms.		
		Eggs and egg products		
		Sweeteners and honey		
		Salt, spices, herbs, sauces and soups		
		Nutritional foodstuffs		Ξ
		Non-alcoholic beverages (except dairy beverages)		
		Alcoholic beverages		
		Ready-to-eat savouries		
	□ □ P.17	Desserts (except bakery and fruit desserts)		
	🗆 🔲 P.17.1	Yoghurt & Desserts		
	☑ P.17.1	1 Spoonable yoghurt		
	P.17.1	2 Chilled & shelf stable desserts		-
	3 visible food catego	pries selected. 3 food categories selected.		
<u>C</u> ancel			Previous <u>N</u> e	ext

Figure 3-86: Select Food Categories

New Assessment Wizard		
	Select Surveys	
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Select Surveys Search Select All Image: S	Clear
	Gender: V Male V Female Age (years): Between V and III + Filtered Population Size: 1631	
Cancel		Previous Next

Figure 3-87: Select Survey

New Assessment Wizard					_ _ x
			Assessment Optic	ons	
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Assessment location: Description: Assess using: Exclude homegrown/h Exclude restaurant/can I Advanced Options	/Assessments/M	y Assessments/New Assessm With consumer loyalty Use SetOff	without consumer loyalty	Choose
Cancel				Previous	<u>N</u> ext

Figure 3-88: Assessment Options

< Save As	
\$ \$ \$	
My Assessments	Name
	iii 1017 - UK - All Foods 1976 - UK - All Foods
	🔯 1976 - UK - All Foods - SetOff
	🔯 Substance: 1334 - Survey: UK_19-64 - Metal: Yes ·
F T C L L 1774 C L	
Filename: Substance: 1334 - Survey: (JK_19-04 - Wietal: No - Foods: Yoghurt - SetUff: No
Create Folder	<u>S</u> ave <u>C</u> ancel

Figure 3-89: Naming Table

New Assessment Wizard							x
			Ass	essment Options			
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Assessment location: Description: Assess using: Exclude homegrown/h Exclude restaurant/can Advanced Options Include lowest tier res Minimum simulated p Exposure statistics:	/Assessments/l omemade foods teen foods: ults: population size:	Assessme With a Use Se 1000 Mean	essment Options nts/Substance: 1334 - Su onsumer loyalty W tOff	rvey: UK_19-64 - M	etal: No - Fooc Cho oyalty	= 2005
	Other percentiles:		P25 ✓ P95	 P50 P97.5 	P75P99	 ✓ P90 P99.9 	
Cancel					<u>P</u> re	evious <u>N</u> ext	



New Assessment Wizard		
		Assessment Summary
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Type: Substance code: Substance name: Concentration data: Food categories:	Migrant 1334 Use my concentration data /Data/My Data/My Migration Data/Substance: 1334 - Metal: No - Food: Yog Code Category Name P.17 Desserts (except bakery and fruit desserts) P.17.1 Yoghurt & Desserts P.17.1 Spoonable vogburt
	Survey(s): Population filter:	UK NDNS 2000 19-64 Gender: Male, Female Age: between 0 and 110
	Name: I understand that runni and 20 minutes per sur computer's processing population size.)	Substance: 1334 - Survey: UK_19-64 - Metal: No - Foods: Yoghurt - SetOff: N m pthis assessment means that my computer will be busy for between 5 vey. (This calculation time depends on several factors, including the ability, the number of food categories selected and the simulated
<u>C</u> ancel		Previous Run

Figure 3-91: Summary of Assessment
FACET							x
<u>File E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp							
4 - 4							
🟠 Home 🚞 Assessments	🚍 FACET Data	🚍 My Data	🖲 Results - Substa	8			
🖃 🚞 Assessments	Name			•	Progress	•	ID
My Assessments	🔄 1617 - UK - All Fo	ods			Complete		440
	📑 1976 - UK - All Fo	ods			Complete		444
	📷 1976 - UK - All Fo	ods - SetOff			Complete		467
	🛐 Substance: 1334 -	- Survey: UK_19-64 - Met	al: Yes - Foods: Beer -	SetOff : No	Complete		481
	🐻 Substance: 1334 -	- Survey: UK_19-64 - Met	tal: No - Foods: Yoghu	rt - SetOff: No	Complete		490
	•	III					•
				View All Resu	View Graphs	View F	Report
			Assessment Summary	1			-
	ID:	490					н
	Name:	Substance: 1334 - Surv	ey: UK_19-64 - Metal: I	No - Foods: Yo	oghurt - SetOff: No		
	Description:						
	Туре:	Migrant					
4 III >	Substance	1334 -					-

Figure 3-92: Assessment Complete

After completion, the user can now view the data in a report format or else visually using graphs. This is shown in Figure 3-93 to Figure 3-95.

FACET						. 🗆 🗙
<u>File Edit Go N</u> ew <u>H</u> elp						
4 - 4						
🟠 Home 🚞 Assessments	🚞 FACET Data	🚞 My Data	🖲 Results - Substa	8		
🗆 🚞 Assessments	Name			•	Progress	• ID
My Assessments	🤯 1617 - UK - All Fo	ods			Complete	440
	🤯 1976 - UK - All Fo	ods			Complete	444
	🧃 1976 - UK - All Fo	ods - SetOff			Complete	467
	🛐 Substance: 1334 -	Survey: UK_19-64 - Met	al: Yes - Foods: Beer - S	etOff : No	Complete	481
	👿 Substance: 1334 -	Survey: UK_19-64 - Met	al: No - Foods: Yoghurt	- SetOff: No	o Complete	490
	•	III				Þ
			V	/iew All Resu	Ults View Graphs	View Report
		1	Assessment Summary			*
	ID:	490				≡
	Name:	Substance: 1334 - Surv	ey: UK_19-64 - Metal: N	o - Foods: Y	oghurt - SetOff: No	
	Description:					
	Туре:	Migrant				
4	Substance	1334 -				

Figure 3-93: Select View Graphs







Figure 3-95: Viewing Graphs, by Food Category

3.3.3 Using the New Packaging Wizard for a New Substance

Another option in the software is for the user to enter a new substance and then run a packaging assessment for the substance. To enter a new substance, the user initially selects the "New Packaging Wizard" as shown in Figure 3-96.



Figure 3-96: New Packaging Wizard

The user has the option of selecting a Non-Metal or Metal pack type. In this example, we select a "New Metal Pack Type".

New Packaging Wizard			_ D X
		Select Packaging Wizard	
Select Packaging Wizard Select Substance Specify Coating Select Food Categories Table Options	New Pack Type	New Metal Pack Typ	e
<u>C</u> ancel			Next

Figure 3-97: New Metal

At this stage, a new substance can be used by entering the appropriate information as is done in Figure 3-98. A suitable "Substance Name" is required as well as "Log(P)" and "Molecular Weight" details for the substance.

New Packaging Wizard		- 🗆 🗙
	Select Substance	
 Select Packaging Wizard Select Substance Specify Coating Select Food Categories Table Options 	 New Substance Substance name: additiveX Log(P): 4.01 Molecular Weight: 500.00 Factor Substance Facct Id CAS Number Chemical Name Alternative Name Molecular Form 1000 0000064-1 Acetic acid Ethanoic acid C2H402 1001 0000108-0 Acetic acid, w Vinyl acetate C4H602 1006 0000079-1 Acrylic acid, v Ning acetate C5H802 C101 C1000 C1010 C1010	Clear ula Molec 60 86 71 72 128 100 184 •
<u>C</u> ancel	<u>P</u> revious	<u>N</u> ext



Once the information for the new substance has been entered, the user can follow a similar approach to that taken in Section 3.3.1 where the concentration of the substance in a specified pack type in a particular food is determined. These steps are illustrated in Figure 3-99 to Figure 3-105.

New Packaging Wizard				
				Add Layers
 Select Packaging Wizard Select Substance Specify Coating Select Food Categories Table Options 	Search Material Code M.30 M.31 M.32 M.33 M.34 M.35 M.36 M.37 M.37.11 M.37.12 M.37.1.3 M.37.1.4 M.37.1.4 M.37.1.4.1 M.37.1.4.2 M.37.1.4.2	Clear Description Colorant Unspecif Inorgani Metallisa Adhesive Wax All other CAN CO Epoxy Phenolic Anhydride Amino Acrylate Acrylate Acrylate Cut	*	Main Closure Outer Include set-off: Surface / Volume: 1.00
<u>C</u> ancel				Previous Next

Figure 3-99: Add Layers

lew Packaging Wizard		
	Add Food Categories	
🖋 Select Packaging Wizard	Search	Clear
 Select Substance 	Food Code Description	*
 Specify Coating 	P.3 Fruits, nuts and seeds	
Select Food Categories	● P.4 Vegetables, starchy roots, legumes and seaweeds	
Table Options	P.5 Chocolate products and confectionery	
	P.6 Cereals and cereal products	
	P.7 Bread and bakery wares	
	P.8 Meat and meat products	
	P.9 Fish and fish products, molluscs, crustaceans and echinoderms.	
	P.10 Eggs and egg products	E <u></u>
	P.11 Sweeteners and honey	
	P.13 Nutritional foodstuffs	
	P.14 Non-alcoholic beverages (except dairy beverages)	
	P.15 Alcoholic beverages	
	P Beers, Ciders, Lagers and Flavoured Alcoholic Beverages	
	֎ P Wine	
	P Spirits	-
Cancel		Previous

Figure 3-100: Add Food Categories

New Packaging Wizard		_		_ D X
		Add Food Catego	ries	
🛩 Select Packaging Wizard	Search	Clear	P.15.1 - Beers, Ciders, Lagers and Flavour	ed 🗙 Remove
 Select Substance 	Food Code Description	*		
 Specify Coating 	P.3 Fruits, nuts and seeds		Market share: 100.00 + %	
Select Food Categories		s and seaweeds	Pack size: 500.00 🗘 g	
Table Options	P.5 Chocolate products and confection	nery	Substance migration rate: 1	ma (dm²
	P.6 Cereals and cereal products			ing/ diff
	P.7 Bread and bakery wares			
	P.8 Meat and meat products			
	₽.9 Fish and fish products, molluscs,	crustaceans and echinoderms.		
	P.10 Eggs and egg products	E		
	P.11 Sweeteners and honey			
	P.12 Salt, spices, herbs, sauces and sou	ps		
	P.13 Nutritional foodstuffs			
	P.14 Non-alcoholic beverages (except	dairy beverages)		
	P.15 Alcoholic beverages			
		d Alcoholic Beverages		
	P Spirits	-		
	L			
Cancel			Previous	Next

Figure 3-101: Pack Size and Substance Migration Rate

New Packaging Wizard				• ×
		Table Options		
 ✓ Select Packaging Wizard Output ✓ Select Substance ✓ Specify Coating ✓ Select Food Categories ✓ Table Options ✓ Gategories ✓ Gategories 	t file: //Data/My Data/My Migration Data/ iging type: New/MetalPackType ance type: New Substance ance name: additiveX 0 ular Weight: 0 mol s: Component Type Main Beverage Can categories: Food Code Description P.15.1 Beers, Ciders, 1	New Migration Data Table		Choose
Cancel			Previous	<u>R</u> un

Figure 3-102: Table Options

 My Data My Additive Data My Flavouring Data My Migration Data My Packaging Data My Pre-Population Data 	🔦 Save As	X
 My Data My Additive Data My Flavouring Data My Migration Data My Packaging Data My Pre-Population Data 	\$ \$ ₽	
	 My Data My Additive Data My Flavouring Data My Migration Data My Packaging Data My Pre-Population Data 	Name Substance: 1334 - Metal: Yes - Food: Beer Substance: 1334 - Metal: No - Food: Yoghurt
Filename: Substance: AdditiveX - Metal: Yes - Food: Beer	Filename: Substance: AdditiveX - Meta	al: Yes - Food: Beer

Figure 3-103: Naming Table

New Packaging Wizard			
		Table Options	
 Select Packaging Wizard Select Substance Specify Coating Select Food Categories Table Options 	Output file: //Data/W Packaging type: Substance type: Substance name: Log(P): Molecular Weight: Layers: Food categories:	ly Data/My Migration Data/Substance: AdditiveX - Metal: Yes - Food: Beer NewMetalPackType NewMetalPackType New Substance additiveX 0 0 mol Component Type Layers Main Beverage Can Food Code Description P.15.1 Beers, Ciders, Lagers and Flavoured Alcoholic Beverages	Choose
<u><u><u></u>Cancel</u></u>		<u>P</u> revious	Bun

Figure 3-104: Ready to Run

FACET				- • ×
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp				
≪ -				
🟠 Home 🚞 Assessments	🚞 FACET Data	🚞 My Data		
🖃 🚞 My Data	Name		 Progress 	 Type
🚞 My Additive Data	🗊 Substance: 1334 -	Metal: Yes - Food: Beer	Complete	New P
🚞 My Flavouring Data	🗊 Substance: 1334 -	Metal: No - Food: Yogh	urt Complete	New P
🚞 My Migration Data	💼 Substance: Addit	iveX - Metal: Yes - Food:	Beer Complete	New P
🚞 My Packaging Data				
🚞 My Pre-Population Data				
	•	III		4
			View Structure Table	View Pack Table
		Assessment S	Summary	*
	ID:	494		
				=
	Type:	Packaging		
	Cubetanco	additiveV		
	Substance:	aduitiveA		
4 III +				-

Figure 3-105: Complete

Once the concentration levels are calculated and stored in a table, a packaging assessment can be carried out on the results. This is illustrated in Figure 3-106 to Figure 3-114.



Figure 3-106: New Assessment



Figure 3-107: Packaging Assessment

New Assessment Wizard			_ D X
		Select Migrant	
🖋 Select Assessment Type	Ose pre-installed FACET data.		
🔶 Select Migrant	Search	FACET ID	Clear
Select Pack Types		· · · · · · · · · · · · · · · ·	
Select Food Categories	FACET IE CAS Number	Chemical Name	Alternative Name
Select Surveys	0000080-05-7	2,2-Bis(4-hydroxyphenyl)propane	Bisphenol A
Assessment Options	0000100-42-5	Styrene	Vinylbenzene
Assessment Summary	0031570-04-4	Phosphorous acid, tris(2,4-di-tert-butylphenyl)ester	tris(2,4-ditert-butylphe
	0000077-90-7	Tri-n-butyl acetyl citrate	Acetyl tributyl citrate
	< [4
	No substances selected.		
	Use my concentration data		
	Select Concentration Table		
		A Name	Data Created
	🥅 My Additive Data	Substance: 1324 - Metal: Ver - Food: Reer	2 Sep 2012 12:21
	🚞 My Flavouring Data	Substance: 1334 - Metal: No. Food: Veghut	2 Sep 2012 14:15
	🚞 My Migration Data	Substance: 1554 - Metal: No - Food: Fognatt	2 Sep 2012 14:15
	🚞 My Packaging Data	Substance: AdditiveA - Metal: Tes - Pood: Beer	5 Sep 2015 14:50
	🚞 My Pre-Population Da	ati 👻 🖌 III	۰.
	Use in combination with pre-	installed FACET data	
<u>C</u> ancel		E	Previous <u>N</u> ext

Figure 3-108: Select Table

New Assessment Wizard	
	Select Pack Types
Select Assessment Type	Search Clear
Select Pack Types	Select <u>A</u> ll
Select Food Categories	Code Category Name
Select Surveys	E V Main
Assessment Options	
Assessment Summary	🗄 📝 Insert
	55 visible pack types selected. 55 pack types selected.
Cancel	Previous Next

Figure 3-109: Select Pack Types

New Assessment Wizard			
		Select Food Categories	
 Select Assessment Type Select Migrant 	Search		Clear
Select Pack Types	Code	Category Name	*
Select Food Categories	⊕ 📃 P.4	Vegetables, starchy roots, legumes and seaweeds	
Select Surveys	⊞ 🔲 P.5	Chocolate products and confectionery	
Assessment Options	⊞ P.6	Cereals and cereal products	
Assessment Summary	🕀 📃 P.7	Bread and bakery wares	
	🕀 📃 P.8	Meat and meat products	
	🕀 📃 P.9	Fish and fish products, molluscs, crustaceans and echinoderms.	
	🕀 🔲 P.10	Eggs and egg products	
	🕀 📃 P.11	Sweeteners and honey	=
	🕀 📃 P.12	Salt, spices, herbs, sauces and soups	
	🕀 📃 P.13	Nutritional foodstuffs	
	🕀 📃 P.14	Non-alcoholic beverages (except dairy beverages)	
	🖃 🔳 P.15	Alcoholic beverages	
	🖽 🗹 P.15.1	Beers, Ciders, Lagers and Flavoured Alcoholic Beverages	
	🕀 📃 P.15.2	? Wine	
	± ■ P.15.	3 Spirits	-
	5 visible food ca	tegories selected. 5 food categories selected.	
Cancel			Previous <u>N</u> ext

Figure 3-110: Select Food Categories

New Assessment Wizard		
	Select Surveys	
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Search Select <u>A</u> ll □ ■ ■ UK □ ■ UK NDNS 1992 1-4 □ ■ UK NDNS 1997 4-18 □ ■ UK NDNS 2000 19-64 □ ■ UK NDNS 1995 Over 65	Clear
	 Hungary France Poland Finland Ireland Italy Portugal 	
	Gender: V Male V Female Age (years): Between V 0 A and 110 A Filtered Population Size: 1631	
<u>C</u> ancel	[Previous <u>N</u> ext

Figure 3-111: Select Survey

< Save As	
\$ \$ \$	
My Assessments	Name I 1617 - UK - All Foods I 1976 - UK - All Foods I 1976 - UK - All Foods - SetOff I Substance: 1334 - Survey: UK_19-64 - Metal: Yes - Foods: Beer - SetOff : No I Substance: 1334 - Survey: UK_19-64 - Metal: No - Foods: Yoghurt - SetOff: No
Filename: Substance: AdditiveX - Sun	vey: UK_19-64: Metal: Yes: Foods: Beer: SetOff: No
Create Folder	<u>Save</u> <u>Cancel</u>

Figure 3-112: Naming Table

New Assessment Wizard						
			Ass	essment Options		
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options 	Assessment location: Description:	/Assessments/N	My Assessme	nts/Substance: AdditiveX -	Survey: UK_19-64	I: Metal: Yes: F Choose
Assessment Summary	Assess using: Exclude homegrown/h Exclude restaurant/can	omemade foods	○ With a Use Se :: ♥	onsumer loyalty 💿 Wit tOff	hout consumer lo	yalty
	Advanced Options					*
	Include lowest tier res Minimum simulated Exposure statistics:	sults: population size:	□ 1000 ✓ Mean □ P25 □ P05	Standard Deviation	 Minimum P75 D00 	✓ Maximum ✓ P90
	Other percentiles:		Vert [1]	C.164	P99	······································
Cancel					Pre	vious <u>N</u> ext

Figure 3-113: Assessment Options

New Assessment Wizard		
		Assessment Summary
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Type: Substance code: Substance name: Concentration data: 	Migrant additiveX Use my concentration data //Data/My Data/My Migration Data/Substance: AdditiveX - Metal: Yes - Foo Code Category Name P.15 Alcoholic beverages P.15.1 Beers, Ciders, Lagers and Flavoured Alcoholic Beverages P.15.1.1 Beer P.15.1.2 Cider P.15.1.3 Flavoured Alcoholic Beverages
	Survey(s): Population filter: Name: I understand that runni and 20 minutes per sun computer's processing population size.)	UK NDNS 2000 19-64 Gender: Male, Female Age: between 0 and 110 Substance: AdditiveX - Survey: UK_19-64: Metal: Yes: Foods: Beer: SetOff: Ne III ng this assessment means that my computer will be busy for between 5 vey. (This calculation time depends on several factors, including the ability, the number of food categories selected and the simulated
<u>C</u> ancel		Previous Run



It is left up to the user to access the output of the resulting assessment (i.e. the assessment Substance: AdditiveX – Survey: UK_19-64 - Metal: Yes - Foods: Beer - SetOff: No)

3.3.4 Exercises for Entering extraction/migration data

Use the "New Packaging Wizard" and "New Assessment" tools to initially establish the concentration levels of the given substance in the chosen foods in (i) and hence run an exposure assessment for the chosen country in (ii).

- (i) Existing Substance in Non-Metal Pack Type
 - a. Metal: No
 - b. Existing Substance: Yes
 - c. Substance: 1976 (ATBC)
 - d. Include set-off: No
 - e. Surface / Volume: 0.6
 - f. (Pack) Type: Flexible Wrapper /Bag/ Pouch
 - g. Material Code: M.9.2 OPP not voided
 - h. Concentration: 900
 - i. Thickness: 25
 - j. Food Categories: P.1.2.1 Processed Cheese
 - k. Pack Size: 1000.00
 - I. Time: 10 days
 - m. Temperature: 40 degrees centigrade

- n. Table Name: Substance: 1976 Metal: No SetOff: No Food: Cheese
- (ii) Use the results in (i) to run a Packaging Assessment satisfying the following criteria:
 - a. Pack Types: All
 - b. Food Categories: P.1.2.1 Cheese
 - c. Survey: UK NDNS 2000 19-64
 - d. Assessment Name: Substance: 1976 Metal: No SetOff: No Food: Cheese
 - e. Consumer Loyalty: Without
 - f. Use SetOff: No

3.4 Working at Lowest Tier

Earlier we ran the assessment "Substance: 1084 –Survey: UK_19-64 – All Foods" as highlighted in Figure 3-115.

FACET				_ D
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp				
🌱 🗝 🗇				
🟠 Home 🚞 Assessments	FACET Data	🚍 My Data		
🗆 🚞 Assessments	Name		Progress	• ID
My Assessments	🐻 Substance: 1084 -	Survey: UK_19-64 - All Food	ls Complete	453
	Substance: 1057 -	Survey: UK_19-64 - All Food	ls Complete	461
	4		View All Results	View Graphs View Report
		Assessment	t Summary	
	ID:	453		=
	Name:	Substance: 1084 - Survey: U	JK_19-64 - All Foods	
	Description:			
	Туре:	Migrant		
۲	Substance:	1084 - 2,2-Bis(4-hydroxyph	enyl)propane	-

Figure 3-115: Already Run Assessment

Graphs relating to the outputs of the assessment are illustrated in Figure 3-116.

EACI	T										
File	Changes New	Halp									
<u>File</u> (nanges <u>iv</u> ew										
4 -			By Food Category By Pac	:к Туре		_					
💮 Hor	ne	🚍 Assessments 🗧	FACET Data 📄 My Data	Result	ts - Substa 🔞						
0-3)	All Pa	ck Types - Per unit b	ody weight - Total Popula	tion - Mean			All Pack Types - Per	unit body weight - Food	Consumers - I	4ean	
× ≱0.	1				₩ ×1	0.1					
Į 20.	08				Ag h	0.08					
Ĕ.	06				l l l	0.06					
2 o.	04				an a	0.04					
d a	02		_		Ödx	0.02					
E CE		_				0.02					
E,	P.1 P.2 I	P.3 P.4 P.5 P.6 P.7 P.	8 P.9 P.10P.11P.12P.13P.14F	.15P.16P.17P,18	AII . E	a,	P.1 P.2 P.3 P.4 P.5 P.6	P.7 P.8 P.9 P.10P.11P.12	P.13P.14P.15P.16	P.17P.18	All
Z		F,	ACET Category			4		FACET Category			
	✓ Survey ●				V Consumer	T •	✓ FACET Category Co ●		𝒜 Statistic ◀	Value 4	Units 4
77773	UK NDNS 2000	All Pack Types	All Pack Types	Per unit body weigh	Total Populatio	n	P.1	Dairy products and analogues	Mean	4.58655e	mg/kg l 📩
77784	UK NDNS 2000	All Pack Types	All Pack Types	Per unit body weigh	Food Consume	rs	P.1	Dairy products and analogue	Mean	4.64926e	mg/kg l
77817	UK NDNS 2000	All Pack Types	All Pack Types	Per unit body weigh	Total Populatio	n	P.2	Fats and oils and fat emulsion	Mean	0	mg/kg l
77828	UK NDNS 2000	All Pack Types	All Pack Types	Per unit body weigh	Food Consume	rs	P.2	Fats and oils and fat emulsion	Mean	0	mg/kg l
77861	UK NDNS 2000	All Pack Types	All Pack Types	Per unit body weigh	Total Populatio	n	P.3	Fruits, nuts and seeds	Mean	3.40032e	mg/kg I 🛫
	•										F.

Figure 3-116: View Graphs

We observe that food categories P.15, P.14, P.18, P.12, P.4 are the main drivers, in that order. However no detail is provided at a lower tier. This means that when an assessment is run and "Include lowest tier results" is not selected, the exposure value for this food is described only for the parent food (e.g. P.15 Alcoholic Beverages) and not the foods at lower tiers (e.g. P.15.1.1 Beer, P.15.1.2 Cider, etc.). We have two options. The first is to repeat the assessment selecting the option at all tiers. This is time and memory intensive. The other option is identify the main drivers of the exposure and repeat the assessment at lower tiers for that food. An example of this is provided below where a lower tier assessment is run for P.15 (Alcoholic beverages). At this point the user follows the steps illustrated in Figure 3-117 to Figure 3-123.

FACET		
<u>F</u> ile <u>N</u> ew <u>H</u> elp	-	
 New Assessment New Packaging Wizard Pre-Population Wizard New <u>Table</u> 	FACET Data My Data	
Flavou FACET is a food chemical exposure	ırings, Additives and Food Contact Mater surveillance system to meet the needs of EU regulator European Commission 7th Framework Programm	ials Exposure Task ry authorities in the protection of consumer health. e, 2008-2012
	Create New Assessment	
	Go To FACET Data	
	🧰 Go To My Data	
		≯ Creme





Figure 3-118: Packaging Assessment

New Assessment Wizard					x
		Select Migrant			
Select Assessment Type Select Migrant Select Dack Types	Ose pre-installed FACET data.		FACET ID	▼ C <u>l</u> ear	
Select Food Categories	FACET IE CAS Number	Chemical Name Adipic acid	Alternative Name Hexanedioc acid	Molecular Fc Mole C6H10O4 146	eci Pi V
Assessment Options	 1084 0000080-05-7 1334 0000100 43 5 	2,2-Bis(4-hydroxyphenyl)pro	Bisphenol A	C15H16O2 228	V
	< 1084 - 0000080-05-7 - 2,2-Bis(4-	III hydroxyphenyl)propane			4
	Use my concentration data Select Concentration Table—				
	 My Data My Additive Data My Flavouring Data My Migration Data My Packaging Data Use in combination with pre- 	Name	Date Created	Date Accessed	4
<u>C</u> ancel			P	Previous <u>N</u> ext	:

Figure 3-119: Select Migrant

New Assessment Wizard			_ D _ X
		Select Pack Types	
✓ Select Assessment Type	Search		Clear
✓ Select Migrant	🗸 Sele	ect <u>A</u> ll	
Select Pack Types	Code	Category Name	
Select Food Categories	+ 🗸	Main	
Select Surveys	+ 🗸	Closure	
Assessment Options	+ 🗸	Outer	
Assessment Summary	+ 🗸	Insert	
	55 visib	le pack types selected. 55 pack types selected.	
Cancel		Previou	Next

Figure 3-120: Select Pack Types

New Assessment Wizard			
		Select Food Categories	
✓ Select Assessment Type	Search		Clear
🛩 Select Migrant	Select All		
🖋 Select Pack Types	Carda	Coheren News	
+ Select Food Categories	± 2.4	Vegetables, starchy roots, legumes and seaweeds	
Select Surveys	€ ₽.5	Chocolate products and confectionery	
Assessment Options	± ■ P.6	Cereals and cereal products	
Assessment Summary	🛨 📃 P.7	Bread and bakery wares	
	± ■ P.8	Meat and meat products	
		Fish and fish products, molluscs, crustaceans and echinoderms.	
	🔲 P.10	Eggs and egg products	
	🕀 📃 P.11	Sweeteners and honey	
	🕀 📃 P.12	Salt, spices, herbs, sauces and soups	E
	🕀 📃 P.13	Nutritional foodstuffs	
	🕀 📃 P.14	Non-alcoholic beverages (except dairy beverages)	
	🖽 🗹 P.15	Alcoholic beverages	
		Ready-to-eat savouries	
	⊕ 🔲 P.17	Desserts (except bakery and fruit desserts)	
	🕀 📃 P.18	Composite foods	~
	9 visible food c	ategories selected. 9 food categories selected.	
Cancel			Previous <u>N</u> ext

Figure 3-121: Select Food Categories

New Assessment Wizard		
	Select Surveys	
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Search Search Select <u>A</u> II Select <u>A</u> II Select <u>A</u> II UK NDNS 1992 1-4 UK NDNS 1997 4-18 V V UK NDNS 2000 19-64 UK NDNS 1995 Over 65 UK NDNS 1995 Over 65 D = Hungary D = IFrance P = Poland	Clear
Cancel	<u>P</u> reviou	us <u>N</u> ext

Figure 3-122: Select Survey

< Save A	s		`
	\$		
My	/ Assessments	Name Substance: 1084 - Survey: UK_19-64 - All Foods Substance: 1057 - Survey: UK_19-64 - All Foods	•
Filename:	Substance: 1084 - Survey: U	K_19-64 - Foods: Alcoholic Beverages	
Create F	older	Save Cancel	

Figure 3-123: Naming Assessment

Now the user can access the "Assessment Options" and in particular the "Advanced Options". In the "Advanced Options" the user should tick the "Include lowest tier results" option (as shown in Figure 3-124). This has the effect of providing exposure data for every food in the "P.15 Alcoholic Beverages" category. Without selecting this option, the software will calculate an exposure only at the highest tier (i.e. P.15 Alcoholic Beverages).

New Assessment Wizard		~					x	
	Assessment Options							
 Select Assessment Type Select Migrant Select Pack Types Select Food Categories Select Surveys Assessment Options Assessment Summary 	Assessment location: Description: Assess using: Exclude homegrown/h Exclude restaurant/can	/Assessments/M	Ay Assessme ○ With c □ Use Se : ♥	nts/Substance: 1084 - Surv onsumer loyalty	ey: UK_19-64 - Fo	ods: Alcoholic Choc	ose	
	Advanced Options							
	Include lowest tier res Minimum simulated Exposure statistics: Other percentiles:	sults: population size:	▼ 1000 ✓ Mean ▼ P25 ✓ P95	♥ ✓ ✓ ✓ ✓ ▶ </th <th> Minimum P75 P99 </th> <th> ✓ Maximum ✓ P90 ✓ P99.9 </th> <th>* III</th>	 Minimum P75 P99 	 ✓ Maximum ✓ P90 ✓ P99.9 	* III	
<u>C</u> ancel					<u>P</u> re	vious <u>N</u> ext		



The assessment is now summarised and run as shown in Figure 3-125.

New Assessment Wizard			
		Assessment Summary	
 ✓ Select Assessment Type ✓ Select Migrant ✓ Select Pack Types ✓ Select Food Categories 	Type: Substance code: Substance name: Concentration data:	Migrant 1084 2,2-Bis(4-hydroxyphenyl)propane Use pre-installed FACET data	
 Select Surveys Assessment Options Assessment Summary 	Food categories:	Code Category Name Image: Category Name </th <th></th>	
	Survey(s): Population filter: Name: Description: Assessment location: I understand this run minutes per survey. computer's processi population size.)	UK NDNS 2000 19-64 Gender: Male, Female Age: between 0 and 110 Substance: 1084 - Survey: UK_19-64 - Foods: Alcoholic Beverages /Assessments/Mx Assessments ning assessment involving output at all food tiers can take 10 - 45 (This calculation time depends on several factors, including the ing ability, the number of food categories selected and the simulated	
Cancel		Previous Run	

Figure 3-125: Assessment Summary

FACET				_		
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp						
₹ -						
🟠 Home 🚞 Assessments	FACET Data	🚞 My Data				
🖃 🚞 Assessments	Name		•	Progress	• 1	
My Assessments	🛐 Substance: 1084 ·	Survey: UK_19-64 - All F	Foods	Complete		
	🔯 Substance: 1057 -	Survey: UK_19-64 - All F	Foods	Complete		
	👼 Substance: 1084 ·	Survey: UK_19-64 - Foo	ds: Alcoholic Beverages	Complete		
	٩ [m	View All Results	View Graphs	► View Report	
		Assessment Summary				
	ID:	465			E	
	Name:	Substance: 1084 - Surv	ey: UK_19-64 - Foods: Alco	oholic Beverages		
	Description:					
	Туре:	Migrant				
۰ III ا	Substance:	1084 - 2,2-Bis(4-hydro:	xyphenyl)propane		-	

Figure 3-126: Assessment Complete

Following completion, the viewer has different options to view the results. If the user selects the "View All Results" option (shown in Figure 3-127 and Figure 3-128) then it is possible to view the results at the lowest tiers. However the "View Graphs" and "View Report" options still only provide exposure data at the higher tier (i.e. P15 Alcoholic Beverages in this example).

FACET					
<u>F</u> ile <u>E</u> dit <u>G</u> o <u>N</u> ew <u>H</u> elp					
4 - 4					
🟠 Home 🚍 Assessments	FACET Data	🚞 My Data	📑 Results - Substa	8	
🗆 🚞 Assessments	Name			Progress	• 1
My Assessments	🔯 Substance: 1084 -	Survey: UK_19-64 - All F	oods	Complete	
	Substance: 1057 ·	Survey: UK_19-64 - All F	Foods	Complete	
	🛐 Substance: 1084 -	Survey: UK_19-64 - Foo	ds: Alcoholic Beverages	Complete	
	۲	III	View All Results	View Graphs	► View Report
		Assess	nent Summary		*
	ID:	465			E
	Name:	Substance: 1084 - Surv	ey: UK_19-64 - Foods: Al	lcoholic Beverages	
	Description:				
	Туре:	Migrant			
(الله الله الله الله الله الله الله الله	Substance:	1084 - 2,2-Bis(4-hydrox	(yphenyl)propane		-

Figure 3-127: Select View Results to check at Lowest Tiers

FACE1	ſ			~				x
<u>F</u> ile Changes <u>N</u> ew <u>H</u> elp								
4 - 🌒 💷 🖹 😭								
💮 Hom	e 😑	Assessments 📄 FA	ACET Data 📄 My	Data 📑	Results - Substa	🕴	🖲 All Data - Substa	8
	onsumer T 4	✓ FACET Food C<	V FACET Food N	V Statistic 4	Value 4	Units 4	Standard Error	90'
20199	Population	P.15.3.1	Spirits	Mean	0	mg	0	^
20221	Population	P.15.3.1	Spirits	Mean	0	mg/kg b	0	
20243	Population	P.15.1.1	Beer	Mean	217.287	g	10.512	
20265	Population	P.15.1.1	Beer	Mean	2.77259	g/kg bw	0.13542	
20287	Population	P.15.1.2	Cider	Mean	19.7386	g	4.42073	
20309	Population	P.15.1.2	Cider	Mean	0.272662	g/kg bw	0.069255	
20331	Population	P.15.1.3	Flavoured Alcoholic Beve	Mean	9.95113	g	1.37345	
20353	Population	P.15.1.3	Flavoured Alcoholic Beve	Mean	0.13709	g/kg bw	0.0207831	
20375	Population	P.15.2.1	Wine	Mean	53.1079	9	2.6555	
20397	Population	P.15.2.1	Wine	Mean	0.721355	g/kg bw	0.0318761	
20419	Population	P.15.3.1	Spirits	Mean	6.03594	9	0.495681	
20441	Population	P.15.3.1	Spirits	Mean	0.0822354	g/kg bw	0.00642261	
20463	Population	P.15.1.1	Beer	Mean	0	mg	0	_
20485	Population	P.15.1.1	Beer	Mean	0	mg/kg b	0	
20507	Population	P.15.1.2	Cider	Mean	0	mg	0	-
	•							P

Figure 3-128: Examining Results

3.4.1 Exercises for Working at Lowest Tier

Exercises for Working at Lowest Tier

- (i) Run a Packaging Assessment (at the lowest tier) satisfying the following criteria
 - a. Substance: 1084
 - b. Pack Types: All
 - c. Food Categories: P.14 Non-alcoholic beverages
 - d. Survey: UK NDNS 2000 19-64
 - e. Loyalty: Without
 - f. Use SetOff: No