

Use of the CO₂ calculator

Find the ingredients at <https://denstoreklimadatabase.dk/en>

Climate footprint calculated in kg. Click on column titles to sort.

Category	Food	CO ₂ e pr kg	Agriculture	ILUC	Processing	Packaging	Transport	Retail
Beverages	BITTER, Gammel Dansk Bitter Dram	2,04	1,10	-0,05	-0,11	0,37	0,72	0,01
Beverages	Brandy, cognac	8,22	0,99	-0,02	4,80	0,37	2,07	0,01
Beverages	Vodka	2,04	1,10	-0,05	-0,11	0,37	0,72	0,01
Beverages	Aquavit, 40 % vol., average values	2,04	1,10	-0,05	-0,11	0,37	0,72	0,01
Beverages	Tomatojuice, canned	1,26	0,13	0,02	0,20	0,22	0,68	0,01
Beverages	Wine, white, average values	1,87	0,31	0,07	0,40	0,41	0,68	0,01
Beverages	Wine, rosé	1,87	0,31	0,07	0,40	0,41	0,68	0,01
Beverages	Wine, red	1,87	0,31	0,07	0,40	0,41	0,68	0,01
Beverages	Wine, white, sparkling, champagne	1,87	0,31	0,07	0,40	0,41	0,68	0,01
Beverages	Icetea, peach	0,82	0,20	0,02	0,37	0,13	0,08	0,01

SEARCH

Search

GOODS CATEGORY

- Beverages (32)
- Bread/bakery products (34)
- Candy/sugar products (13)
- Cereal/grain/pulse products (22)
- Fruit/vegetable products (75)

The search function is not the best, so use “Goods Category” to reduce the ingredients.

Climate footprint calculated in kg. Click on column titles to sort.

Category	Food	CO ₂ e pr kg	Agriculture	ILUC	Processing	Packaging	Transport	Retail
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Beverages	Wine, white, sparkling, champagne	1,87	0,31	0,07	0,40	0,41	0,68	0,01
Beverages	Icetea, peach	0,82	0,20	0,02	0,37	0,13	0,08	0,01
Beverages	Energy drink	0,53	0,14	0,00	0,17	0,16	0,06	0,01
Beverages	Alcoholic soda, 4%	0,72	0,25	0,00	0,21	0,19	0,07	0,01
Beverages	Cider 4.5%	1,10	0,28	0,01	0,53	0,19	0,08	0,01
Beverages	Apple juice	1,64	0,32	0,02	0,61	0,31	0,37	0,01
Beverages	Smoothie, strawberry blueberry	2,16	0,40	0,07	0,10	0,31	1,29	0,00
Beverages	Beer, lager, alc. 4.4 % by vol.	0,60	0,07	0,05	0,24	0,16	0,07	0,01
Beverages	Beer, Danish household, low alcohol	0,60	0,07	0,05	0,24	0,16	0,07	0,01
Beverages	Beer, strong, alc. 7.6 % by vol.	0,60	0,07	0,05	0,24	0,16	0,07	0,01
Beverages	Tea, leaves	8,41	2,50	1,61	1,87	1,94	0,47	0,01

SEARCH

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GOODS CATEGORY

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- Bread/bakery products (34)
- Candy/sugar products (13)
- Cereal/grain/pulse products (22)
- Fruit/vegetable products (75)
- Fruits (27)
- Meat/poultry (62)
- Milk/eggs/substitute products (31)
- Oils/fats edible (4)
- Prepared/preserved foods (61)
- Seafood (51)
- Seasonings/preservatives/extracts (32)
- Vegetables (56)

If you can't find the ingredients in the database, then find something similar e.g., if you are going to make “Stuffed leeks”. Then you can't find thyme in the database, but you can find basil. Both are herbs and the packaging, transport and retail are similar. Just make a note, so you can explain why you use the basil data.

Ingredients	Weight in grams	Climate footprint		Total no local		No Transport		Local food		Total with local	
		CO ₂ /kg	CO ₂ /kg	CO ₂ /kg	CO ₂ /kg	CO ₂ /kg	CO ₂ /kg	CO ₂ /kg	CO ₂ /kg		
Minced pork 5-10% fat	400 gram	2,9	CO ₂ /kg	1,16	CO ₂		CO ₂ /kg	0,00	CO ₂	1,16	CO ₂
Egg	60 gram	0,85	CO ₂ /kg	0,05	CO ₂		CO ₂ /kg	0,00	CO ₂	0,05	CO ₂
Onion	100 gram	0,9	CO ₂ /kg	0,09	CO ₂		CO ₂ /kg	0,00	CO ₂	0,09	CO ₂
Garlic raw	8 gram	1,33	CO ₂ /kg	0,01	CO ₂		CO ₂ /kg	0,00	CO ₂	0,01	CO ₂
Thyme (basil dried data)	3 gram	4,44	CO ₂ /kg	0,01	CO ₂		CO ₂ /kg	0,00	CO ₂	0,01	CO ₂
Wheat flour	15 gram	0,84	CO ₂ /kg	0,01	CO ₂		CO ₂ /kg	0,00	CO ₂	0,01	CO ₂

Figure 1: Enter ingredients

After you have funded the ingredients, then enter the name of the dish, showed at (1), enter how many people the dish is to at (2), and enter the amount of grams of every ingredients (3). Remember it has to be in grams and NOT Kilos.

Original Dish: (1) Stuffed leeks											
Numbers of people (2) 2											
Ingredients	Weight in grams	Climate footprint	Total no local	No Transport	Local food	Total with local					
Minced pork 5-10% fat	400 gram	2,9 CO ₂ /kg	1,16 CO ₂	CO ₂ /kg	0,00 CO ₂	1,16 CO ₂					
Egg (3)	60 gram	0,85 CO ₂ /kg	0,05 CO ₂	CO ₂ /kg	0,00 CO ₂	0,05 CO ₂					
Onion	100 gram	0,9 CO ₂ /kg	0,09 CO ₂	CO ₂ /kg	0,00 CO ₂	0,09 CO ₂					
Garlic raw	8 gram	1,33 CO ₂ /kg	0,01 CO ₂	CO ₂ /kg	0,00 CO ₂	0,01 CO ₂					
Thyme (basil dried data)	3 gram	4,44 CO ₂ /kg	0,01 CO ₂	CO ₂ /kg	0,00 CO ₂	0,01 CO ₂					
Wheat flour	15 gram	0,84 CO ₂ /kg	0,01 CO ₂	CO ₂ /kg	0,00 CO ₂	0,01 CO ₂					
Milk 1,5% fat	100 gram	0,61 CO ₂ /kg	0,06 CO ₂	CO ₂ /kg	0,00 CO ₂	0,06 CO ₂					
Black pepper	10 gram	4,3 CO ₂ /kg	0,04 CO ₂	CO ₂ /kg	0,00 CO ₂	0,04 CO ₂					
Salt	6 gram	0,44 CO ₂ /kg	0,00 CO ₂	CO ₂ /kg	0,00 CO ₂	0,00 CO ₂					
Leeks	430 gram	0,32 CO ₂ /kg	0,14 CO ₂	CO ₂ /kg	0,00 CO ₂	0,14 CO ₂					
Wheat flour	9 gram	0,84 CO ₂ /kg	0,01 CO ₂	CO ₂ /kg	0,00 CO ₂	0,01 CO ₂					
Egg	60 gram	0,85 CO ₂ /kg	0,05 CO ₂	CO ₂ /kg	0,00 CO ₂	0,05 CO ₂					
Bread-crumbs	100 gram	1,26 CO ₂ /kg	0,13 CO ₂	CO ₂ /kg	0,00 CO ₂	0,13 CO ₂					
Salt	6 gram	0,44 CO ₂ /kg	0,00 CO ₂	CO ₂ /kg	0,00 CO ₂	0,00 CO ₂					
Black pepper	10 gram	4,3 CO ₂ /kg	0,04 CO ₂	CO ₂ /kg	0,00 CO ₂	0,04 CO ₂					
Butter	25 gram	3,92 CO ₂ /kg	0,10 CO ₂	CO ₂ /kg	0,00 CO ₂	0,10 CO ₂					
Olive oil	15 gram	3,83 CO ₂ /kg	0,06 CO ₂	CO ₂ /kg	0,00 CO ₂	0,06 CO ₂					
	gram	CO ₂ /kg	0,00 CO ₂	CO ₂ /kg	0,00 CO ₂	0,00 CO ₂					
	gram	CO ₂ /kg	0,00 CO ₂	CO ₂ /kg	0,00 CO ₂	0,00 CO ₂					
	gram	CO ₂ /kg	0,00 CO ₂	CO ₂ /kg	0,00 CO ₂	0,00 CO ₂					
Total	1,36 Kg		1,97 CO₂		0,00 CO₂	1,97 CO₂					

Climate footprint calculated in kg. Click on column titles to sort.

Category	Food	CO ₂ e pr kg	Agriculture	ILUC	Processing	Packaging	Transport	Retail
Oils/fats edible	Sunflower oil	3,76	1,95	0,87	0,37	0,56	0,00	0,01
Oils/fats edible	Olive oil	(4) 3,83	1,81	0,64	0,01	0,56	0,79	0,01
Oils/fats edible	Oil, rape seed (no eruca acid)	3,84	2,46	0,47	0,33	0,56	0,00	0,01
Oils/fats edible	Magarine	2,93	0,00	0,32	2,31	0,24	0,05	0,00

Figure 2: Entering weight in grams and climate footprint

As showed in figure 2 with the small red circle (4), you can find the total CO₂e pr kg. The total CO₂e pr kg is the sum of the factors in Agriculture, ILUC¹, Processing, Packaging, Transport and Retail

¹ Indirect land use change = ILUC, https://ec.europa.eu/commission/presscorner/detail/en/MEMO_12_787

Use of local ingredients

If you use local ingredients e.g., onion from your own garden, you have to minus the processing, packaging, transport and retail factors.

Original Dish: Stuffed leeks												
Numbers of people		2										
Ingredients	Weight in grams		Climate footprint		Total no local		No Transport		Local food		Total with local	
Minced pork 5-10% fat	400	gram	2,9	CO ₂ /kg	1,16	CO ₂		CO ₂ /kg	0,00	CO ₂	1,16	CO ₂
Egg	60	gram	0,85	CO ₂ /kg	0,05	CO ₂		CO ₂ /kg	0,00	CO ₂	0,05	CO ₂
Onion	100	gram	0,9	CO ₂ /kg	0,09	CO ₂	0,67	CO ₂ /kg	-0,07	CO ₂	0,02	CO ₂
Garlic raw	8	gram	1,33	CO ₂ /kg	0,01	CO ₂		CO ₂ /kg	0,00	CO ₂	0,01	CO ₂
Thyme (basil dried data)	3	gram	4,44	CO ₂ /kg	0,01	CO ₂		CO ₂ /kg	0,00	CO ₂	0,01	CO ₂
Wheat flour	15	gram	0,84	CO ₂ /kg	0,01	CO ₂		CO ₂ /kg	0,00	CO ₂	0,01	CO ₂
Milk 1,5% fat	100	gram	0,61	CO ₂ /kg	0,06	CO ₂		CO ₂ /kg	0,00	CO ₂	0,06	CO ₂
Black pepper	10	gram	4,3	CO ₂ /kg	0,04	CO ₂		CO ₂ /kg	0,00	CO ₂	0,04	CO ₂
Salt	6	gram	0,44	CO ₂ /kg	0,00	CO ₂		CO ₂ /kg	0,00	CO ₂	0,00	CO ₂
Leeks	430	gram	0,32	CO ₂ /kg	0,14	CO ₂		CO ₂ /kg	0,00	CO ₂	0,14	CO ₂
Wheat flour	9	gram	0,84	CO ₂ /kg	0,01	CO ₂		CO ₂ /kg	0,00	CO ₂	0,01	CO ₂
Egg	60	gram	0,85	CO ₂ /kg	0,05	CO ₂		CO ₂ /kg	0,00	CO ₂	0,05	CO ₂
Bread-crumbs	100	gram	1,26	CO ₂ /kg	0,13	CO ₂		CO ₂ /kg	0,00	CO ₂	0,13	CO ₂
Salt	6	gram	0,44	CO ₂ /kg	0,00	CO ₂		CO ₂ /kg	0,00	CO ₂	0,00	CO ₂
Black pepper	10	gram	4,3	CO ₂ /kg	0,04	CO ₂		CO ₂ /kg	0,00	CO ₂	0,04	CO ₂
Butter	25	gram	3,92	CO ₂ /kg	0,10	CO ₂		CO ₂ /kg	0,00	CO ₂	0,10	CO ₂
Olive oil	15	gram	3,83	CO ₂ /kg	0,06	CO ₂		CO ₂ /kg	0,00	CO ₂	0,06	CO ₂
		gram		CO ₂ /kg	0,00	CO ₂		CO ₂ /kg	0,00	CO ₂	0,00	CO ₂
		gram		CO ₂ /kg	0,00	CO ₂		CO ₂ /kg	0,00	CO ₂	0,00	CO ₂
		gram		CO ₂ /kg	0,00	CO ₂		CO ₂ /kg	0,00	CO ₂	0,00	CO ₂
Total	1,36	Kg			1,97	CO₂			-0,07	CO₂	1,90	CO₂

Category	Food	CO2e pr kg	Agriculture	ILUC	Processing	Packaging	Transport	Retail
Meat/poultry	Meatballs	3,00	1,97	0,35	0,28	0,26	0,11	0,03
Vegetables	Red onion	0,90	0,18	0,04	0,00	0,06	0,60	0,01
Vegetables	Onion, raw	0,90	0,18	0,04	0,00	0,06	0,60	0,01
Vegetables	Onions, spring, raw	0,90	0,18	0,04	0,00	0,06	0,60	0,01

Figure 3: Local ingredients

As showed in figure 3, you can find the processing, packaging, transport, and retail factors under every ingredient in the big climate database.

You have to plus the numbers from processing, packaging, transport, and retail together.

$$0,00 + 0,06 + 0,60 + 0,01 = 0,67.$$

Then add the number at No Transport as showed in figure 3.

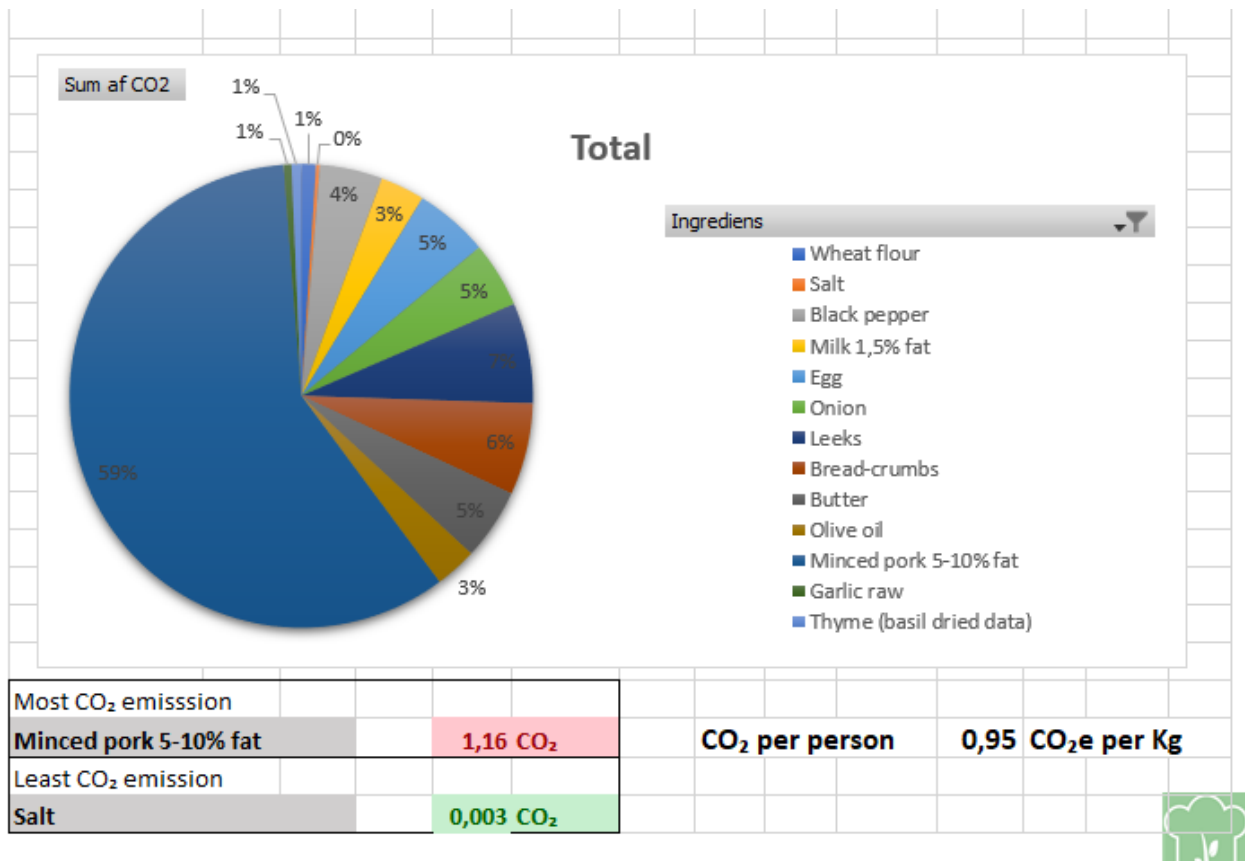


Figure 4: The pie chart showed shows the dishes distributions of CO2 in %

The CO₂ calculator will automatically add the local food value to the CO₂ emission. So, by adding a local onion to the Stuffed leeks dish you reduce the CO₂ emission by 0,07 CO₂e per kg.

The pie chart showed at figure 4 is automatically changing when you are updating the data in the CO₂ calculator in Excel.

You are updating the data by enter "Data" in the upper fan and enter "Refresh All" as showed in figure 5 or enter (Ctrl+Alt+F5).

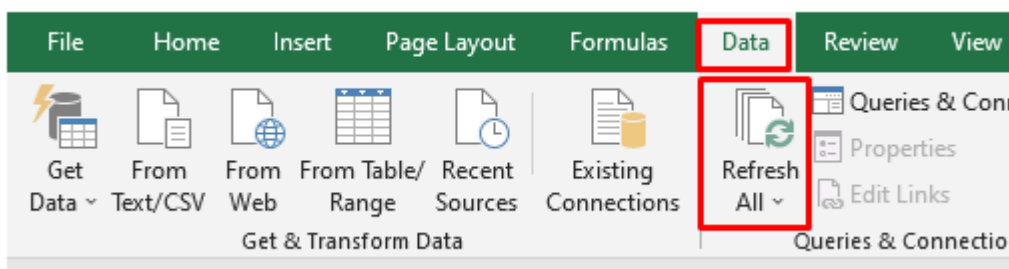


Figure 5: How to update the data in Excel